State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

11/17/03

CERTIFIED MAIL

RE: Preliminary Proposed Title V
Chapter 3745-77 permit

13-18-12-0180
Ford Motor Company, Cleveland Casting Plant
Batuk Modi
5600 Henry Ford Blvd
Brook Park, OH 44142-1526

Dear Batuk Modi:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on (not issued). The comment period for the Draft permit has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. **In order to facilitate our review of all the comments or concerns you may have with the enclosed preliminary proposed permit, please provide a hand marked-up copy of the permit showing the changes you think are necessary, along with any additional summary comments, within fourteen (14) days from your receipt of this letter to:**

Ohio EPA, Division of Air Pollution Control
Jim Orlemann, Manager, Engineering Section
Preliminary Proposed Title V Permit Correspondence
122 South Front Street
Columbus, Ohio 43215

and

Cleveland Division of Air Pollution Control
1925 St. Clair
Cleveland, OH 44114
(216) 664-2324

Also, if you believe that it is necessary to have an informal conference with us, then, as part of your written comments, you should request a conference concerning the written comments.

If comments are not submitted within fourteen (14) days of your receipt of this letter, we will forward the proposed permit to USEPA for approval. All comments received will be carefully considered before proceeding to the proposed permit.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Cleveland Division of Air Pollution Control
File, DAPC PMU

State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 11/17/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 13-18-12-0180 to:
Ford Motor Company, Cleveland Casting Plant
5600 Henry Ford Blvd
Brook Park, OH 44142-1526

Emissions Unit ID (Company ID)/Emissions Unit Activity Description

B007 (Hot Blast # 7)
Hot Blast # 7 - 32.1 mmBTU/hr

B008 (Hot Blast # 1)
Hot Blast # 1 - 28.9 mmBTU/hr

B010 (Hot Blast # 2)
Hot Blast # 2 - 28.9 mmBTU/hr

B011 (Hot Blast # 3)
Hot Blast # 3 - 28.9 mmBTU/hr

B020 (Boiler # 1)
Coal Fired, Chain Grate Boiler # 1 - 77 mmBTU/hr

B021 (Boiler # 2)
Coal Fired, Chain Grate Boiler # 2 - 122 mmBTU/hr

B022 (Boiler # 3)
Coal Fired, Chain Grate Boiler # 3 - 122 mmBTU/hr

B023 (Boiler # 4)
Coal Fired, Chain Grate Boiler # 4 - 122 mmBTU/hr

B024 (Boiler # 5)
Natural Gas and Coal Fired, Spreader Stoker Boiler # 5 - 122 mmBTU/hr

B025 (Boiler # 6)
Coal Fired With Up To 10 % Shredded Tire Material, Spreader Stoker Boiler # 6 - 122 mmBTU/hr

F001 (Plant Roadways & Parking Areas)
Paved and Unpaved Roadways & Parking Areas

F003 (Coke, Stone, Steel, Scrap Sand Handling)
Coke, Stone, Steel, Scrap Sand Handling

F005 (Cupola 7 Holding Furnace)
Cupola 7 100 Ton Electric Induction Holding Furnace

F023 (Molding Basement Refuse Pan Conveyors)
Molding Basement Refuse Pan Conveyors

F024 (Knockout House Refuse Handling System)
Knockout House Refuse Handling System

F025 (Cupola 3 Holding Furnace)
Cupola 3 100 Ton Electric Induction Holding Furnace

F026 (Makeup Air Heater #1)
Natural Gas-Fired Makeup Air Heater #1 - 10 mm Btu/hr

F027 (Makeup Air Heater #2)
Natural Gas-Fired Makeup Air Heater #2 - 10 mm Btu/hr

F028 (Makeup Air Heater #3)
Natural Gas-Fired Makeup Air Heater #3 - 10 mm Btu/hr

F029 (Makeup Air Heater #4)
Natural Gas-Fired Makeup Air Heater #4- 10 mm Btu/hr

F030 (Makeup Air Heater #5)
Natural Gas-Fired Makeup Air Heater #5- 10 mm Btu/hr

F031 (Makeup Air Heater #6)
Natural Gas-Fired Makeup Air Heater #6- 10 mm Btu/hr

F032 (Makeup Air Heater #7)
Natural Gas-Fired Makeup Air Heater #7 - 10 mm Btu/hr

F033 (Makeup Air Heater #8)
Natural Gas-Fired Makeup Air Heater #8 - 10 mm Btu/hr

F034 (Makeup Air Heater #9)
Natural Gas-Fired Makeup Air Heater #9 - 10 mm Btu/hr

F035 (Makeup Air Heater #10)
Natural Gas-Fired Makeup Air Heater #10 - 10 mm Btu/hr

F036 (Makeup Air Heater #11)
Natural Gas-Fired Makeup Air Heater #11 - 10 mm Btu/hr

F037 (Makeup Air Heater #13)
Natural Gas-Fired Makeup Air Heater #13 - 10 mm Btu/hr

F038 (Makeup Air Heater #14)
Natural Gas-Fired Makeup Air Heater #14 - 10 mm Btu/hr

F039 (Makeup Air Heater #15)
Natural Gas-Fired Makeup Air Heater #15 - 10 mm Btu/hr

F040 (Makeup Air Heater #16)
Natural Gas-Fired Makeup Air Heater #16 - 10 mm Btu/hr

F041 (Makeup Air Heater #17)
Natural Gas-Fired Makeup Air Heater #17 - 10 mm Btu/hr

F042 (Makeup Air Heater #18)
Natural Gas-Fired Makeup Air Heater #18 - 10 mm Btu/hr

F043 (Makeup Air Heater #19)
Natural Gas-Fired Makeup Air Heater #19 - 10 mm Btu/hr

F044 (Makeup Air Heater #20)
Natural Gas-Fired Makeup Air Heater #20 - 10 mm Btu/hr

F045 (Makeup Air Heater #21)
Natural Gas-Fired Makeup Air Heater #21 - 10 mm Btu/hr

F046 (Makeup Air Heater #22)
Natural Gas-Fired Makeup Air Heater #22 - 10 mm Btu/hr

F047 (Makeup Air Heater #23)
Natural Gas-Fired Makeup Air Heater #23 - 10 mm Btu/hr

F048 (Makeup Air Heater #24)
Natural Gas-Fired Makeup Air Heater #24 - 10 mm Btu/hr

F049 (Makeup Air Heater #25)
Natural Gas-Fired Makeup Air Heater #25 - 10 mm Btu/hr

F050 (Makeup Air Heater #26)
Natural Gas-Fired Makeup Air Heater #26 - 10 mm Btu/hr

F051 (Makeup Air Heater #27)
Natural Gas-Fired Makeup Air Heater #27 - 10 mm Btu/hr

F052 (Makeup Air Heater #28)
Natural Gas-Fired Makeup Air Heater #28 - 10 mm Btu/hr

F053 (Makeup Air Heater #29)
Natural Gas-Fired Makeup Air Heater #29 - 10 mm Btu/hr

F054 (Makeup Air Heater #30)
Natural Gas-Fired Makeup Air Heater #30 - 10 mm Btu/hr

F055 (Makeup Air Heater #31)
Natural Gas-Fired Makeup Air Heater #31 - 10 mm

Btu/hr

F056 (Makeup Air Heater #32)
Natural Gas-Fired Makeup Air Heater #32 - 10 mm Btu/hr

F057 (Makeup Air Heater #33)
Natural Gas-Fired Makeup Air Heater #33 - 10 mm Btu/hr

F058 (Makeup Air Heater #34)
Natural Gas-Fired Makeup Air Heater #34 - 10 mm Btu/hr

F059 (Makeup Air Heater #35)
Natural Gas-Fired Makeup Air Heater #35 - 10 mm Btu/hr

F060 (Makeup Air Heater #36)
Natural Gas-Fired Makeup Air Heater #36 - 10 mm Btu/hr

F061 (Makeup Air Heater #37)
Natural Gas-Fired Makeup Air Heater #37 - 10 mm Btu/hr

F062 (Makeup Air Heater #38)
Natural Gas-Fired Makeup Air Heater #38 - 10 mm Btu/hr

F063 (Makeup Air Heater #39)
Natural Gas-Fired Makeup Air Heater #39 - 10 mm Btu/hr

F064 (Makeup Air Heater #40)
Natural Gas-Fired Makeup Air Heater #40 - 10 mm Btu/hr

F065 (Makeup Air Heater #41)
Natural Gas-Fired Makeup Air Heater #41 - 10 mm Btu/hr

F066 (Makeup Air Heater #42)
Natural Gas-Fired Makeup Air Heater #42 - 10 mm Btu/hr

F067 (Makeup Air Heater #43)
Natural Gas-Fired Makeup Air Heater #43 - 10 mm Btu/hr

F068 (Makeup Air Heater #44)
Natural Gas-Fired Makeup Air Heater #44 - 10 mm Btu/hr

F069 (Makeup Air Heater #45)
Natural Gas-Fired Makeup Air Heater #45 - 10 mm Btu/hr

F070 (Makeup Air Heater #46)
Natural Gas-Fired Makeup Air Heater #46 - 10 mm Btu/hr

F071 (Makeup Air Heater #47)
Natural Gas-Fired Makeup Air Heater #47 - 10 mm Btu/hr

F072 (Makeup Air Heater #48)
Natural Gas-Fired Makeup Air Heater #48 - 10 mm Btu/hr

F073 (Makeup Air Heater #49)
Natural Gas-Fired Makeup Air Heater #49 - 10 mm Btu/hr

F074 (Makeup Air Heater #50)
Natural Gas-Fired Makeup Air Heater #50 - 10 mm Btu/hr

F075 (Makeup Air Heater #51)
Natural Gas-Fired Makeup Air Heater #51 - 10 mm Btu/hr

F076 (Makeup Air Heater #52)
Natural Gas-Fired Makeup Air Heater #52 - 10 mm Btu/hr

F077 (Makeup Air Heater #53)
Natural Gas-Fired Makeup Air Heater #53 - 10 mm Btu/hr

F078 (Makeup Air Heater #54)
Natural Gas-Fired Makeup Air Heater #54 - 10 mm Btu/hr

K001 (V-6 Block Paint Spray Booth)
V-6 Block Paint Spray Booth

K002 (V-6 Head Paint Spray Booth)
V-6 Head Paint Spray Booth

P026 (Cupola 2 Holding Furnace)
Cupola 2 50 Ton Electric Induction Holding Furnace

P027 (No. 1 Cleaning Line)
No. 1 Cleaning Line

P028 (No. 2 Cleaning Line)
No. 2 Cleaning Line

P029 (No. 3 Cleaning Line)
No. 3 Cleaning Line

P032 (No. 6 Cleaning Line)
No. 6 Cleaning Line

P033 (No. 7 Cleaning Line)
No. 7 Cleaning Line

P035 (No. 9 Cleaning Line)
No. 9 Cleaning Line

P036 (No. 10 Cleaning Line)
No. 10 Cleaning Line

P038 (No. 2 Unhook Station)
No. 2 Unhook Station

P039 (No. 3 Unhook Station)
No. 3 Unhook Station

P040 (No. 4 Dump Station)
No. 4 Dump Station

P041 (No. 5 Dump Station)
No. 5 Dump Station

P042 (No. 6 & 7 Dump Stations)
No. 6 & 7 Dump Stations

P050 (Cleaning Room Scrap Reclamation)
Cleaning Room Scrap Reclamation

P056 (Core Line 5)
Core Line 5

P064 (Core Line 10)
Core Line 10

P066 (Core Line 11)
Core Line 11

P091 (Cleaning Room No.2 Cooler)
Cleaning Room No.2 Cooler

P092 (Cleaning Room No.3 Cooler)
Cleaning Room No.3 Cooler

P099 (Cupola 1 Holding Furnace)
Cupola 1 50 Ton Electric Induction Furnace

P101 (Core Line 9)
Core Line 9

P102 (No. 3 Cooler V-6 Unhook Station)
No. 3 Cooler V-6 Unhook Station

P106 (Core Line 7)
Core Line 7

P110 (No. 1 ML Holding Furnaces)
No. 1 ML Holding Furnaces

P111 (No. 1 ML Iron Pouring)
No. 1 ML Iron Pouring

P112 (No. 1 ML Mold Conveyor)
No. 1 ML Mold Conveyor With Cope

P113 (No. 1 ML Casting Shakeout)
No. 1 ML Casting Shakeout

P114 (No. 1 ML Cope & Drag Punch-up)
No. 1 ML Cope & Drag Punch-up

P115 (No. 1 ML Castings Hook-ups)
No. 1 ML Castings Hook-ups

P116 (No. 1 ML Sand Reclaim)
No. 1 ML Return Sand System

P117 (No. 1 ML Mag Belt)
No. 1 ML Mag Belt

P118 (No. 1 ML New Sand Transfer)
No. 1 ML Sand Chute

P119 (No. 1 ML Return Sand Storage)
No. 1 ML Sand Bins

P120 (No. 1 ML Sand Cooling)
No. 1 ML Sand Coolers

P141 (No. 2 ML Iron Pouring)
No. 2 ML Iron Pouring

P142 (No. 2 ML Cope Mold Machine)
No. 2 ML Cope Mold Machine

P145 (No. 2 ML Mold Conveyor)
No. 2 ML Mold Conveyor With Cope

P146 (No. 2 ML Casting Split)
No. 2 ML Casting Split

P147 (No. 2 ML Rotary And Cooling Screen)
No. 2 ML Rotary And Cooling Screen

P148 (No. 2 ML Conveyor)
No. 2 ML Conveyor Without Cope

P149 (No. 2 ML Casting Shakeout)
No. 2 ML Casting Shakeout

P150 (No. 2 ML Drag Punchout)
No. 2 ML Drag Punchout

P151 (No. 2 ML Cope Punchout)
No. 2 ML Cope Punchout

P152 (No. 2 ML Dredgeout Fractionating System)
No. 2 ML Dredgeout Fractionating System

P153 (No. 2 ML Sprue Removal)
No. 2 ML Sprue Removal

P154 (No. 2 ML Hook-up)
No. 2 ML Hook-up

P155 (No. 2 ML Dredgeout)
No. 2 ML Dredgeout

P156 (No. 2 ML Sand Transfer)
No. 2 ML Sand transfer

P157 (No. 2 ML Sand Mag Belt)
No. 2 ML Sand Mag Belt

P158 (No. 2 ML Sand Preparation)
No. 2 ML Sand Preparation

P159 (No. 2 ML Casting Cooling)
No. 2 ML Casting Cooling Conveyor

P160 (No. 2 ML Holding Furnace)
No. 2 ML Holding Furnace (replaces P140)

P161 (No. 2 ML Iron Transfer)
No. 2 ML Iron Transfer (replaces P140)

P162 (No. 2 ML Slag Station)
No. 2 ML Slag Station (replaces P140)

P171 (No. 3 ML Iron Pouring)
No. 3 ML Iron Pouring

P172 (No. 3 ML Cope Mold Machine)
No. 3 ML Cope Mold Machine

P173 (No. 3 ML Drag Mold Machine)
No. 3 ML Drag Mold Machine

P174 (No. 3 ML Core Handling)
No. 3 ML Core Handling

P177 (No. 3 ML Mold Conveyor)
No. 3 ML Mold Conveyor With Cope

P178 (No. 3 ML Mold Conveyor)
No. 3 ML Mold Conveyor Without Cope

P179 (No. 3 ML Drag Punchout)
No. 3 ML Drag Punchout

P180 (No. 3 ML Cope Punchout)
No. 3 ML Cope Punchout

P181 (No. 3 ML Sand Transfer)
No. 3 ML Sand Transfer

P182 (No. 3 ML New (Make-up) Sand)
No. 3 ML New Sand System

P183 (No. 3 ML Sand Cooling Rotary Screen)
No. 3 ML Sand Cooling Rotary Screen

P184 (No. 3 ML Sand Preparation Mullors)
No. 3 ML Sand Preparation Mullors

P185 (No. 3 ML Casting Shakeout)
No. 3 ML Casting Shakeout

P186 (No. 3 ML Dredgeout/ Fractionating System)
No. 3 ML Dredgeout/Fractionating System

P187 (No. 3 ML Casting Splitter)
No. 3 ML Casting Splitter

P188 (No. 3 ML Sprue Removal)
No. 3 ML Sprue Removal

P189 (No. 3 ML Casting Hook-up Station)
No. 3 ML Casting Hook-up Station

P190 (No. 3 ML Dredgeout)
No. 3 ML Dredgeout

P191 (No. 3 ML Mag Belt)
No. 3 ML Mag Belt

P192 (No. 3 ML Iron Transfer Station)
No. 3 ML Iron Transfer Station (replaces P170)

P193 (No. 3 ML Slag Station)
No. 3 ML Slag Station (replaces P170)

P194 (No. 3 ML Holding Furnace)
No. 3 ML Molten Iron Holding Furnace (replaces P170)

P290 (No. 7 ML Electric Induction Holding Furnace)
No. 7 ML Electric Induction Holding Furnace

P291 (No. 7 ML Iron Pouring)
No. 7 ML Iron Pouring

P293 (No. 7 ML Primary And Secondary Shakeouts)
No. 7 ML Primary And Secondary Shakeouts

P294 (No. 7 ML Automatic Castings Extractor)
No. 7 ML Automatic Castings Extractor

P295 (No. 7 ML Return Sand System)
No. 7 ML Return Sand System Including Existing (Pre-1994) Mullor

P296 (No. 7 ML Fluid Bed Sand Cooler)
No. 7 ML Fluid Bed Sand Cooler

P297 (No. 7 ML Mold Conveyor)
No. 7 ML Mold Conveyor

P298 (No. 7 ML Block Casting Shakeout)
No. 7 ML Block Casting Shakeout

P299 (No. 7 ML Sand Mullor)
No. 7 ML Sand Mullor (New Mullor Added Under PTI # 13-2790)

P300 (No. 7 ML Casting Cooling)
No. 7 ML Casting Cooling

P301 (No. 7 ML Sand Conveyor and Hopper)
No. 7 ML Sand Conveyor and Hopper

P411 (OSCI-Rocker Barrel Blast)
OSCI-Rocker Barrel Blast

P412 (Core Line 4.6L)
Core Line 4.6L

P414 (NGT (TMEP) Core Line)
NGT (TMEP) Core Line

P415 (Preblast Operation)
Preblast Operation For Cleaned Castings

P416 (Core Line 5.0L)
Core Line 5.0L

P419 (Nodular Operation of # 1 Cupola)
Porous Plug Desulfurization Operation Required to Convert Gray Iron into
Nodular Iron

P702 (Core Making Machine # 1)
Core Making Machine # 1 at CACP

P703 (Core Making Machine # 2)
Core Making Machine # 2 at CACP

P704 (Core Making Machine # 3)
Core Making Machine # 3 at CACP

P705 (Core Making Machine # 4)
Core Making Machine # 4 at CACP

P707 (Core Making Machine # 6)
Core Making Machine # 6 at CACP

P708 (Core Making Machine # 7)
Core Making Machine # 7 at CACP

P709 (Core Making Machine # 8)
Core Making Machine # 8 at CACP

P710 (Core Making Machine # 9)
Core Making Machine # 9 at CACP

P711 (Core Making Machine # 10)
Core Making Machine # 10 at CACP

P712 (Rollover Pouring Machine A)
Rollover Pouring Machine A at CACP

P714 (Thermal Sand Recovery Continuous Oven System A)
Thermal Sand Recovery Continuous Oven System A including TSR
Furnace, Quench, Heat Treat Oven, and Cooling Operations at CACP

P715 (Casting Cleaning Line Including Shot Blast Operation)
Casting Cleaning Line Including Shot Blast Operation at CACP

P720 (Aluminum Receiving Furnace A)
Aluminum Receiving Furnace A at CACP

P724 (Hot Sand Primary Coolers)
Hot Sand Primary Coolers at CACP

P725 (Scrap Core Processing)
Scrap Core Processing at CACP

P729 (In-Process Sand Storage and Handling)
In-Process Sand Storage and Handling at CACP

P733 (Core Machine Sand Hoppers and Transport)
Core Machine Sand Hoppers and Transport at CACP

P735 (Core Sand Final Cooler and Transport)
Core Sand Final Cooler and Transport at CACP

P741 (Hot Sand Transport)
Hot Sand Transport at CACP

P742 (Sand Screen)
Sand Screen at CACP

P744 (Liner Blast)
Liner Blast at CACP

P745 (New Sand Transport/Sand Addition)
New Sand Transport/Sand Addition at CACP

P746 (Core Box Cleaning)
Core Box Cleaning at CACP

P901 (Cupola 1)
Cupola 1 And Associated Charging And Tapping Operations

P902 (Cupola 2)
Cupola 2 And Associated Charging And Tapping Operations

P903 (Cupola 3)
Cupola 3 And Associated Charging And Tapping

Operations P907 (Cupola 7) Cupola 7 And Associated Charging And Tapping Operations	P908 (Shot Reclaim & Refuse System) Shot Reclaim & Refuse System P912 (Sand Mullors/ Sand Handling System)	Sand Mullors/ Sand Handling System

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-04(A) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

Described below is the current Ohio EPA District Office or local air agency that is responsible for processing and administering your Title V permit:

Cleveland Division of Air Pollution Control
1925 St. Clair
Cleveland, OH 44114
(216) 664-2324

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.III of Part III of this Title V permit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

i. The date, place (as defined in the permit), and time of sampling or measurements.
ii. The date(s) analyses were performed.
iii. The company or entity that performed the analyses.
iv. The analytical techniques or methods used.
v. The results of such analyses.
vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c. The permittee shall submit required reports in the following manner:

i. **All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:**

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted by January 31, April 30, July 31, and October 31 of each year in accordance with General Term and Condition A.1.c.ii below; and each report shall cover the previous calendar quarter.

In accordance with OAC rule 3745-15-06, a malfunction constitutes a violation of an emission limitation (or control requirement) and, therefore, is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

ii. **Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Section A.IV of Part III of this Title V permit or, in some cases, in Part II of this Title V permit, all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. OAC rule 3745-77-07(A)(3)(c) is not fully satisfied until the permittee addresses all other deviations of the federally enforceable requirements specified in the permit.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement overrides the reporting requirements specified in this General Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this General Term and Condition.

See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

iii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted in the following manner:**

Written reports that identify all other deviations of the federally enforceable requirements contained in this permit, including the monitoring, record keeping, and reporting requirements, which are not reported in accordance with General Term and Condition A.1.c.ii above shall be submitted to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with General Term and Condition A.1.c.ii above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

v. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

2. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in General Term and Condition A.1.c.i above.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a. a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b. as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.
(Authority for term: OAC rule 3745-77-07(A)(5))

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.
(Authority for term: OAC rule 3745-77-07(A)(6))

6. General Requirements

a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d. This permit does not convey any property rights of any sort, or any exclusive privilege.

e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

(Authority for term: OAC rule 3745-77-07(A)(7))

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.
(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.
(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.
(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

11. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

12. Compliance Requirements

a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:
(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local

air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.
(Authority for term: OAC rule 3745-77-07(G))

16. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA. Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit to install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.
(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.
(This term is provided for informational purposes only.)

18. Insignificant Activities

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.
(Authority for term: OAC rule 3745-77-07(A)(1))

19. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.
(Authority for term: OAC rule 3745-77-07(A)(1))

20. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.
(Authority for term: OAC rule 3745-77-07(A)(1))

21. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification by the responsible official of the date on which the emissions unit was permanently shut down. Authorization to operate the affected part or activity of the stationary source shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

If an emissions unit is permanently shut down (i.e., that has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any monitoring, record keeping, reporting, or testing requirements, applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

2. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

3. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

4. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

6. Additional Reporting Requirements When There Are No Deviations of <u>Federally Enforceable</u> Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a. where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in General Term and Condition A.1.c.ii;

b. where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; and

c. where the company's responsible official has certified that an emissions unit has been permanently shut down.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

1. This facility is subject to portions of 40 CFR 82.150 through 166 "Recycling and Emissions Reduction" because it has refrigeration and air conditioning equipment in use and plant personnel service at least some of the equipment. This federal regulation reduces emissions of Class I and Class II refrigerants to the lowest achievable level during service, maintenance, repair and disposal of appliances in accordance with section 608 of Title VI of the Clean Air Act. Section 608 applies to any person servicing, maintaining, or repairing appliances (excluding motor vehicle air conditioners) and disposing of appliances. Some provisions of Section 608 apply to owners of appliances. The term "all" was selected to define the "affected pollutants" (see below) because Section 608 requirements apply to "all" affected refrigerants, e.g., HCFCs and their replacements like HFC-134a, unless USEPA excludes any such refrigerants from the regulation.

The portions of 40 CFR 82.150 through 166 currently not considered applicable include the following: prohibitions under 40 CFR 82.154(c), (g) through (k), and (m) through (n), standards for recycling and recovery equipment related to equipment manufacturers under 40 CFR 82.158(a) through (k), approved equipment testing organizations under 40 CFR 82.160, technician certification related to the testing organization under 40 CFR 82.161(b) through (e), reclaimer certification under 40 CFR 82.164, and reporting/record keeping requirements under 40 CFR 82.166(a) through (i).

2. This facility has one or more emissions units that emit more than 0.25 ton per day of a criteria pollutant and are subject to the emergency action plan provisions of OAC rule 3745-25-03.

3. This facility is subject to portions of 40 CFR 82.30 through 42 "Servicing of Motor Vehicle Air Conditioners" because plant personnel service at least some of the company vehicles. This federal regulation applies to any person performing service on a motor vehicle for consideration when this service involves the refrigerant in the motor vehicle air conditioner in accordance with section 609 of Title VI of the Clean Air Act. The term "all" was selected to define the "affected pollutants" (see below) because Section 609 requirements apply to "all" affected refrigerants, e.g., CFC-12, HCFC-134a (replacement refrigerant), unless USEPA excludes any such refrigerants by regulation.

The portions of 40 CFR 82.30 through 42 not considered applicable include the following: approved refrigerant recycling equipment related to equipment manufacturers under 40 CFR 82.36, approved independent standards testing organizations under 40 CFR 82.38 and technician training and certification related to the testing organizations.

4. This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from Ohio EPA.

5. All asbestos renovation and demolition activities conducted at this facility shall be performed in accordance with the applicable requirements specified in 40 CFR, Part 61 and OAC Chapter 3745-20.

6. The operation of any control equipment outside of any applicable parametric operating restriction(s) established in the terms and conditions of this permit may or may not indicate a mass emission violation. If required by Ohio EPA, compliance with the mass emission limitation(s) shall be determined by performing concurrent mass emission tests and parameter readings, using USEPA-approved methods and procedures. The results of any required emission tests and parameter readings shall be used in determining whether or not the operation of the control equipment outside of such restriction(s) is indicative of a possible violation of the mass emission limitation(s).

7. The permittee is subject to the applicable requirements specified in 40 CFR Part 63, Subparts A and EEEEE.

Subpart EEEEE--National Emission Standards for Hazardous
Air Pollutants for Iron and Steel Foundries

<u>What This Subpart Covers</u>
63.7680 What is the purpose of this subpart?
63.7681 Am I subject to this subpart?
63.7682 What parts of my foundry does this subpart cover?
63.7683 When do I have to comply with this subpart?

<u>Emissions Limitations</u>

63.7690 What emissions limitations must I meet?

<u>Work Practice Standards</u>

63.7700 What work practice standards must I meet?

<u>Operation and Maintenance Requirements</u>

63.7710 What are my operation and maintenance requirements?

<u>General Compliance Requirements</u>

63.7720 What are my general requirements for complying with this subpart?

Initial Compliance Requirements

63.7730 By what date must I conduct performance tests or other initial compliance demonstrations?
63.7731 When must I conduct subsequent performance tests?
63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?
63.7733 What procedures must I use to establish operating limits?
63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?
63.7735 How do I demonstrate initial compliance with the work practice standards that apply to me?
63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

Continuous Compliance Requirements

63.7740 What are my monitoring requirements?
63.7741 What are the installation, operation, and maintenance requirements for my monitors?
63.7742 How do I monitor and collect data to demonstrate continuous compliance?
63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?
63.7744 How do I demonstrate continuous compliance with the work practice standards that apply to me?
63.7745 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?
63.7746 What other requirements must I meet to demonstrate continuous compliance?
63.7747 How do I apply for alternative monitoring requirements for a continuous emissions monitoring system?

Notifications, Reports, and Records

63.7750 What notifications must I submit and when?
63.7751 What reports must I submit and when?
63.7752 What records must I keep?
63.7753 In what form and for how long must I keep my records?

Other Requirements and Information

63.7760 What parts of the General Provisions apply to me?
63.7761 Who implements and enforces this subpart?

Definitions

63.7765 What definitions apply to this subpart?

Tables to Subpart EEEEE of Part 63
Table 1 to Subpart EEEEE of Part 63 - Applicability of General Provisions to Subpart EEEEE

What this Subpart Covers

§63.7680 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for iron and steel foundries. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart.

§63.7681 Am I subject to this subpart?

You are subject to this subpart if you own or operate an iron and steel foundry that is (or is part of) a major source of hazardous air pollutant (HAP) emissions. Your iron and steel foundry is a major source of HAP for purposes of this subpart if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year or if it is located at a facility that emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.7682 What parts of my foundry does this subpart cover?

(a) The affected source is each new or existing iron and steel foundry.
(b) This subpart covers emissions from metal melting furnaces, scrap preheaters, pouring areas, pouring stations, automated conveyor and pallet cooling lines, automated shakeout lines, and mold and core making lines. This subpart also covers fugitive emissions from foundry operations.
(c) An affected source is existing if you commenced construction or reconstruction of the affected source before December 23, 2002.
(d) An affected source is new if you commenced construction or reconstruction of the affected source on or after December 23, 2002. An affected source is reconstructed if it meets the definition of "reconstruction" in §63.2.

§63.7683 When do I have to comply with this subpart?

(a) Except as specified in paragraph (b) of this section, if you have an existing affected source, you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than [INSERT DATE 3 YEARS AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].
(b) If you have an existing affected source, you must comply with the work practice standards in §63.7700(b) or (c), as applicable, no later than [INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].
(c) If you have a new affected source for which the initial startup date is on or before [INSERT DATE

OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].
(c) If you have a new affected source for which the initial startup date is after [INSERT DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emissions limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.
(d) If your iron and steel foundry is an area source that becomes a major source of HAP, you must meet the requirements of §63.6(c)(5).
(e) You must meet the notification and schedule requirements in §63.7750. Note that several of these notifications must be submitted before the compliance date for your affected source.

Emissions Limitations

§63.7690 What emissions limitations must I meet?

(a) You must meet each emissions limit or standard in paragraphs (a)(1) through (11) of this section that applies to you.
(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for particulate matter (PM) in paragraph (a)(1)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(1)(ii) of this section:
(i) 0.005 grains of PM per dry standard cubic foot (gr/dscf), or
(ii) 0.0004 gr/dscf of total metal HAP.
(2) For each cupola metal melting furnace at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(2)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(2)(ii) of this section:
(i) 0.006 gr/dscf of PM, or
(ii) 0.0005 gr/dscf of total metal HAP.
(3) For each cupola metal melting furnace or electric arc metal melting furnace at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(3)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(3)(ii) of this section:
(i) 0.002 gr/dscf of PM, or
(ii) 0.0002 gr/dscf of total metal HAP.
(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(4)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(4)(ii) of this section:
(i) 0.001 gr/dscf of PM, or
(ii) 0.00008 gr/dscf of total metal HAP.

(5) For each pouring station at an existing iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(5)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(5)(ii) of this section:
(i) 0.010 gr/dscf of PM, or
(ii) 0.0008 gr/dscf of total metal HAP.
(6) For each pouring area or pouring station at a new iron and steel foundry, you must not discharge emissions through a conveyance to the atmosphere that exceed either the limit for PM in paragraph (a)(6)(i) of this section or, alternatively the limit for total metal HAP in paragraph (a)(6)(ii) of this section:
(i) 0.002 gr/dscf of PM, or
(ii) 0.0002 gr/dscf of total metal HAP.
(7) For each building or structure housing any emissions source at the iron and steel foundry, you must not discharge any fugitive emissions to the atmosphere that exhibit opacity greater than 20 percent (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.
(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, you must not discharge emissions of volatile organic hazardous air pollutants (VOHAP) through a conveyance to the atmosphere that exceed 20 parts per million by volume (ppmv) corrected to 10 percent oxygen.
(9) As an alternative to the work practice standard in §63.7700(e) for a scrap preheater at an existing iron and steel foundry or in §63.7700(f) for a scrap preheater at a new iron and steel foundry, you must not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed 20 ppmv.
(10) For one or more automated conveyor and pallet cooling lines that use a sand mold system or automated shakeout lines that use a sand mold system at a new iron and steel foundry, you must not discharge emissions of VOHAP through a conveyance to the atmosphere that exceed a flow-weighted average of 20 ppmv.
(11) For each triethylamine (TEA) cold box mold or core making line at a new or existing iron and steel foundry, you must meet either the emissions limit in paragraph (a)(11)(i) of this section or, alternatively the emissions standard in paragraph (a)(11)(ii) of this section:
(i) You must not discharge emissions of TEA through a conveyance to the atmosphere that exceed 1 ppmv, as determined when scrubbing with fresh acid solution; or
(ii) You must reduce emissions of TEA from each TEA cold box mold or core making line by at least 99 percent, as determined when scrubbing with fresh acid solution.
(b) You must meet each operating limit in paragraphs (b)(1) through (5) of this section that applies to you.
(1) You must install, operate, and maintain a capture and collection system for all emissions sources subject to an emissions limit or standard for VOHAP or TEA in paragraphs (a)(8) through (11) of this section.
(i) Each capture and collection system must meet accepted engineering standards, such as those published by the American Conference of Governmental Industrial Hygienists.
(ii) You must operate each capture system at or above the lowest value or settings established as operating limits in your operation and maintenance plan.

(2) You must operate each wet scrubber applied to emissions from a metal melting furnace, scrap preheater, pouring area, or pouring station subject to an emissions limit for PM or total metal HAP in paragraphs (a)(1) through (6) of this section such that the 3-hour average pressure drop and scrubber water flow rate does not fall below the minimum levels established during the initial or subsequent performance test.

(3) You must operate each combustion device applied to emissions from a cupola metal melting furnace subject to the emissions limit for VOHAP in paragraph (a)(8) of this section, such that the 15-minute average combustion zone temperature does not fall below 1,300 degrees Fahrenheit (°F). Periods when

the cupola is off blast and for 15 minutes after going on blast from an off blast condition are not included in the 15-minute average.
(4) You must operate each combustion device applied to emissions from a scrap preheater subject to the emissions limit for VOHAP in paragraph (a)(9) of this section or from a TEA cold box mold or core making line subject to the emissions limit for TEA in paragraph (a)(11) of this section, such that the 3-hour average combustion zone temperature does not fall below the minimum level established during the initial or subsequent performance test.
(5) You must operate each wet acid scrubber applied to emissions from a TEA cold box mold or core making line subject to the emissions limit for TEA in paragraph (a)(11) of this section such that:
(i) The 3-hour average scrubbing liquid flow rate does not fall below the minimum level established during the initial or subsequent performance test; and
(ii) The 3-hour average pH of the scrubber blowdown, as measured by a continuous parameter monitoring system (CPMS), does not exceed 4.5 or the pH of the scrubber blowdown, as measured once every 8 hours during process operations, does not exceed 4.5.
(c) If you use a control device other than a baghouse, wet scrubber, wet acid scrubber, or combustion device, you must prepare and submit a monitoring plan containing the information listed in paragraphs (c)(1) through (5) of this section. The monitoring plan is subject to approval by the Administrator.
(1) A description of the device;
(2) Test results collected in accordance with §63.7732 verifying the performance of the device for reducing emissions of PM, total metal HAP, VOHAP, or TEA to the levels required by this subpart;
(3) A copy of the operation and maintenance plan required by §63.7710(b);
(4) A list of appropriate operating parameters that will be monitored to maintain continuous compliance with the applicable emissions limitation(s); and
(5) Operating parameter limits based on monitoring data collected during the performance test.

Work Practice Standards

§63.7700 What work practice standards must I meet?

(a) You must comply with the certification requirements in paragraph (b) of this section or prepare and implement a plan for the selection and inspection of scrap according to the requirements in paragraph (c) of this section.
(b) You must prepare and operate at all times according to a written certification that the foundry purchases and uses only certified-metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, oil filters, oily turnings, lead components, mercury switches, plastics, or organic liquids.
(c) You must prepare and operate at all times according to a written plan for the selection and inspection of iron and steel scrap to minimize, to the extent practicable, the amount of organics and HAP metals in the charge materials used by the iron and steel foundry. This scrap selection and inspection plan is subject to approval by the Administrator. You must keep a copy of the plan onsite and readily available to all plant personnel with materials acquisition or inspection duties. You must provide a copy of the material specifications to each of your scrap vendors. Each plan must include the information specified in paragraphs (c)(1) through (3) of this section.

(1) A materials acquisition program to limit organic contaminants according to the requirements in paragraph (c)(1)(i) or (ii) of this section.

(i) For scrap charged to a scrap preheater, electric arc metal melting furnace, or electric induction metal melting furnaces, specifications for scrap materials to be depleted (to the extent practicable) of the presence of used oil filters, plastic parts, organic liquids, and a program to ensure the scrap materials are drained of free liquids; or

(ii) For scrap charged to a cupola metal melting furnace, specifications for scrap materials to be depleted (to the extent practicable) of the presence of plastic, and a program to ensure the scrap materials are drained of free liquids.

(2) A materials acquisition program specifying that the scrap supplier remove accessible mercury switches from the trunks and hoods of any automotive bodies contained in the scrap and remove accessible lead components such as batteries and wheel weights. You must obtain and maintain onsite a copy of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.

(3) Procedures for visual inspection of a representative portion, but not less than 10 percent, of all incoming scrap shipments to ensure the materials meet the specifications.

(i) The inspection procedures must identify the location(s) where inspections are to be performed for each type of shipment. The selected location(s) must provide a reasonable vantage point, considering worker safety, for visual inspection.

(ii) The inspection procedures must include recordkeeping requirements that document each visual inspection and the results.

(iii) The inspection procedures must include provisions for rejecting or returning entire or partial scrap shipments that do not meet specifications and limiting purchases from vendors whose shipments fail to meet specifications for more than three inspections in one calender year.

(d) For each furan warm box mold or core making line in a new or existing iron and steel foundry, you must use a binder chemical formulation that does not contain methanol as a specific ingredient of the catalyst formulation as determined by the Material Safety Data Sheet. This requirement does not apply to the resin portion of the binder system.

(e) For each scrap preheater at an existing iron and steel foundry, you must meet either the requirement in paragraph (e)(1) or (2) of this section. As an alternative to the requirement in paragraph (e)(1) or (2) of this section, you must meet the VOHAP emissions limit in §63.7690(a)(9).

(1) You must install, operate, and maintain a gas-fired preheater where the flame directly contacts the scrap charged; or

(2) You must charge only material that is subject to and in compliance with the scrap certification requirement in paragraph (b) of this section.

(f) For each scrap preheater at a new iron and steel foundry, you must charge only material that is subject to and in compliance with the scrap certification requirement in paragraph (b) of this section. As an alternative to this requirement, you must meet the VOHAP emissions limit in §63.7690(a)(9).

Operation and Maintenance Requirements

§63.7710 What are my operation and maintenance requirements?

(a) As required by §63.6(e)(1)(i), you must always operate and maintain your iron and steel foundry, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.

(b) You must prepare and operate at all times according to a written operation and maintenance plan for each capture and collection system and control device for an emissions source subject to an emissions limit in §63.7690(a). Your operation and maintenance plan also must include procedures for igniting gases from mold vents in pouring areas and pouring stations that use a sand mold system. This operation and maintenance plan is subject to approval by the Administrator. Each plan must contain the elements described in paragraphs (b)(1) through (6) of this section.

(1) Monthly inspections of the equipment that is important to the performance of the total capture system (i.e., pressure sensors, dampers, and damper switches). This inspection must include observations of the physical appearance of the equipment (e.g., presence of holes in the ductwork or hoods, flow constrictions caused by dents or accumulated dust in the ductwork, and fan erosion). The operation and maintenance plan must also include requirements to repair the defect or deficiency as soon as practicable.

(2) Operating limits for each capture system for an emissions source subject to an emissions limit or standard for VOHAP or TEA in §63.7690(a)(8) through (11). You must establish the operating according to the requirements in paragraphs (b)(2)(i) through (iii) of this section.

(i) Select operating limit parameters appropriate for the capture system design that are representative and reliable indicators of the performance of the capture system. At a minimum, you must use appropriate operating limit parameters that indicate the level of the ventilation draft and damper position settings for the capture system when operating to collect emissions, including revised settings for seasonal variations. Appropriate operating limit parameters for ventilation draft include, but are not limited to: volumetric flow rate through each separately ducted hood, total volumetric flow rate at the inlet to the control device to which the capture system is vented, fan motor amperage, or static pressure. Any parameter for damper position setting may be used that indicates the duct damper position related to the fully open setting.

(ii) For each operating limit parameter selected in paragraph (b)(2)(i) of this section, designate the value or setting for the parameter at which the capture system operates during the process operation. If your operation allows for more than one process to be operating simultaneously, designate the value or setting for the parameter at which the capture system operates during each possible configuration that you may operate (i.e., the operating limits with one furnace melting, two melting, as applicable to your plant).

(iii) Include documentation in your plan to support your selection of the operating limits established for your capture system. This documentation must include a description of the capture system design, a description of the capture system operating during production, a description of each selected operating limit parameter, a rationale for why you chose the parameter, a description of the method used to monitor the parameter according to the requirements of §63.7740(a), and the data used to set the value or setting for the parameter for each of your process configurations.

(3) Preventative maintenance plan for each control device, including a preventative maintenance schedule that is consistent with the manufacturer's instructions for routine and long-term maintenance.

(4) A site-specific monitoring plan for each bag leak detection system. For each bag leak detection system that operates on the triboelectric effect, the monitoring plan must be consistent with the recommendations contained in the U.S. Environmental Protection Agency guidance document "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015). This baghouse monitoring plan is subject to approval by the Administrator. The owner or operator shall operate and maintain the bag leak detection

system according to the site-specific monitoring plan at all times. The plan must address all of the items identified in paragraphs (b)(4)(i) through (v) of this section.

(i) Installation of the bag leak detection system.

(ii) Initial and periodic adjustment of the bag leak detection system including how the alarm set-point will be established.

(iii) Operation of the bag leak detection system including quality assurance procedures.

(iv) How the bag leak detection system will be maintained including a routine maintenance schedule and spare parts inventory list.

(v) How the bag leak detection system output will be recorded and stored.

(5) Corrective action plan for each baghouse. The plan must include the requirement that, in the event a bag leak detection system alarm is triggered, you must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the cause of the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable. Corrective actions taken may include, but are not limited to:

(i) Inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other condition that may cause an increase in emissions.

(ii) Sealing off defective bags or filter media.

(iii) Replacing defective bags or filter media or otherwise repairing the control device.

(iv) Sealing off a defective baghouse compartment.

(v) Cleaning the bag leak detection system probe or otherwise repairing the bag leak detection system.

(vi) Making process changes.

(vii) Shutting down the process producing the PM emissions.

(6) Procedures for providing an ignition source to mold vents of sand mold systems in each pouring area and pouring station unless you determine the mold vent gases either are not ignitable, ignite automatically, or cannot be ignited due to accessibility or safety issues. You must document and maintain records of this determination. The determination of ignitability, accessibility, and safety may encompass multiple casting patterns provided the castings utilize similar sand-to-metal ratios, binder formulations, and coating materials. The determination of ignitability must be based on observations of the mold vents within 5 minutes of pouring, and the flame must be present for at least 15 seconds for the mold vent to be considered ignited. For the purpose of this determination:

(i) Mold vents that ignite more than 75 percent of the time without the presence of an auxiliary ignition source are considered to ignite automatically; and

(ii) Mold vents that do not ignite automatically and cannot be ignited in the presence of an auxiliary ignition source more than 25 percent of the time are considered to be not ignitable.

General Compliance Requirements

§63.7720 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, or malfunction.

(b) During the period between the compliance date specified for your iron and steel foundry in §63.7683 and the date when applicable operating limits have been established during the initial performance test, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.

(c) You must develop and implement a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The startup, shutdown, and malfunction plan also must specify what constitutes a shutdown of a cupola and how to determine that operating conditions are normal following startup of a cupola.

Initial Compliance Requirements

§63.7730 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) As required by §63.7(a)(2), you must conduct a performance test no later than 180 calendar days after the compliance date that is specified in §63.7683 for your iron and steel foundry to demonstrate initial compliance with each emissions limitation in §63.7690 that applies to you.

(b) For each work practice standard in §63.7700 and each operation and maintenance requirement in §63.7710
that applies to you where initial compliance is not demonstrated using a performance test, you must demonstrate initial compliance no later than 30 calendar days after the compliance date that is specified for your iron and steel foundry in §63.7683.

(c) If you commenced construction or reconstruction between December 23, 2002 and [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must demonstrate initial compliance with either the proposed emissions limit or the promulgated emissions limit no later than [180 CALENDAR DAYS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or no later than 180 calendar days after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between December 23, 2002 and [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], and you chose to comply with the proposed emissions limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emissions limit by [3 YEARS AND 180 CALENDAR DAYS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER] or after startup of the source, whichever is later, according to §63.7(a)(2)(ix).

§63.7731 When must I conduct subsequent performance tests?

(a) You must conduct subsequent performance tests to demonstrate compliance with all applicable PM or total metal HAP, VOHAP, and TEA emissions limitations in §63.7690 for your iron and steel foundry no less frequently than every 5 years. The requirement to conduct performance tests every 5 years does not apply to an emissions source for which a continuous emissions monitoring system (CEMS) is used to demonstrate continuous compliance.

(b) You must conduct subsequent performance tests to demonstrate compliance with the opacity limit in §63.7690(a)(7) for your iron and steel foundry no less frequently than once every 6 months.

§63.7732 What test methods and other procedures must I use to demonstrate initial compliance with the emissions limitations?

(a) You must conduct each performance test that applies to your iron and steel foundry according to the requirements in §63.7(e)(1) and the conditions specified in paragraphs (b) through (h) of this section.

(b) To determine compliance with the applicable emissions limit for PM in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (b)(1) through (5) of this section.

(1) Determine the concentration of PM according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (b)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 5, 5B, 5D, 5F, or 5I, as applicable, to determine the PM concentration. The PM concentration is determined using only the front-half (probe rinse and filter) of the PM catch.

(2) Collect a minimum sample volume of 60 dscf of gas during each PM sampling run. A minimum of three valid test runs are needed to comprise a performance test.

(3) For cupola metal melting furnaces, sample only during times when the cupola is on blast.

(4) For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.

(5) For scrap preheaters, sample only when scrap is being preheated.

(c) To determine compliance with the applicable emissions limit for total metal HAP in §63.7690(a)(1) through (6) for a metal melting furnace, scrap preheater, pouring station, or pouring area, follow the test methods and procedures in paragraphs (c)(1) through (5) of this section.

(1) Determine the concentration of total metal HAP according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (c)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 29 to determine the total metal HAP concentration.

(2) Collect a minimum sample volume of 60 dscf of gas during each total metal HAP sampling run. A minimum of three valid test runs are needed to comprise a performance test.

(3) For cupola metal melting furnaces, sample only during times when the cupola is on blast.

(4) For electric arc and electric induction metal melting furnaces, sample only when metal is being melted.

(5) For scrap preheaters, sample only when scrap is being preheated.

(d) To determine compliance with the opacity limit in §63.7690(a)(7) for fugitive emissions from buildings or structures housing any emissions source at the iron and steel foundry, follow the procedures in paragraphs (d)(1) and (2) of this section.

(1) Using a certified observer, conduct each opacity test according to the requirements in EPA Method 9 (40 CFR part 60, appendix A) and §63.6(h)(5).

(2) Conduct each test such that the opacity observations overlap with the PM performance tests.

(e) To determine compliance with the applicable VOHAP emissions limit in §63.7690(a)(8) for a cupola metal melting furnace or in §63.7690(a)(9) for a scrap preheater, follow the test methods and procedures in paragraphs (e)(1) through (4) of this section.

(1) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (e)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

(v) Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine the concentration of total gaseous nonmethane organics (TGNMO) or Method 25A to determine the concentration of total organic compounds (TOC), using hexane as the calibration gas.

(2) Determine the average VOHAP, TGNMO, or TOC concentration using a minimum of three valid test runs. Each test run must include a minimum of 60 continuous operating minutes.

(3) For a cupola metal melting furnace, correct the measured concentration of VOHAP, TGNMO, or TOC for oxygen content in the gas stream using Equation 1 of this section:

$$C_{VOHAP,10\%O_2} = C_{VOHAP}\left(\frac{10.9\%}{20.9\% - \%O_2}\right) \qquad \text{(Eq. 1)}$$

Where:

C_{VOHAP} = Concentration of VOHAP in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the concentration of TGNMO or TOC in ppmv as hexane as measured by Method 25 or 25A in 40 CFR part 60, appendix A; and

$\%O_2$ = Oxygen concentration in gas stream, percent by volume (dry basis).

(4) For a cupola metal melting furnace, measure the combustion zone temperature of the combustion device with the CPMS required in §63.7740(d) during each sampling run in 15-minute intervals. Determine and record the 15-minute average of the three runs.

(f) Follow the applicable procedures in paragraphs (f)(1) through (3) of this section to determine compliance with the VOHAP emissions limit in §63.7690(a)(10) for automated pallet cooling lines or automated shakeout lines.

(1) Follow these procedures to demonstrate compliance by direct measurement of total hydrocarbons (a surrogate for VOHAP) using a volatile organic compound (VOC) CEMS.

(i) Using the VOC CEMS required in §63.7740(g), measure and record the concentration of total hydrocarbons (as hexane) for 180 continuous operating minutes. You must measure emissions at the

outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Reduce the monitoring data to hourly averages as specified in §63.8(g)(2).

(iii) Compute and record the 3-hour average of the monitoring data.

(2) As an alternative to the procedures in paragraph (f)(1) of this section, you may demonstrate compliance with the VOHAP emissions limit in §63.7690(a)(10) by establishing a site-specific TOC emissions limit that is correlated to the VOHAP emissions limit according to the procedures in paragraph (f)(2)(i) through (ix) of this section.

(i) Determine the VOHAP concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraph (f)(2)(ii) through (vi) of this section.

(ii) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. Sampling sites must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(iii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iv) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(v) Method 4 to determine the moisture content of the stack gas.

(vi) Method 18 to determine the VOHAP concentration. Alternatively, you may use Method 25 to determine the concentration of TGNMO using hexane as the calibration gas.

(vii) Using the CEMS required in §63.7740(g), measure and record the concentration of total hydrocarbons (as hexane) during each of the Method 18 (or Method 25) sampling runs. You must measure emissions at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(viii) Calculate the average VOHAP (or TGNMO) concentration for the source test as the arithmetic average of the concentrations measured for the individual test runs, and determine the average concentration of total hydrocarbon (as hexane) as measured by the CEMS during all test runs.

(ix) Calculate the site-specific VOC emissions limit using Equation 2 of this section:

$$VOC_{limit} = 20 \times \frac{C_{VOHAP,ave}}{C_{CEM}} \qquad \text{(Eq. 2)}$$

Where:

$C_{VOHAP,avg}$ = Average concentration of VOHAP for the source test in ppmv as measured by Method 18 in 40 CFR part 60, appendix A or the average concentration of TGNMO for the source test in ppmv as hexane as measured by Method 25 in 40 CFR part 60, appendix A; and

C_{CEM} = Average concentration of total hydrocarbons in ppmv as hexane as measured using the CEMS during the source test.

(3) For two or more exhaust streams from one or more automated conveyor and pallet cooling lines or automated shakeout lines, compute the flow-weighted average concentration of VOHAP emissions for each combination of exhaust streams using Equation 3 of this section:

Where:

C_w = Flow-weighted concentration of VOHAP or VOC, ppmv (as hexane);
C_i = Concentration of VOHAP or VOC from exhaust stream "i", ppmv (as hexane);
n = Number of exhaust streams sampled; and
Q_i = Volumetric flow rate of effluent gas from exhaust stream "i," in dry standard cubic feet per minute (dscfm).

(g) To determine compliance with the emissions limit or standard in §63.7690(a)(11) for a TEA cold box mold or core making line, follow the test methods in 40 CFR part 60, appendix A, specified in paragraphs (g)(1) through (4) of this section.

(1) Determine the TEA concentration for each test run according to the test methods in 40 CFR part 60, appendix A that are specified in paragraphs (g)(1)(i) through (v) of this section.

(i) Method 1 or 1A to select sampling port locations and the number of traverse points in each stack or duct. If you elect to meet the 99 percent reduction standard, sampling sites must be located both at the inlet to the control device and at the outlet of the control device prior to any releases to the atmosphere. If you elect to meet the concentration limit, the sampling site must be located at the outlet of the control device (or at the outlet of the emissions source if no control device is present) prior to any releases to the atmosphere.

(ii) Method 2, 2A, 2C, 2D, 2F, or 2G to determine the volumetric flow rate of the stack gas.

(iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.

(iv) Method 4 to determine the moisture content of the stack gas.

$$C_W = \frac{\sum_{i=1}^{n} C_i Q_i}{\sum_{i=1}^{n} Q_i} \qquad \text{(Eq. 3)}$$

(v) Method 18 to determine the TEA concentration. The Method 18 sampling option and time must be sufficiently long such that either the TEA concentration in the field sample is at least 5 times the limit of detection for the analytical method or the test results calculated using the laboratory's reported analytical detection limit for the specific field samples are less than 1/5 of the applicable emissions limit. The adsorbent tube approach, as described in Method 18, may be required to achieve the necessary analytical detection limits. The sampling time must be at least 1 hour in all cases.

(2) Conduct the test as soon as practicable after adding fresh acid solution and the system has reached normal operating conditions.

(3) If you use a wet acid scrubber that is subject to the operating limit in §63.7690(b)(5)(ii) for pH level, determine the pH of the scrubber blowdown using the procedures in paragraph (g)(3)(i) or (ii) of this section.

(i) Measure the pH of the scrubber blowdown with the CPMS required in §63.7740(f)(2) during each TEA sampling run in intervals of no more than 15 minutes. Determine and record the 3-hour average; or

(ii) Measure and record the pH level using the probe and meter required in §63.7740(f)(2) once each sampling run. Determine and record the average pH level for the three runs.

(4) If you are subject to the 99 percent reduction standard, calculate the mass emissions reduction using Equation 4 of this section:

$$\%reduction = \frac{E_i - E_o}{E_i} \times 100\% \qquad \text{(Eq. 4)}$$

Where:

E_i = Mass emissions rate of TEA at control device inlet, kg/hr; and

E_o = Mass emissions rate of TEA at control device outlet, kg/hr.

(h) To determine compliance with the PM or total metal HAP emissions limits in §63.7690(a)(1) through (6) when one or more regulated emissions sources are combined with either another regulated emissions source subject to a different emissions limit or other non-regulated emissions sources, you may demonstrate compliance using one of the procedures in paragraphs (h)(1) through (3) of this section.

(1) Meet the most stringent applicable emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.

(2) Use the procedures in paragraphs (h)(2)(i) through (iii) of this section.

(i) Determine the volumetric flow rate of the individual regulated streams for which emissions limits apply.

(ii) Calculate the flow-weighted average emissions limit, considering only the regulated streams, using Equation 3 of this section, except C_w is the flow-weighted average emissions limit for PM or total metal HAP in the exhaust stream, gr/dscf; and C_i is the concentration of PM or total metal HAP in exhaust stream “i”, gr/dscf.

(iii) Meet the calculated flow-weighted average emissions limit for the regulated emissions sources included in the combined emissions stream for the combined emissions stream.

(3) Use the procedures in paragraphs (h)(3)(i) through (iii) of this section.

(i) Determine the PM or total metal HAP concentration of each of the regulated streams prior to the combination with other exhaust streams or control device.

(ii) Measure the flow rate and PM or total metal HAP concentration of the combined exhaust stream both before the control device and calculate the mass removal efficiency of the control device using Equation 4 of this section, except E_i is the mass emissions rate of PM or total metal HAP at the control device inlet, lb/hr and E_o is the mass emissions rate of PM or total metal HAP at control device outlet, lb/hr.

(iii) Meet the applicable emissions limit based on the calculated PM or total metal HAP concentration for the regulated emissions source using Equation 5 of this section:

$$C_{released} = C_i \times \left(1 - \frac{\%reduction}{100}\right) \qquad \text{(Eq. 5)}$$

Where:

$C_{released}$ = Calculated concentration of PM (or total metal HAP) predicted to be released to the atmosphere from the regulated emissions source, in gr/dscf; and

C_i = Concentration of PM (or total metal HAP) in the uncontrolled regulated exhaust stream, in gr/dscf.

§63.7733 What procedures must I use to establish operating limits?

(a) For each capture system subject to operating limits in §63.7690(b)(1)(ii), you must establish site-specific operating limits in your operation and maintenance plan according to the procedures in paragraphs (a)(1) through (3) of this section.

(1) Concurrent with applicable emissions and opacity tests, measure and record values for each of the operating limit parameters in your capture system operation and maintenance plan according to the monitoring requirements in §63.7740(a).

(2) For any dampers that are manually set and remain at the same position at all times the capture system is operating, the damper position must be visually checked and recorded at the beginning and end of each run.

(3) Review and record the monitoring data. Identify and explain any times the capture system operated outside the applicable operating limits.

(b) For each wet scrubber subject to the operating limits in §63.7690(b)(2) for pressure drop and scrubber water flow rate, you must establish site-specific operating limits according to the procedures specified in paragraphs (b)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(c), measure and record the pressure drop and scrubber water flow rate in intervals of no more than 15 minutes during each PM test run.

(2) Compute and record the 3-hour average pressure drop and average scrubber water flow rate for each sampling run in which the applicable emissions limit is met.

(c) For each combustion device applied to emissions from a scrap preheater or TEA cold box mold or core making line subject to the operating limit in §63.7690(b)(4) for combustion zone temperature, you must establish a site-specific operating limit according to the procedures specified in paragraphs (c)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(e), measure and record the combustion zone temperature during each sampling run in intervals of no more than 15 minutes.

(2) Compute and record the 3-hour average combustion zone temperature for each sampling run in which the applicable emissions limit is met.

(d) For each acid wet scrubber subject to the operating limit in §63.7690(b)(5), you must establish a site-specific operating limit for scrubbing liquid flow rate according to the procedures specified in paragraphs (d)(1) and (2) of this section.

(1) Using the CPMS required in §63.7740(f), measure and record the scrubbing liquid flow rate during each TEA sampling run in intervals of no more than 15 minutes.

(2) Compute and record the 3-hour average scrubbing liquid flow rate for each sampling run in which the applicable emissions limit is met.

(e) You may change the operating limits for a capture system, wet scrubber, acid wet scrubber, or combustion device if you meet the requirements in paragraphs (e)(1) through (3) of this section.

(1) Submit a written notification to the Administrator of your request to conduct a new performance test to revise the operating limit.

(2) Conduct a performance test to demonstrate compliance with the applicable emissions limitation in §63.7690.

(3) Establish revised operating limits according to the applicable procedures in paragraphs (a) through (d) of this section.

(f) You may use a previous performance test (conducted since December 22, 2002) to establish an operating limit provided the test meets the requirements of this subpart.

§63.7734 How do I demonstrate initial compliance with the emissions limitations that apply to me?

(a) You have demonstrated initial compliance with the emissions limits in §63.7690(a) if:

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.005 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0004 gr/dscf.

(2) For each cupola metal melting furnace at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.006 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0005 gr/dscf.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at a new iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.002 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0002 gr/dscf.

(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry,

(i) The average PM concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(b), did not exceed 0.001 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.00008 gr/dscf.

(5) For each pouring station at an existing iron and steel foundry,

(i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.010 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0008 gr/dscf.

(6) For each pouring area or pouring station at a new iron and steel foundry,

(i) The average PM concentration in the exhaust stream, measured according to the performance test procedures in §63.7732(b), did not exceed 0.002 gr/dscf; or

(ii) The average total metal HAP concentration in the exhaust stream, determined according to the performance test procedures in §63.7732(c), did not exceed 0.0002 gr/dscf.

(7) For each building or structure housing any emissions source at the iron and steel foundry, the opacity of fugitive emissions discharged to the atmosphere, determined according to the performance test procedures in §63.7732(d), did not exceed 20 percent (6-minute average), except for one 6-minute average per hour that did not exceed 27 percent opacity.

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, the average VOHAP concentration, determined according to the performance test procedures in §63.7732(e), did not exceed 20 ppmv corrected to 10 percent oxygen.

(9) For each scrap preheater at an existing iron and steel foundry that does not meet the work practice standards in §63.7700(e)(1) or (2) and for each scrap preheater at a new iron and steel foundry that does not meet the work practice standard in §63.7700(f), the average VOHAP concentration determined according to the performance test procedures in §63.7732(e), did not exceed 20 ppmv.

(10) For one or more automated conveyor and pallet cooling lines that use a sand mold system or automated shakeout lines that use a sand mold system at a new foundry,

(i) You have reduced the data from the CEMS to 3-hour averages according to the performance test procedures in §63.7732(f)(1) or (2); and

(ii) The 3-hour flow-weighted average VOHAP concentration, measured according to the performance test procedures in §63.7332(f)(1) or (2), did not exceed 20 ppmv.

(11) For each TEA cold box mold or core making line in a new or existing iron and steel foundry, the average TEA concentration, determined according to the performance test procedures in §63.7732(g) did not exceed 1 ppmv or was reduced by 99 percent.

(b) You have demonstrated initial compliance with the operating limits in §63.7690(b) if:

(1) For each capture system subject to the operating limit in §63.7690(b)(1)(ii),

(i) You have established appropriate site-specific operating limits in your operation and maintenance plan according to the requirements in §63.7710(b); and

(ii) You have a record of the operating parameter data measured during the performance test in accordance with §63.7733(a); and

(2) For each wet scrubber subject to the operating limits in §63.7690(b)(2) for pressure drop and scrubber water flow rate, you have established appropriate site-specific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.7733(b).

(3) For each combustion device subject to the operating limit in §63.7690(b)(3) for combustion zone temperature, you have a record of the combustion zone temperature measured during the performance test in accordance with §63.7732(e)(4).

(4) For each combustion device subject to the operating limit in §63.7690(b)(4) for combustion zone temperature, you have established appropriate site-specific operating limits and have a record of the combustion zone temperature measured during the performance test in accordance with §63.7733(c).

(5) For each acid wet scrubber subject to the operating limits in §63.7690(b)(5) for scrubbing liquid flow rate and scrubber blowdown pH,

(i) You have established appropriate site-specific operating limits for the scrubbing liquid flow rate and have a record of the scrubbing liquid flow rate measured during the performance test in accordance with §63.7733(d); and

(ii) You have a record of the pH of the scrubbing liquid blowdown measured during the performance test in accordance with §63.7732(g)(3).

§63.7735 How do I demonstrate initial compliance with the work practice standards that apply to me?

(a) For each iron and steel foundry subject to the certification requirement in §63.7700(b), you have demonstrated initial compliance if you have certified in your notification of compliance status that: "At all times, your foundry will purchase and use only certified metal ingots, pig iron, slitter, or other materials that do not include post-consumer automotive body scrap, post-consumer engine blocks, oil filters, oily turnings, lead components, mercury switches, plastics, or organic liquids."

(b) For each iron and steel foundry subject to the requirements in §63.7700(c) for a scrap inspection and selection plan, you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have submitted a written plan to the Administrator for approval according to the requirements in §63.7700(c); and

(2) You will operate at all times according to the plan requirements.

(c) For each furan warm box mold or core making line in a new or existing foundry subject to the work practice standard in §63.7700(d), you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You will meet the no methanol requirement for the catalyst portion of each binder chemical formulation; and

(2) You have records documenting your certification of compliance, such as a material safety data sheet (provided that it contains appropriate information), a certified product data sheet, or a manufacturer's hazardous air pollutant data sheet, onsite and available for inspection.

(d) For each scrap preheater at an existing iron and steel foundry subject to the work practice standard in §63.7700(e)(1) or (2), you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have installed a gas-fired preheater where the flame directly contacts the scrap charged, you will operate and maintain each gas-fired scrap preheater such that the flame directly contacts the scrap charged, and you have records documenting your certification of compliance that are onsite and available for inspection; or

(2) You will charge only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b) and you have records documenting your certification of compliance that are onsite and available for inspection.

(e) For each scrap preheater at a new iron and steel foundry subject to the work practice standard in §63.7700(f), you have demonstrated initial compliance if you have certified in your notification of compliance status that you will charge only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b) and you have records documenting your certification of compliance that are onsite and available for inspection.

§63.7736 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system subject to an operating limit in §63.7690(b), you have demonstrated initial compliance if you have met the conditions in paragraphs (a)(1) and (2) of this section.

(1) You have certified in your notification of compliance status that:

(i) You have submitted the capture system operation and maintenance plan to the Administrator for approval according to the requirements of §63.7710(b); and

(ii) You will inspect, operate, and maintain each capture system according to the procedures in the plan.

(2) You have certified in your performance test report that the system operated during the test at the operating limits established in your operation and maintenance plan.

(b) For each control device subject to an operating limit in §63.7690(b), you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have submitted the control device operation and maintenance plan to the Administrator for approval according to the requirements of §63.7710(b); and

(2) You will inspect, operate, and maintain each control device according to the procedures in the plan.

(c) For each bag leak detection system, you have demonstrated initial compliance if you have certified in your notification of compliance status that:

(1) You have submitted the bag leak detection system monitoring plan to the Administrator for approval according to the requirements of §63.7710(b);

(2) You will inspect, operate, and maintain each bag leak detection system according to the procedures in the plan; and

(3) You will follow the corrective action procedures for bag leak detection system alarms according to the requirements in the plan.

(d) For each pouring area and pouring station in a new or existing foundry, you have demonstrated initial compliance if you have certified in your notification of compliance status report that:

(1) You have submitted the mold vent ignition plan to the Administrator for approval according to the requirements in §63.7710(b); and

(2) You will follow the procedures for igniting mold vent gases according to the requirements in the plan.

Continuous Compliance Requirements

§63.7740 What are my monitoring requirements?

(a) For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain a CPMS according to the requirements in §63.7741(a) and the requirements in paragraphs (a)(1) and (2) of this section.

(1) If you use a flow measurement device to monitor the operating limit parameter, you must at all times monitor the hourly average rate (e.g., the hourly average actual volumetric flow rate through each separately ducted hood or the average hourly total volumetric flow rate at the inlet to the control device).

(2) Dampers that are manually set and remain in the same position are exempt from the requirement to install and operate a CPMS. If dampers are not manually set and remain in the same position, you must make a visual check at least once every 24 hours to verify that each damper for the capture system is in the same position as during the initial performance test.

(b) For each negative pressure baghouse or positive pressure baghouse equipped with a stack that is applied to meet any PM or total metal HAP emissions limitation in this subpart, you must at all times monitor the relative change in PM loadings using a bag leak detection system according to the

requirements in §63.7741(b) and conduct inspections at their specified frequencies according to the requirements specified in paragraphs (b)(1) through (8) of this section.

(1) Monitor the pressure drop across each baghouse cell each day to ensure pressure drop is within the normal operating range identified in the manual.

(2) Confirm that dust is being removed from hoppers through weekly visual inspections or other means of ensuring the proper functioning of removal mechanisms.

(3) Check the compressed air supply for pulse-jet baghouses each day.

(4) Monitor cleaning cycles to ensure proper operation using an appropriate methodology.

(5) Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means.

(6) Make monthly visual checks of bag tension on reverse air and shaker-type baghouses to ensure that bags are not kinked (kneed or bent) or lying on their sides. You do not have to make this check for shaker-type baghouses using self-tensioning (spring-loaded) devices.

(7) Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks.

(8) Inspect fans for wear, material buildup, and corrosion through quarterly visual inspections, vibration detectors, or equivalent means.

(c) For each wet scrubber subject to the operating limits in §63.7690(b)(2), you must at all times monitor the 3-hour average pressure drop and scrubber water flow rate using CPMS according to the requirements in §63.7741(c).

(d) For each combustion device subject to the operating limit in §63.7690(b)(3), you must at all times monitor the 15-minute average combustion zone temperature using a CPMS according to the requirements of §63.7741(d).

(e) For each combustion device subject to the operating limit in §63.7690(b)(4), you must at all times monitor the 3-hour average combustion zone temperature using CPMS according to the requirements in §63.7741(d).

(f) For each wet acid scrubber subject to the operating limits in §63.7690(b)(5),

(1) You must at all times monitor the 3-hour average scrubbing liquid flow rate using CPMS according to the requirements of §63.7741(e)(1); and

(2) You must at all times monitor the 3-hour average pH of the scrubber blowdown using CPMS according to the requirements in §63.7741(e)(2) or measure and record the pH of the scrubber blowdown once per production cycle using a pH probe and meter according to the requirements in §63.7741(e)(3).

(g) For one or more automated conveyor and pallet cooling lines and automated shakeout lines at a new iron and steel foundry subject to the VOHAP emissions limit in §63.7690(a)(10), you must at all times monitor the 3-hour average VOHAP concentration using a CEMS according to the requirements of §63.7741(g).

§63.7741 What are the installation, operation, and maintenance requirements for my monitors?

(a) For each capture system subject to an operating limit in §63.7690(b)(1), you must install, operate, and maintain each CPMS according to the requirements in paragraphs (a)(1) through (3) of this section.

(1) If you use a flow measurement device to monitor an operating limit parameter for a capture system, you must meet the requirements in paragraphs (a)(1)(i) through (iv) of this section.

(i) Locate the flow sensor and other necessary equipment such as straightening vanes in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(2) If you use a pressure measurement device to monitor the operating limit parameter for a capture system, you must meet the requirements in paragraphs (a)(2)(i) through (vi) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(iii) Check the pressure tap for pluggage daily.

(iv) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor.

(vi) At least monthly, inspect all components for integrity, all electrical connections for continuity, and
all mechanical connections for leakage.

(3) Record the results of each inspection, calibration, and validation check.

(b) You must install, operate, and maintain a bag leak detection system according to the requirements in paragraphs (b)(1) through (7) of this section.

(1) The system must be certified by the manufacturer to be capable of detecting emissions of particulate matter at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.

(2) The bag leak detection system sensor must provide output of relative particulate matter loadings and the owner or operator shall continuously record the output from the bag leak detection system using electronic or other means (e.g., using a strip chart recorder or a data logger).

(3) The system must be equipped with an alarm that will sound when an increase in relative particulate loadings is detected over the alarm set point established in the operation and maintenance plan, and the alarm must be located such that it can be heard by the appropriate plant personnel.

(4) The initial adjustment of the system must, at minimum, consist of establishing the baseline output by adjusting the sensitivity (range) and the averaging period of the device, and establishing the alarm set points and the alarm delay time (if applicable).

(5) Following the initial adjustment, do not adjust the sensitivity or range, averaging period, alarm set point, or alarm delay time without approval from the Administrator. Except, once per quarter, you may adjust the sensitivity of the bag leak detection system to account for seasonable effects including temperature and humidity according to the procedures in the operation and maintenance plan required by §63.7710(b).

(6) For negative pressure, induced air baghouses, and positive pressure baghouses that are discharged to the atmosphere through a stack, the bag leak detector sensor must be installed downstream of the baghouse and upstream of any wet scrubber.

(7) Where multiple detectors are required, the system's instrumentation and alarm may be shared among detectors.

(c) For each wet scrubber subject to the operating limits in §63.7690(b)(2), you must install and maintain CPMS to measure and record the pressure drop and scrubber water flow rate according to the requirements in paragraphs (c)(1) and (2) of this section.

(1) For each CPMS for pressure drop you must:

(i) Locate the pressure sensor in or as close as possible to a position that provides a representative measurement of the pressure drop and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.

(iii) Check the pressure tap for pluggage daily.

(iv) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.

(v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor.

(vi) At least monthly, inspect all components for integrity, all electrical connections for continuity, and
all mechanical connections for leakage.

(2) For each CPMS for scrubber liquid flow rate, you must:

(i) Locate the flow sensor and other necessary equipment in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.

(iii) Conduct a flow sensor calibration check at least semiannually according to the manufacturer's instructions.

(iv) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(d) For each combustion device subject to the operating limit in §63.7690(b)(3) or (4), you must install and maintain a CPMS to measure and record the combustion zone temperature according to the requirements in paragraphs (d)(1) through (8) of this section.

(1) Locate the temperature sensor in a position that provides a representative temperature.

(2) For a noncryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2°C or 0.75 percent of the temperature value, whichever is larger.

(3) For a cryogenic temperature range, use a temperature sensor with a minimum tolerance of 2.2°C or 2 percent of the temperature value, whichever is larger.

(4) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(5) If you use a chart recorder, it must have a sensitivity in the minor division of at least 20°F.

(6) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, conduct a temperature sensor validation check, in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7°C of the process temperature sensor's reading.

(7) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range, or install a new temperature sensor.

(8) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(e) For each wet acid scrubber subject to the operating limits in §63.7690(b)(5), you must:

(1) Install and maintain CPMS to measure and record the scrubbing liquid flow rate according to the requirements in paragraph (c)(2) of this section; and

(2) Install and maintain CPMS to measure and record the pH of the scrubber blowdown according to the requirements in paragraph (e)(2)(i) through (iv) of this section.

(i) Locate the pH sensor in a position that provides a representative measurement of the pH and that minimizes or eliminates internal and external corrosion.

(ii) Use a gauge with a minimum measurement sensitivity of 0.1 pH or a transducer with a minimum measurement sensitivity of 5 percent of the pH range.

(iii) Check gauge calibration quarterly and transducer calibration monthly using a manual pH gauge.

(iv) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(3) As an alternative to the CPMS required in paragraph (e)(2) of this section, you may use a pH probe to extract a sample for analysis by a pH meter that meets the requirements in paragraphs (e)(3)(i) through (iii) of this section.

(i) The pH meter must have a range of at least 1 to 5 or more;

(ii) The pH meter must have a accuracy of +0.1; and

(iii) The pH meter must have a resolution of at least 0.1 pH.

(f) You must operate each CPMS used to meet the requirements of this subpart according to the requirements specified in paragraphs (f)(1) through (3) of this section.

(1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of three of the required four data points to constitute a valid hour of data.

(2) Each CPMS must have valid hourly data for 100 percent of every averaging period.

(3) Each CPMS must determine and record the hourly average of all recorded readings and the 3-hour average of all recorded readings.

(g) For each automated conveyor and pallet cooling line and automated shakeout line at a new iron and steel foundry subject to the VOHAP emissions limit in §63.7690(a)(10), you must install, operate, and maintain a CEMS to measure and record the concentration of VOHAP emissions according to the requirements in paragraphs (g)(1) through (3) of this section.

(1) You must install, operate, and maintain each CEMS according to Performance Specification 8 in 40 CFR part 60, appendix B.

(2) You must conduct a performance evaluation of each CEMS according to the requirements of §63.8 and Performance Specification 8 in 40 CFR part 60, appendix B.

(3) You must operate each CEMS according to the requirements specified in paragraph (g)(3)(i) through (iv) of this section.

(i) As specified in §63.8(c)(4)(ii), each CEMS must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

(ii) You must reduce CEMS data as specified in §63.8(g)(2).

(iii) Each CEMS must determine and record the 3-hour average emissions using all the hourly averages collected for periods during which the CEMS is not out-of-control.

(iv) Record the results of each inspection, calibration, and validation check.

§63.7742 How do I monitor and collect data to demonstrate continuous compliance?

(a) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) any time a source of emissions is operating.

(b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emissions or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.

(c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

§63.7743 How do I demonstrate continuous compliance with the emissions limitations that apply to me?

(a) You must demonstrate continuous compliance by meeting the applicable conditions in paragraphs (a)(1) through (12) of this section:

(1) For each electric arc metal melting furnace, electric induction metal melting furnace, or scrap preheater at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.005 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0004 gr/dscf.

(2) For each cupola metal melting furnace at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.006 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0005 gr/dscf.

(3) For each cupola metal melting furnace or electric arc metal melting furnace at new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.002 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0002 gr/dscf.

(4) For each electric induction metal melting furnace or scrap preheater at a new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.001 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.00008 gr/dscf.

(5) For each pouring station at an existing iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.010 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0008 gr/dscf.

(6) For each pouring area or pouring station at a new iron and steel foundry,

(i) Maintaining the average PM concentration in the exhaust stream at or below 0.002 gr/dscf; or

(ii) Maintaining the average total metal HAP concentration in the exhaust stream at or below 0.0002 gr/dscf.

(7) For each building or structure housing any emissions source at the iron and steel foundry, maintaining the opacity of any fugitive emissions discharged to the atmosphere at or below 20 percent opacity (6-minute average), except for one 6-minute average per hour that does not exceed 27 percent opacity.

(8) For each cupola metal melting furnace at a new or existing iron and steel foundry, maintaining the average VOHAP concentration in the exhaust stream at or below 20 ppmv corrected to 10 percent oxygen.

(9) For each scrap preheater at an existing new iron and steel foundry that does not comply with the work practice standard in §63.7700(e)(1) or (2) and for each scrap preheater at a new iron and steel foundry that does not comply with the work practice standard in §63.7700(f), maintaining the average VOHAP concentration in the exhaust stream at or below 20 ppmv.

(10) For one or more automated conveyor and pallet cooling lines or automated shakeout lines that use a sand mold system at a new iron and steel foundry,

(i) Maintaining the 3-hour flow-weighted average VOHAP concentration in the exhaust stream at or below 20 ppmv.

(ii) Inspecting and maintaining each CEMS according to the requirements of §63.7741(g) and recording all information needed to document conformance with these requirements; and

(iv) Collecting and reducing monitoring data for according to the requirements of §63.7741(g) and recording all information needed to document conformance with these requirements.

(11) For each TEA cold box mold or core making line at a new or existing iron and steel foundry, maintaining a 99 percent reduction in the VOHAP concentration in the exhaust stream or maintaining the average VOHAP concentration in the exhaust stream at or below 1 ppmv.

(12) Conducting subsequent performance tests at least every 5 years for each emissions source subject to an emissions limit for PM, total metal HAP, VOHAP, or TEA in §63.7690(a) and subsequent performance tests at least every 6 months for each building or structure subject to the opacity limit in §63.7690(a)(7).

(b) You must demonstrate continuous compliance for each capture system subject to an operating limit in §63.7690(b)(1) by meeting the requirements in paragraphs (b)(1) and (2) of this section.

(1) Operating the capture system at or above the lowest values or settings established for the operating limits in your operation and maintenance plan; and

(2) Monitoring the capture system according to the requirements in §63.7740(a) and collecting, reducing, and recording the monitoring data for each of the operating limit parameters according to the applicable requirements in this subpart.

(b) For each baghouse equipped with a bag leak detection system,

(1) Maintaining records of the times the bag leak detection system alarm sounded, and for each valid alarm, the time you initiated corrective action, the corrective action taken, and the date on which corrective action was completed; and

(2) Inspecting and maintaining each baghouse according to the requirements of §63.7740(b)(1) through (8) and recording all information needed to document conformance with these requirements.

(c) For each wet scrubber that is subject to the operating limits in §63.7690(b)(2), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average pressure drop and 3-hour average scrubber water flow rate at levels no lower than those established during the initial or subsequent performance test;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(c) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for pressure drop and scrubber water flow rate according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(d) For each combustion device that is subject to the operating limit in §63.7690(b)(3), you must demonstrate continuous compliance by:

(1) Maintaining the 15-minute average combustion zone temperature at a level no lower than 1,300°F;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(d) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for combustion zone temperature according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(e) For each combustion device that is subject to the operating limit in §63.7690(b)(4), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average combustion zone temperature at a level no lower that established during the initial or subsequent performance test;

(2) Inspecting and maintaining each CPMS according to the requirements of §63.7741(d) and recording all information needed to document conformance with these requirements; and

(3) Collecting and reducing monitoring data for combustion zone temperature according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements.

(f) For each acid wet scrubber subject to the operating limits in §63.7690(b)(5), you must demonstrate continuous compliance by:

(1) Maintaining the 3-hour average scrubbing liquid flow rate at a level no lower than the level established during the initial or subsequent performance test;

(2) Maintaining the 3-hour average pH of the scrubber blowdown at a level no higher than 4.5 (if measured by a CPMS) or maintaining the pH level of the scrubber blowdown during each production shift no higher than 4.5;

(3) Inspecting and maintaining each CPMS according to the requirements of §63.7741(e) and recording all information needed to document conformance with these requirements; and

(4) Collecting and reducing monitoring data for scrubbing liquid flow rate and scrubber blowdown pH according to the requirements of §63.7741(f) and recording all information needed to document conformance with these requirements. If the pH level of the scrubber blowdown is measured by a probe and meter, you must demonstrate continuous compliance by maintaining records that document the date, time, and results of each sample taken for each production shift.

§63.7744 How do I demonstrate continuous compliance with the work practice standards that apply to me?

(a) You must maintain records that document continuous compliance with the certification requirements in §63.7700(b) or with the procedures in your scrap selection and inspection plan required in §63.7700(c). Your records documenting compliance with the scrap selection and inspection plan must include an copy (kept onsite) of the procedures used by the scrap supplier for either removing accessible mercury switches or for purchasing automobile bodies that have had mercury switches removed, as applicable.

(b) You must keep records of the chemical composition of all catalyst binder formulations applied in each furan warm box mold or core making line at a new or existing iron and steel foundry to demonstrate continuous compliance with the requirements in §63.7700(d).

(c) For a scrap preheater at an existing iron and steel foundry, you must operate and maintain each gas-fired preheater such that the flame directly contacts the scrap charged to demonstrate continuous compliance with the requirement §63.7700(e)(1). If you choose to meet the work practice standard in §63.7700(e)(2), you must keep records to document that the scrap preheater charges only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b).

(d) For a scrap preheater at a new iron and steel foundry, you must keep records to document that each scrap preheater charges only material that is subject to and in compliance with the scrap certification requirements in §63.7700(b) to demonstrate continuous compliance with the requirement in §63.7700(f).

§63.7745 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

(a) For each capture system and control device for an emissions source subject to an emissions limit in §63.7690(a), you must demonstrate continuous compliance with the operation and maintenance requirements of §63.7710 by:

(1) Making monthly inspections of capture systems and initiating corrective action according to §63.7710(b)(1) and recording all information needed to document conformance with these requirements;

(2) Performing preventative maintenance for each control device according to the preventive maintenance plan required by §63.7710(b)(3) and recording all information needed to document conformance with these requirements;

(3) Operating and maintaining each bag leak detection system according to the site-specific monitoring plan required by §63.7710(b)(4) and recording all information needed to demonstrate conformance with these requirements;

(3) Initiating and completing corrective action for a bag leak detection system alarm according to the corrective action plan required by §63.7710(b)(5) and recording all information needed to document conformance with these requirements; and

(4) Igniting gases from mold vents according to the procedures in the plan required by §63.7710(b)(6). (Any instance where you fail to follow the procedures is a deviation that must be included in your semiannual compliance report.)

(b) You must maintain a current copy of the operation and maintenance plans required by §63.7710(b) onsite and available for inspection upon request. You must keep the plans for the life of the iron and steel foundry or until the iron and steel foundry is no longer subject to the requirements of this subpart.

§63.7746 What other requirements must I meet to demonstrate continuous compliance?

(a) Deviations. You must report each instance in which you did not meet each emissions limitation in §63.7690 (including each operating limit) that applies to you. This requirement includes periods of startup, shutdown, and malfunction. You also must report each instance in which you did not meet each work practice standard in §63.7700 and each operation and maintenance requirement of §63.7710 that applies to you. These instances are deviations from the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements of §63.7751.

(b) Startups, shutdowns, and malfunctions. During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

(1) Consistent with the requirements of §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan.

(2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations according to the provisions in §63.6(e).

§63.7747 How do I apply for alternative monitoring requirements for a continuous emissions monitoring system?

(a) You may request an alternative monitoring method to demonstrate compliance with the VOHAP emissions limits in §63.7690(a)(10) for automated pallet cooling lines or automated shakeout lines at a new iron and steel foundry according to the procedures in this section.

(b) You can request approval to use an alternative monitoring method in the notification of construction or reconstruction for new sources, or at any time.

(c) You must submit a monitoring plan that includes a description of the control technique or pollution prevention technique, a description of the continuous monitoring system or method including appropriate operating parameters that will be monitored, test results demonstrating compliance with the emissions limit, operating limit(s) (if applicable) determined according to the test results, and the frequency of measuring and recording to establish continuous compliance. If applicable, you must also include operation and maintenance requirements for the monitors.

(d) The monitoring plan is subject to approval by the Administrator. Use of the alternative monitoring method must not begin until approval is granted by the Administrator.

Notifications, Reports, and Records

§63.7750 What notifications must I submit and when?

(a) You must submit all of the notifications required by §§63.6(h)(4) and (5), 63.7(b) and (c); 63.8(e); 63.8(f)(4) and (6); 63.9(b) through (h) that apply to you by the specified dates.

(b) As specified in §63.9(b)(2), if you start up your iron and steel foundry before [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit your initial notification no later than [120 CALENDAR DAYS AFTER THE DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER].

(c) As specified in §63.9(b)(3), if you start up your new iron and steel foundry on or after [DATE OF PUBLICATION OF THE FINAL RULE IN THE FEDERAL REGISTER], you must submit your initial notification no later than 120 calendar days after you become subject to this subpart.

(d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required by §63.7(b)(1).

(e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a notification of compliance status according to the requirements of §63.9(h)(2)(ii).

(1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.

(2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test according to the requirement specified in §63.10(d)(2).

§63.7751 What reports must I submit and when?

(a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements specified in paragraphs (a)(1) through (5) of this section.

(1) The first compliance report must cover the period beginning on the compliance date that is specified for your iron and steel foundry by §63.7683 and ending on June 30 or December 31, whichever date comes first after the compliance date that is specified for your iron and steel foundry.

(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your first compliance report is due.

(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

(5) For each iron and steel foundry that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of the dates specified in paragraphs (a)(1) through (4) of this section.

(b) Compliance report contents. Each compliance report must include the information specified in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this section.

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took action consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(5) If there were no deviations from any emissions limitations (including operating limit), work practice standards, or operation and maintenance requirements, a statement that there were no deviations from the emissions limitations, work practice standards, or operation and maintenance requirements during the reporting period.

(6) If there were no periods during which a continuous monitoring system (including a CPMS or CEMS) was out-of-control as specified by §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(7) For each deviation from an emissions limitation (including an operating limit) that occurs at an iron and steel foundry for which you are not using a continuous monitoring system (including a CPMS or CEMS) to comply with an emissions limitation or work practice standard required in this subpart, the compliance report must contain the information specified in paragraphs (b)(1) through (4) and (b)(7)(i) and (ii) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The total operating time of each emissions source during the reporting period.

(ii) Information on the number, duration, and cause of deviations (including unknown cause) as applicable and the corrective action taken.

(8) For each deviation from an emissions limitation (including an operating limit) or work practice standard occurring at an iron and steel foundry where you are using a continuous monitoring system (including a CPMS or CEMS) to comply with the emissions limitation or work practice standard in this subpart, you must include the information specified in paragraphs (b)(1) through (4) and (b)(8)(i) through (xi) of this section. This requirement includes periods of startup, shutdown, and malfunction.

(i) The date and time that each malfunction started and stopped.

(ii) The date and time that each continuous monitoring system was inoperative, except for zero (low-level) and high-level checks.

(iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in §63.8(c)(8).

(iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(v) A summary of the total duration of the deviations during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(vi) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and unknown causes.

(vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.

(viii) A brief description of the process units.

(ix) A brief description of the continuous monitoring system.

(x) The date of the latest continuous monitoring system certification or audit.

(xi) A description of any changes in continuous monitoring systems, processes, or controls since the last reporting period.

(c) Immediate startup, shutdown, and malfunction report. If you had a startup, shutdown, or malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements of §63.10(d)(5)(ii).

(d) Part 70 monitoring report. If you have obtained a title V operating permit for an iron and steel foundry pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an iron and steel foundry along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an iron and steel foundry to your permitting authority.

§63.7752 What records must I keep?

(a) You must keep the records specified in paragraphs (a)(1) through (4) of this section:

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements of §63.10(b)(2)(xiv).

(2) The records specified in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) Records of performance tests and performance evaluations as required by §63.10(b)(2)(viii).

(4) Records of the annual quantity of each chemical binder or coating material used to make molds and cores, the Material Data Safety Sheet or other documentation that provides the chemical composition of each component, and the annual quantity of HAP used at the foundry.

(b) You must keep the following records for each CEMS.

(1) Records described in §63.10(b)(2)(vi) through (xi).

(2) Previous (i.e., superseded) versions of the performance evaluation plan as required in §63.8(d)(3).

(3) Request for alternatives to relative accuracy tests for CEMS as required in §63.8(f)(6)(i).

(4) Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(c) You must keep the records required by §§63.7743, 63.7744, and 63.7745 to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies to you.

§63.7753 In what form and for how long must I keep my records?

(a) You must keep your records in a form suitable and readily available for expeditious review, according to the requirements of §63.10(b)(1).

(b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to the requirements in §63.10(b)(1). You can keep the records for the previous 3 years offsite.

Other Requirements and Information

§63.7760 What parts of the General Provisions apply to me?

Table 1 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§63.7761 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency, in addition to the U.S. EPA, has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your State, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that cannot be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.

(1) Approval of alternatives to non-opacity emissions limitations in §63.7690 and work practice standards in §63.7700 under §63.6(g).

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

Definitions

§63.7765 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA), in §63.2, and in this section.

Automated conveyor and pallet cooling line means any dedicated conveyor line or area used for cooling molds received from pouring stations.

Automated shakeout line means any mechanical process unit designed for and dedicated to separating a casting from a mold. These mechanical processes include, but are not limited to, shaker

decks, rotary separators, and high-frequency vibration units. Automated shakeout lines do not include manual processes for separating a casting from a mold, such as personnel using a hammer, chisel, pick ax, sledge hammer, or jackhammer.

Bag leak detection system means a system that is capable of continuously monitoring relative particulate matter (dust) loadings in the exhaust of a baghouse to detect bag leaks and other upset conditions. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, electrodynamic, light scattering, light transmittance, or other effect to continuously monitor relative particulate matter loadings.

Binder chemical means a component of a system of chemicals used to bind sand together into molds, mold sections, and cores through chemical reaction as opposed to pressure.

Capture system means the collection of components used to capture gases and fumes released from one or more emissions points and then convey the captured gas stream to a control device or to the atmosphere. A capture system may include, but is not limited to, the following components as applicable to a given capture system design: duct intake devices, hoods, enclosures, ductwork, dampers, manifolds, plenums, and fans.

Cold box mold or core making line means a mold or core making line in which the formed aggregate is hardened by catalysis with a gas.

Combustion device means an afterburner, thermal incinerator, or scrap preheater.

Conveyance means the system of equipment that is designed to capture pollutants at the source, convey them through ductwork, and exhaust them using forced ventilation. A conveyance may, but does not necessarily include, control equipment designed to reduce emissions of the pollutants. Emissions that are released through windows, vents, or other general building ventilation or exhaust systems are not considered to be discharged through a conveyance.

Cooling means the process of molten metal solidification within the mold and subsequent temperature reduction prior to shakeout.

Cupola means a vertical cylindrical shaft furnace that uses coke and forms of iron and steel such as scrap and foundry returns as the primary charge components and melts the iron and steel through combustion of the coke by a forced upward flow of heated air.

Deviation means any instance in which an affected source or an owner or operator of such an affected source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emissions limitation (including operating limits), work practice standard, or operation and maintenance requirement;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any iron and steel foundry required to obtain such a permit; or

(3) Fails to meet any emissions limitation (including operating limits) or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Electric arc furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted through resistance heating by an electric current flowing through the arcs formed between the electrodes and the surface of the metal and also flowing through the metal between the arc paths.

Electric induction furnace means a vessel in which forms of iron and steel such as scrap and foundry returns are melted though resistance heating by an electric current that is induced in the metal by passing an alternating current through a coil surrounding the metal charge or surrounding a pool of molten metal at the bottom of the vessel.

Emissions limitation means any emissions limit or operating limit.

Exhaust stream means gases emitted from a process through a conveyance as defined in this subpart.

Fresh acid solution means a sulfuric acid solution used for the control of triethylamine emissions that has a pH of 2.0 or less.

Fugitive emissions means any pollutant released to the atmosphere that is not discharged through a conveyance as defined in this subpart.

Furan warm box mold or core making line means a mold or core making line in which the binder chemical system used is that system commonly designated furan warm box system by the foundry industry.

Hazardous air pollutant means any substance on the list originally established in 112(b)(1) of the CAA and subsequently amended as published in the Code of Federal Regulations.

Iron and steel foundry means a facility or portion of a facility that melts scrap, ingot, and/or other forms of iron and/or steel and pours the resulting molten metal into molds to produce final or near final shape products for introduction into commerce. Research and development facilities and operations that only produce non-commercial castings are not included in this definition.

Metal melting furnace means a cupola, electric arc furnace, or electric induction furnace that converts scrap, foundry returns, and/or other solid forms of iron and/or steel to a liquid state. This definition does not include a holding furnace, an argon oxygen decarburization vessel, or ladle that receives molten metal from a metal melting furnace, to which metal ingots or other material may be added to adjust the metal chemistry.

Mold or core making line means the collection of equipment that is used to mix an aggregate of sand and binder chemicals, form the aggregate into final shape, and harden the formed aggregate. This definition does not include a line for making green sand molds or cores.

Mold vent means an intentional opening in a mold through which gases containing pyrolysis products of organic mold and core constituents produced by contact with or proximity to molten metal normally escape the mold during and after metal pouring.

Pouring area means an area, generally associated with floor and pit molding operations, in which molten metal is brought to each individual mold. Pouring areas include all pouring operations that do not meet the definition of a pouring station.

Pouring station means the fixed location to which molds are brought in a continuous or semicontinuous manner to receive molten metal, after which the molds are moved to a cooling area.

Responsible official means responsible official as defined in §63.2.

Scrap preheater means a vessel or other piece of equipment in which metal scrap that is to be used as melting furnace feed is heated to a temperature high enough to eliminate moisture and other volatile impurities or tramp materials by direct flame heating or similar means of heating.

Scrubber blowdown means liquor or slurry discharged from a wet scrubber that is either removed as a waste stream or processed to remove impurities or adjust its composition or pH before being returned to the scrubber.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

Tables to Subpart EEEEE of Part 63

(As stated in §63.7760, you must meet each requirement in the following table that applies to you.)

Table 1 to Subpart EEEEE of Part 63. Applicability of General Provisions to Subpart EEEEE

Citation	Subject	Applies to Subpart EEEEE?	Explanation
63.1	Applicability	Yes.	
63.2	Definitions	Yes.	
63.3	Units and abbreviations	Yes.	
63.4	Prohibited activities	Yes.	
63.5	Construction/ reconstruction	Yes.	
63.6(a)-(g)	Compliance with standards and maintenance requirements	Yes.	
63.6(h)	Opacity and visible emissions standards	Yes.	
63.6(i)(i)-(j)	Compliance extension and Presidential compliance exemption	Yes.	
63.7(a)(3), (b)-(h)	Performance testing requirements	Yes.	
63.7(a)(1)-(a)(2)	Applicability and performance test dates	No	Subpart EEEEE specifies applicability and performance test dates.

63.8(a)(1)-(a)(3),(b), (c)(1)-(c)(3), (c)(6)-(c)(8), (d), (e), (f)(1)-(f)(6),(g)(1)-(g)(4)	Monitoring requirements	Yes.	Subpart EEEEE specifies requirements for alternative monitoring systems.
63.8(a)(4)	Additional monitoring requirements for control devices in §63.11	No	Subpart EEEEE does not require flares.
63.8(c)(4)	Continuous monitoring system (CMS) requirements	No	Subpart EEEEE specifies requirements for operation of CMS and CEMS.
63.8(c)(5)	Continuous opacity monitoring system (COMS) Minimum Procedures	No	Subpart EEEEE does not require COMS.
63.8(g)(5)	Data reduction	No	Subpart EEEEE specifies data reduction requirements.
63.9	Notification requirements	Yes.	
63.10(a), (b)(1)-(b)(2)(xii) - (b)(2)(xiv), (b)(3), (c)(1)-(6), (c)(9)-(15), (d)(1)-(2), (e)(1)- (2), (f)	Recordkeeping and reporting requirements	Yes	Additional records for CMS in §63.10(c)(1)-(6),(9)-(15) apply only to CEMS.
63.10(c)(7)-(8)	Records of excess emissions and parameter monitoring exceedances for CMS	No	Subpart EEEEE specifies records requirements.
63.10(d)(3)	Reporting opacity or visible emissions observations	Yes.	

63.10(e)(3)	Excess emissions reports	No	Subpart EEEEE specifies reporting requirements.
63.10(e)(4)	Reporting COMS data	No	Subpart EEEEE does not require COMS.
63.11	Control device requirements	No	Subpart EEEEE does not require flares.
63.12	State authority and delegations	Yes.	
63.13-63.15	Addresses of State air pollution control agencies and EPA regional offices. Incorporation by reference. Availability of information and confidentiality	Yes.	

THIS DATA CURRENT AS OF THE FEDERAL REGISTER DATED OCTOBER 31, 2003

40 CFR 63 Subpart A - General Provisions Applicable to Subpart EEEEE

§ 63.1 Applicability.

(a) General.

(1) Terms used throughout this part are defined in § 63.2 or in the Clean Air Act (Act) as amended in 1990, except that individual subparts of this part may include specific definitions in addition to or that supersede definitions in § 63.2.

(2) This part contains national emission standards for hazardous air pollutants (NESHAP) established pursuant to section 112 of the Act as amended November 15, 1990. These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants listed in this part pursuant to section 112(b) of the Act. This section explains the applicability of such standards to sources affected by them. The standards in this part are independent of NESHAP contained in 40 CFR part 61. The NESHAP in part 61 promulgated by signature of the Administrator before November 15, 1990 (i.e., the date of enactment of the Clean Air Act Amendments of 1990) remain in effect until they are amended, if appropriate, and added to this part.

(3) No emission standard or other requirement established under this part shall be interpreted, construed, or applied to diminish or replace the requirements of a more stringent emission limitation or other applicable requirement established by the Administrator pursuant to other authority of the Act (section 111, part C or D or any other authority of this Act), or a standard issued under State authority. The Administrator may specify in a specific standard under this part that facilities subject to other provisions under the Act need only comply with the provisions of that standard.

(4)(i) Each relevant standard in this part 63 must identify explicitly whether each provision in this subpart A is or is not included in such relevant standard.

(ii) If a relevant part 63 standard incorporates the requirements of 40 CFR part 60, part 61 or other part 63 standards, the relevant part 63 standard must identify explicitly the applicability of each corresponding part 60, part 61, or other part 63 subpart A (General) provision.

(iii) The General Provisions in this subpart A do not apply to regulations developed pursuant to section 112(r) of the amended Act, unless otherwise specified in those regulations.

(5) [Reserved]

(6) To obtain the most current list of categories of sources to be regulated under section 112 of the Act, or to obtain the most recent regulation promulgation schedule established pursuant to section 112(e) of the Act,

contact the Office of the Director, Emission Standards Division, Office of Air Quality Planning and Standards, U.S. EPA (MD-13), Research Triangle Park, North Carolina 27711.

(7) -- (9) [Reserved]

(10) For the purposes of this part, time periods specified in days shall be measured in calendar days, even if the word "calendar" is absent, unless otherwise specified in an applicable requirement.

(11) For the purposes of this part, if an explicit postmark deadline is not specified in an applicable requirement for the submittal of a notification, application, test plan, report, or other written communication to the Administrator, the owner or operator shall postmark the submittal on or before the number of days specified in the applicable requirement. For example, if a notification must be submitted 15 days before a particular event is scheduled to take place, the notification shall be postmarked on or before 15 days preceding the event; likewise, if a notification must be submitted 15 days after a particular event takes place, the notification shall be postmarked on or before 15 days following the end of the event. The use of reliable non-Government mail carriers that provide indications of verifiable delivery of information required to be submitted to the Administrator, similar to the postmark provided by the U.S. Postal Service, or alternative means of delivery agreed to by the permitting authority, is acceptable.

(12) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. Procedures governing the implementation of this provision are specified in § 63.9(i).

(b) Initial applicability determination for this part.

(1) The provisions of this part apply to the owner or operator of any stationary source that --

(i) Emits or has the potential to emit any hazardous air pollutant listed in or pursuant to section 112(b) of the Act; and

(ii) Is subject to any standard, limitation, prohibition, or other federally enforceable requirement established pursuant to this part.

(2) [Reserved]

(3) An owner or operator of a stationary source who is in the relevant source category and who determines that the source is not subject to a relevant standard or other requirement established under this part must keep a record as specified in § 63.10(b)(3).

(c) Applicability of this part after a relevant standard has been set under this part.

(1) If a relevant standard has been established under this part, the owner or operator of an affected source must comply with the provisions of that standard and of this subpart as provided in paragraph (a)(4) of this section.

(2) Except as provided in § 63.10(b)(3), if a relevant standard has been established under this part, the owner or operator of an affected source may be required to obtain a title V permit from a permitting authority in the State

in which the source is located. Emission standards promulgated in this part for area sources pursuant to section 112(c)(3) of the Act will specify whether --

(i) States will have the option to exclude area sources affected by that standard from the requirement to obtain a title V permit (i.e., the standard will exempt the category of area sources altogether from the permitting requirement);

(ii) States will have the option to defer permitting of area sources in that category until the Administrator takes rulemaking action to determine applicability of the permitting requirements; or

(iii) If a standard fails to specify what the permitting requirements will be for area sources affected by such a standard, then area sources that are subject to the standard will be subject to the requirement to obtain a title V permit without any deferral.

(3) -- (4) [Reserved]

(5) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source also shall be subject to the notification requirements of this subpart.

(d) [Reserved]

(e) If the Administrator promulgates an emission standard under section 112(d) or (h) of the Act that is applicable to a source subject to an emission limitation by permit established under section 112(j) of the Act, and the requirements under the section 112(j) emission limitation are substantially as effective as the promulgated emission standard, the owner or operator may request the permitting authority to revise the source's title V permit to reflect that the emission limitation in the permit satisfies the requirements of the promulgated emission standard. The process by which the permitting authority determines whether the section 112(j) emission limitation is substantially as effective as the promulgated emission standard must include, consistent with part 70 or 71 of this chapter, the opportunity for full public, EPA, and affected State review (including the opportunity for EPA's objection) prior to the permit revision being finalized. A negative determination by the permitting authority constitutes final action for purposes of review and appeal under the applicable title V operating permit program.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16595, Apr. 5, 2002]

§ 63.2 Definitions.

The terms used in this part are defined in the Act or in this section as follows:

Act means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Pub. L. 101-549, 104 Stat. 2399).

Actual emissions is defined in subpart D of this part for the purpose of granting a compliance extension for an early reduction of hazardous air pollutants.

Administrator means the Administrator of the United States Environmental Protection Agency or his or her authorized representative (e.g., a State that has been delegated the authority to implement the provisions of this part).

Affected source, for the purposes of this part, means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory for which a section 112(d) standard or other relevant standard is established pursuant to section 112 of the Act. Each relevant standard will define the "affected source," as defined in this paragraph unless a different definition is warranted based on a published justification as to why this definition would result in significant administrative, practical, or implementation problems and why the different definition would resolve those problems. The term "affected source," as used in this part, is separate and distinct from any other use of that term in EPA regulations such as those implementing title IV of the Act. Affected source may be defined differently for part 63 than affected facility and stationary source in parts 60 and 61, respectively. This definition of "affected source," and the procedures for adopting an alternative definition of "affected source," shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002.

Alternative emission limitation means conditions established pursuant to sections 112(i)(5) or 112(i)(6) of the Act by the Administrator or by a State with an approved permit program.

Alternative emission standard means an alternative means of emission limitation that, after notice and opportunity for public comment, has been demonstrated by an owner or operator to the Administrator's satisfaction to achieve a reduction in emissions of any air pollutant at least equivalent to the reduction in emissions of such pollutant achieved under a relevant design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act.

Alternative test method means any method of sampling and analyzing for an air pollutant that is not a test method in this chapter and that has been demonstrated to the Administrator's satisfaction, using Method 301 in Appendix A of this part, to produce results adequate for the Administrator's determination that it may be used in place of a test method specified in this part.

Approved permit program means a State permit program approved by the Administrator as meeting the requirements of part 70 of this chapter or a Federal permit program established in this chapter pursuant to title V of the Act (42 U.S.C. 7661).

Area source means any stationary source of hazardous air pollutants that is not a major source as defined in this part.

Commenced means, with respect to construction or reconstruction of an affected source, that an owner or operator has undertaken a continuous program of construction or reconstruction or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or reconstruction.

Compliance date means the date by which an affected source is required to be in compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established by the Administrator (or a State with an approved permit program) pursuant to section 112 of the Act.

Compliance schedule means: (1) In the case of an affected source that is in compliance with all applicable requirements established under this part, a statement that the source will continue to comply with such requirements; or

(2) In the case of an affected source that is required to comply with applicable requirements by a future date, a statement that the source will meet such requirements on a timely basis and, if required by an applicable requirement, a detailed schedule of the dates by which each step toward compliance will be reached; or

(3) In the case of an affected source not in compliance with all applicable requirements established under this part, a schedule of remedial measures, including an enforceable sequence of actions or operations with milestones and a schedule for the submission of certified progress reports, where applicable, leading to compliance with a relevant standard, limitation, prohibition, or any federally enforceable requirement established pursuant to section 112 of the Act for which the affected source is not in compliance. This compliance schedule shall resemble and be at least as stringent as that contained in any judicial consent decree or administrative order to which the source is subject. Any such schedule of compliance shall be supplemental to, and shall not sanction noncompliance with, the applicable requirements on which it is based.

Construction means the on-site fabrication, erection, or installation of an affected source. Construction does not include the removal of all equipment comprising an affected source from an existing location and reinstallation of such equipment at a new location. The owner or operator of an existing affected source that is relocated may elect not to reinstall minor ancillary equipment including, but not limited to, piping, ductwork, and valves. However, removal and reinstallation of an affected source will be construed as reconstruction if it satisfies the criteria for reconstruction as defined in this section. The costs of replacing minor ancillary equipment must be considered in determining whether the existing affected source is reconstructed.

Continuous emission monitoring system (CEMS) means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of emissions.

Continuous monitoring system (CMS) is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.

Continuous opacity monitoring system (COMS) means a continuous monitoring system that measures the opacity of emissions.

Continuous parameter monitoring system means the total equipment that may be required to meet the data acquisition and availability requirements of this part, used to sample, condition (if applicable), analyze, and provide a record of process or control system parameters.

Effective date means:

(1) With regard to an emission standard established under this part, the date of promulgation in the Federal Register of such standard; or

(2) With regard to an alternative emission limitation or equivalent emission limitation determined by the Administrator (or a State with an approved permit program), the date that the alternative emission limitation or equivalent emission limitation becomes effective according to the provisions of this part.

Emission standard means a national standard, limitation, prohibition, or other regulation promulgated in a subpart of this part pursuant to sections 112(d), 112(h), or 112(f) of the Act.

Emissions averaging is a way to comply with the emission limitations specified in a relevant standard, whereby an affected source, if allowed under a subpart of this part, may create emission credits by reducing emissions from specific points to a level below that required by the relevant standard, and those credits are used to offset emissions from points that are not controlled to the level required by the relevant standard.

EPA means the United States Environmental Protection Agency.

Equivalent emission limitation means any maximum achievable control technology emission limitation or requirements which are applicable to a major source of hazardous air pollutants and are adopted by the Administrator (or a State with an approved permit program) on a case-by-case basis, pursuant to section 112(g) or (j) of the Act.

Excess emissions and continuous monitoring system performance report is a report that must be submitted periodically by an affected source in order to provide data on its compliance with relevant emission limits, operating parameters, and the performance of its continuous parameter monitoring systems.

Existing source means any affected source that is not a new source.

Federally enforceable means all limitations and conditions that are enforceable by the Administrator and citizens under the Act or that are enforceable under other statutes administered by the Administrator. Examples of federally enforceable limitations and conditions include, but are not limited to:

(1) Emission standards, alternative emission standards, alternative emission limitations, and equivalent emission limitations established pursuant to section 112 of the Act as amended in 1990;

(2) New source performance standards established pursuant to section 111 of the Act, and emission standards established pursuant to section 112 of the Act before it was amended in 1990;

(3) All terms and conditions in a title V permit, including any provisions that limit a source's potential to emit, unless expressly designated as not federally enforceable;

(4) Limitations and conditions that are part of an approved State Implementation Plan (SIP) or a Federal Implementation Plan (FIP);

(5) Limitations and conditions that are part of a Federal construction permit issued under 40 CFR 52.21 or any construction permit issued under regulations approved by the EPA in accordance with 40 CFR part 51;

(6) Limitations and conditions that are part of an operating permit where the permit and the permitting program pursuant to which it was issued meet all of the following criteria:

(i) The operating permit program has been submitted to and approved by EPA into a State implementation plan (SIP) under section 110 of the CAA;

(ii) The SIP imposes a legal obligation that operating permit holders adhere to the terms and limitations of such permits and provides that permits which do not conform to the operating permit program requirements and the requirements of EPA's underlying regulations may be deemed not "federally enforceable" by EPA;

(iii) The operating permit program requires that all emission limitations, controls, and other requirements imposed by such permits will be at least as stringent as any other applicable limitations and requirements contained in the SIP or enforceable under the SIP, and that the program may not issue permits that waive, or make less stringent, any limitations or requirements contained in or issued pursuant to the SIP, or that are otherwise "federally enforceable";

(iv) The limitations, controls, and requirements in the permit in question are permanent, quantifiable, and otherwise enforceable as a practical matter; and

(v) The permit in question was issued only after adequate and timely notice and opportunity for comment for EPA and the public.

(7) Limitations and conditions in a State rule or program that has been approved by the EPA under subpart E of this part for the purposes of implementing and enforcing section 112; and

(8) Individual consent agreements that the EPA has legal authority to create.

Fixed capital cost means the capital needed to provide all the depreciable components of an existing source.

Fugitive emissions means those emissions from a stationary source that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening. Under section 112 of the Act, all fugitive emissions are to be considered in determining whether a stationary source is a major source.

Hazardous air pollutant means any air pollutant listed in or pursuant to section 112(b) of the Act.

Issuance of a part 70 permit will occur, if the State is the permitting authority, in accordance with the requirements of part 70 of this chapter and the applicable, approved State permit program. When the EPA is the permitting authority, issuance of a title V permit occurs immediately after the EPA takes final action on the final permit.

Major source means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in the aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless the Administrator establishes a lesser quantity, or in the case of radionuclides, different criteria from those specified in this sentence.

Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control and monitoring equipment, process equipment, or a process to operate in a normal or usual manner which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Monitoring means the collection and use of measurement data or other information to control the operation of a process or pollution control device or to verify a work practice standard relative to assuring compliance with applicable requirements. Monitoring is composed of four elements:

(1) Indicator(s) of performance -- the parameter or parameters you measure or observe for demonstrating proper operation of the pollution control measures or compliance with the applicable emissions limitation or standard. Indicators of performance may include direct or predicted emissions measurements (including opacity), operational parametric values that correspond to process or control device (and capture system) efficiencies or emissions rates, and recorded findings of inspection of work practice activities, materials tracking, or design characteristics. Indicators may be expressed as a single maximum or minimum value, a function of process variables (for example, within a range of pressure drops), a particular operational or work practice status (for example, a damper position, completion of a waste recovery task, materials tracking), or an interdependency between two or among more than two variables.

(2) Measurement techniques -- the means by which you gather and record information of or about the indicators of performance. The components of the measurement technique include the detector type, location and installation specifications, inspection procedures, and quality assurance and quality control measures. Examples of measurement techniques include continuous emission monitoring systems, continuous opacity monitoring systems, continuous parametric monitoring systems, and manual inspections that include making records of process conditions or work practices.

(3) Monitoring frequency -- the number of times you obtain and record monitoring data over a specified time interval. Examples of monitoring frequencies include at least four points equally spaced for each hour for continuous emissions or parametric monitoring systems, at least every 10 seconds for continuous opacity monitoring systems, and at least once per operating day (or week, month, etc.) for work practice or design inspections.

(4) Averaging time -- the period over which you average and use data to verify proper operation of the pollution control approach or compliance with the emissions limitation or standard. Examples of averaging time include a 3-hour average in units of the emissions limitation, a 30-day rolling average emissions value, a daily average of a control device operational parametric range, and an instantaneous alarm.

New affected source means the collection of equipment, activities, or both within a single contiguous area and under common control that is included in a section 112(c) source category or subcategory that is subject to a section 112(d) or other relevant standard for new sources. This definition of "new affected source," and the criteria to be utilized in implementing it, shall apply to each section 112(d) standard for which the initial proposed rule is signed by the Administrator after June 30, 2002. Each relevant standard will define the term "new affected source," which will be the same as the "affected source" unless a different collection is warranted based on consideration of factors including:

(1) Emission reduction impacts of controlling individual sources versus groups of sources;

(2) Cost effectiveness of controlling individual equipment;

(3) Flexibility to accommodate common control strategies;

(4) Cost/benefits of emissions averaging;

(5) Incentives for pollution prevention;

(6) Feasibility and cost of controlling processes that share common equipment (e.g., product recovery devices);

(7) Feasibility and cost of monitoring; and

(8) Other relevant factors.

New source means any affected source the construction or reconstruction of which is commenced after the Administrator first proposes a relevant emission standard under this part establishing an emission standard applicable to such source.

One-hour period, unless otherwise defined in an applicable subpart, means any 60-minute period commencing on the hour.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background. For continuous opacity monitoring systems, opacity means the fraction of incident light that is attenuated by an optical medium.

Owner or operator means any person who owns, leases, operates, controls, or supervises a stationary source.

Performance audit means a procedure to analyze blind samples, the content of which is known by the Administrator, simultaneously with the analysis of performance test samples in order to provide a measure of test data quality.

Performance evaluation means the conduct of relative accuracy testing, calibration error testing, and other measurements used in validating the continuous monitoring system data.

Performance test means the collection of data resulting from the execution of a test method (usually three emission test runs) used to demonstrate compliance with a relevant emission standard as specified in the performance test section of the relevant standard.

Permit modification means a change to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permit program means a comprehensive State operating permit system established pursuant to title V of the Act (42 U.S.C. 7661) and regulations codified in part 70 of this chapter and applicable State regulations, or a comprehensive Federal operating permit system established pursuant to title V of the Act and regulations codified in this chapter.

Permit revision means any permit modification or administrative permit amendment to a title V permit as defined in regulations codified in this chapter to implement title V of the Act (42 U.S.C. 7661).

Permitting authority means: (1) The State air pollution control agency, local agency, other State agency, or other agency authorized by the Administrator to carry out a permit program under part 70 of this chapter; or

(2) The Administrator, in the case of EPA-implemented permit programs under title V of the Act (42 U.S.C. 7661).

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable.

Reconstruction, unless otherwise defined in a relevant standard, means the replacement of components of an affected or a previously nonaffected source to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and

(2) It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

Regulation promulgation schedule means the schedule for the promulgation of emission standards under this part, established by the Administrator pursuant to section 112(e) of the Act and published in the Federal Register.

Relevant standard means:

(1) An emission standard;

(2) An alternative emission standard;

(3) An alternative emission limitation; or

(4) An equivalent emission limitation established pursuant to section 112 of the Act that applies to the collection of equipment, activities, or both regulated by such standard or limitation. A relevant standard may include or consist of a design, equipment, work practice, or operational requirement, or other measure, process, method, system, or technique (including prohibition of emissions) that the Administrator (or a State) establishes for new or existing sources to which such standard or limitation applies. Every relevant standard established pursuant to section 112 of the Act includes subpart A of this part, as provided by § 63.1(a)(4), and all applicable appendices of this part or of other parts of this chapter that are referenced in that standard.

Responsible official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or

(ii) The delegation of authority to such representative is approved in advance by the Administrator.

(2) For a partnership or sole proprietorship: a general partner or the proprietor, respectively.

(3) For a municipality, State, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of the EPA).

(4) For affected sources (as defined in this part) applying for or subject to a title V permit: "responsible official" shall have the same meaning as defined in part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever is applicable.

Run means one of a series of emission or other measurements needed to determine emissions for a representative operating period or cycle as specified in this part.

Shutdown means the cessation of operation of an affected source or portion of an affected source for any purpose.

Six-minute period means, with respect to opacity determinations, any one of the 10 equal parts of a 1-hour period.

Standard conditions means a temperature of 293 K (68 °°F) and a pressure of 101.3 kilopascals (29.92 in. Hg).

Startup means the setting in operation of an affected source or portion of an affected source for any purpose.

State means all non-Federal authorities, including local agencies, interstate associations, and State-wide programs, that have delegated authority to implement: (1) The provisions of this part and/or (2) the permit program established under part 70 of this chapter. The term State shall have its conventional meaning where clear from the context.

Stationary source means any building, structure, facility, or installation which emits or may emit any air pollutant.

Test method means the validated procedure for sampling, preparing, and analyzing for an air pollutant specified in a relevant standard as the performance test procedure. The test method may include methods described in an appendix of this chapter, test methods incorporated by reference in this part, or methods validated for an application through procedures in Method 301 of appendix A of this part.

Title V permit means any permit issued, renewed, or revised pursuant to Federal or State regulations established to implement title V of the Act (42 U.S.C. 7661). A title V permit issued by a State permitting authority is called a part 70 permit in this part.

Visible emission means the observation of an emission of opacity or optical density above the threshold of vision.

Working day means any day on which Federal Government offices (or State government offices for a State that has obtained delegation under section 112(l)) are open for normal business. Saturdays, Sundays, and official Federal (or where delegated, State) holidays are not working days.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16596, Apr. 5, 2002; 68 FR 32600, May 30, 2003]

§ 63.3 Units and abbreviations.

Used in this part are abbreviations and symbols of units of measure. These are defined as follows:

(a) System International (SI) units of measure:

A = ampere

g = gram

Hz = hertz

J = joule

°°K = degree Kelvin

kg = kilogram

l = liter

m = meter

m 3 = cubic meter

mg = milligram = 10−-3 gram

ml = milliliter = 10−-3 liter

mm = millimeter = 10−-3 meter

Mg = megagram = 10 6 gram = metric ton

MJ = megajoule

mol = mole

N = newton

ng = nanogram = 10−-9 gram

nm = nanometer = 10−-9 meter

Pa = pascal

s = second

V = volt

W = watt

Ω = ohm

μµg = microgram = 10−-6 gram

μµl = microliter = 10−-6 liter

(b) Other units of measure:

Btu = British thermal unit

°°C = degree Celsius (centigrade)

cal = calorie

cfm = cubic feet per minute

cc = cubic centimeter

cu ft = cubic feet

d = day

dcf = dry cubic feet

dcm = dry cubic meter

dscf = dry cubic feet at standard conditions

dscm = dry cubic meter at standard conditions

eq = equivalent

°°F degree Fahrenheit

ft = feet

ft 2 = square feet

ft 3 = cubic feet

gal = gallon

gr = grain

g-eq = gram equivalent

g-mole = gram mole

hr = hour

in. = inch

in. H2 O = inches of water

K = 1,000

kcal = kilocalorie

lb = pound

lpm = liter per minute

meq = milliequivalent

min = minute

MW = molecular weight

oz = ounces

ppb = parts per billion

ppbw = parts per billion by weight

ppbv = parts per billion by volume

ppm = parts per million

ppmw = parts per million by weight

ppmv = parts per million by volume

psia = pounds per square inch absolute

psig = pounds per square inch gage

°°R = degree Rankine

scf = cubic feet at standard conditions

scfh = cubic feet at standard conditions per hour

scm = cubic meter at standard conditions

scmm = cubic meter at standard conditions per minute

sec = second

sq ft = square feet

std = at standard conditions

v/v = volume per volume

yd 2 = square yards

yr = year

(c) Miscellaneous:

act = actual

avg = average

I.D. = inside diameter

M = molar

N = normal

O.D. = outside diameter

% = percent

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

§ 63.4 Prohibited activities and circumvention.

(a) Prohibited activities.

(1) No owner or operator subject to the provisions of this part must operate any affected source in violation of the requirements of this part. Affected sources subject to and in compliance with either an extension of compliance or an exemption from compliance are not in violation of the requirements of this part. An extension of compliance can be granted by the Administrator under this part; by a State with an approved permit program; or by the President under section 112(i)(4) of the Act.

(2) No owner or operator subject to the provisions of this part shall fail to keep records, notify, report, or revise reports as required under this part.

(3)-(5) [Reserved]

(b) Circumvention. No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment, or process to conceal an emission that would otherwise constitute noncompliance with a relevant standard. Such concealment includes, but is not limited to --

(1) The use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere;

(2) The use of gaseous diluents to achieve compliance with a relevant standard for visible emissions; and

(c) Fragmentation. Fragmentation after November 15, 1990 which divides ownership of an operation, within the same facility among various owners where there is no real change in control, will not affect applicability. The owner and operator must not use fragmentation or phasing of reconstruction activities (i.e., intentionally dividing reconstruction into multiple parts for purposes of avoiding new source requirements) to avoid becoming subject to new source requirements.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

§ 63.5 Preconstruction review and notification requirements.

(a) Applicability.

(1) This section implements the preconstruction review requirements of section 112(i)(1). After the effective date of a relevant standard, promulgated pursuant to section 112(d), (f), or (h) of the Act, under this part, the preconstruction review requirements in this section apply to the owner or operator of new affected sources and reconstructed affected sources that are major-emitting as specified in this section. New and reconstructed affected sources that commence construction or reconstruction before the effective date of a relevant standard are not subject to the preconstruction review requirements specified in paragraphs (b)(3), (d), and (e) of this section.

(2) This section includes notification requirements for new affected sources and reconstructed affected sources that are not major-emitting affected sources and that are or become subject to a relevant promulgated emission standard after the effective date of a relevant standard promulgated under this part.

(b) Requirements for existing, newly constructed, and reconstructed sources.

(1) A new affected source for which construction commences after proposal of a relevant standard is subject to relevant standards for new affected sources, including compliance dates. An affected source for which reconstruction commences after proposal of a relevant standard is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

(2) [Reserved]

(3) After the effective date of any relevant standard promulgated by the Administrator under this part, no person may, without obtaining written approval in advance from the Administrator in accordance with the procedures specified in paragraphs (d) and (e) of this section, do any of the following:

(i) Construct a new affected source that is major-emitting and subject to such standard;

(ii) Reconstruct an affected source that is major-emitting and subject to such standard; or

(iii) Reconstruct a major source such that the source becomes an affected source that is major-emitting and subject to the standard.

(4) After the effective date of any relevant standard promulgated by the Administrator under this part, an owner or operator who constructs a new affected source that is not major-emitting or reconstructs an affected source that is not major-emitting that is subject to such standard, or reconstructs a source such that the source becomes an affected source subject to the standard, must notify the Administrator of the intended construction or reconstruction. The notification must be submitted in accordance with the procedures in § 63.9(b).

(5) [Reserved]

(6) After the effective date of any relevant standard promulgated by the Administrator under this part, equipment added (or a process change) to an affected source that is within the scope of the definition of affected source under the relevant standard must be considered part of the affected source and subject to all provisions of the relevant standard established for that affected source.

(c) [Reserved]

(d) Application for approval of construction or reconstruction.

The provisions of this paragraph implement section 112(i)(1) of the Act.

(1) General application requirements.

(i) An owner or operator who is subject to the requirements of paragraph (b)(3) of this section must submit to the Administrator an application for approval of the construction or reconstruction. The application must be submitted as soon as practicable before actual construction or reconstruction begins. The application for approval of construction or reconstruction may be used to fulfill the initial notification requirements of § 63.9(b)(5). The owner or operator may submit the application for approval well in advance of the date actual construction or reconstruction begins in order to ensure a timely review by the Administrator and that the planned date to begin will not be delayed.

(ii) A separate application shall be submitted for each construction or reconstruction. Each application for approval of construction or reconstruction shall include at a minimum:

(A) The applicant's name and address;

(B) A notification of intention to construct a new major affected source or make any physical or operational change to a major affected source that may meet or has been determined to meet the criteria for a reconstruction, as defined in § 63.2 or in the relevant standard;

(C) The address (i.e., physical location) or proposed address of the source;

(D) An identification of the relevant standard that is the basis of the application;

(E) The expected date of the beginning of actual construction or reconstruction;

(F) The expected completion date of the construction or reconstruction;

(G) [Reserved]

(H) The type and quantity of hazardous air pollutants emitted by the source, reported in units and averaging times and in accordance with the test methods specified in the relevant standard, or if actual emissions data are not yet available, an estimate of the type and quantity of hazardous air pollutants expected to be emitted by the source reported in units and averaging times specified in the relevant standard. The owner or operator may submit percent reduction information if a relevant standard is established in terms of percent reduction. However, operating parameters, such as flow rate, shall be included in the submission to the extent that they demonstrate performance and compliance; and

(I) [Reserved]

(J) Other information as specified in paragraphs (d)(2) and (d)(3) of this section.

(iii) An owner or operator who submits estimates or preliminary information in place of the actual emissions data and analysis required in paragraphs (d)(1)(ii)(H) and (d)(2) of this section shall submit the actual, measured emissions data and other correct information as soon as available but no later than with the notification of compliance status required in § 63.9(h) (see § 63.9(h)(5)).

(2) Application for approval of construction.

Each application for approval of construction must include, in addition to the information required in paragraph (d)(1)(ii) of this section, technical information describing the proposed nature, size, design, operating design capacity, and method of operation of the source, including an identification of each type of emission point for each type of hazardous air pollutant that is emitted (or could reasonably be anticipated to be emitted) and a description of the planned air pollution control system (equipment or method) for each emission point. The description of the equipment to be used for the control of emissions must include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions must include an estimated control efficiency (percent) for that method. Such technical information must include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations.

(3) Application for approval of reconstruction.

Each application for approval of reconstruction shall include, in addition to the information required in paragraph (d)(1)(ii) of this section --

(i) A brief description of the affected source and the components that are to be replaced;

(ii) A description of present and proposed emission control systems (i.e., equipment or methods). The description of the equipment to be used for the control of emissions shall include each control device for each hazardous air pollutant and the estimated control efficiency (percent) for each control device. The description of the method to be used for the control of emissions shall include an estimated control efficiency (percent) for that method. Such technical information shall include calculations of emission estimates in sufficient detail to permit assessment of the validity of the calculations;

(iii) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new source;

(iv) The estimated life of the affected source after the replacements; and

(v) A discussion of any economic or technical limitations the source may have in complying with relevant standards or other requirements after the proposed replacements. The discussion shall be sufficiently detailed to demonstrate to the Administrator's satisfaction that the technical or economic limitations affect the source's ability to comply with the relevant standard and how they do so.

(vi) If in the application for approval of reconstruction the owner or operator designates the affected source as a reconstructed source and declares that there are no economic or technical limitations to prevent the source from complying with all relevant standards or other requirements, the owner or operator need not submit the information required in paragraphs (d)(3)(iii) through (d)(3)(v) of this section.

(4) Additional information. The Administrator may request additional relevant information after the submittal of an application for approval of construction or reconstruction.

(e) Approval of construction or reconstruction.

(1)(i) If the Administrator determines that, if properly constructed, or reconstructed, and operated, a new or existing source for which an application under paragraph (d) of this section was submitted will not cause emissions in violation of the relevant standard(s) and any other federally enforceable requirements, the Administrator will approve the construction or reconstruction.

(ii) In addition, in the case of reconstruction, the Administrator's determination under this paragraph will be based on:

(A) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new source;

(B) The estimated life of the source after the replacements compared to the life of a comparable entirely new source;

(C) The extent to which the components being replaced cause or contribute to the emissions from the source; and

(D) Any economic or technical limitations on compliance with relevant standards that are inherent in the proposed replacements.

(2)(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of construction or reconstruction within 60 calendar days after receipt of sufficient information to evaluate an application submitted under paragraph (d) of this section. The 60-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(3) Before denying any application for approval of construction or reconstruction, the Administrator will notify the applicant of the Administrator's intention to issue the denial together with --

(i) Notice of the information and findings on which the intended denial is based; and

(ii) Notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator to enable further action on the application.

(4) A final determination to deny any application for approval will be in writing and will specify the grounds on which the denial is based. The final determination will be made within 60 calendar days of presentation of additional information or arguments (if the application is complete), or within 60 calendar days after the final date specified for presentation if no presentation is made.

(5) Neither the submission of an application for approval nor the Administrator's approval of construction or reconstruction shall --

(i) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(ii) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(f) Approval of construction or reconstruction based on prior State preconstruction review.

(1) Preconstruction review procedures that a State utilizes for other purposes may also be utilized for purposes of this section if the procedures are substantially equivalent to those specified in this section. The Administrator will approve an application for construction or reconstruction specified in paragraphs (b)(3) and (d) of this section if the owner or operator of a new affected source or reconstructed affected source, who is subject to such requirement meets the following conditions:

(i) The owner or operator of the new affected source or reconstructed affected source has undergone a preconstruction review and approval process in the State in which the source is (or would be) located and has received a federally enforceable construction permit that contains a finding that the source will meet the relevant promulgated emission standard, if the source is properly built and operated.

(ii) Provide a statement from the State or other evidence (such as State regulations) that it considered the factors specified in paragraph (e)(1) of this section.

(2) The owner or operator must submit to the Administrator the request for approval of construction or reconstruction under this paragraph (f)(2) no later than the application deadline specified in paragraph (d)(1) of this section (see also § 63.9(b)(2)). The owner or operator must include in the request information sufficient for

the Administrator's determination. The Administrator will evaluate the owner or operator's request in accordance with the procedures specified in paragraph (e) of this section. The Administrator may request additional relevant information after the submittal of a request for approval of construction or reconstruction under this paragraph (f)(2).

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16598, Apr. 5, 2002]

§ 63.6 Compliance with standards and maintenance requirements.

(a) Applicability.

(1) The requirements in this section apply to the owner or operator of affected sources for which any relevant standard has been established pursuant to section 112 of the Act and the applicability of such requirements is set out in accordance with § 63.1(a)(4) unless --

(i) The Administrator (or a State with an approved permit program) has granted an extension of compliance consistent with paragraph (i) of this section; or

(ii) The President has granted an exemption from compliance with any relevant standard in accordance with section 112(i)(4) of the Act.

(2) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source, such source shall be subject to the relevant emission standard or other requirement.

(b) Compliance dates for new and reconstructed sources.

(1) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source for which construction or reconstruction commences after proposal of a relevant standard that has an initial startup before the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard not later than the standard's effective date.

(2) Except as specified in paragraphs (b)(3) and (4) of this section, the owner or operator of a new or reconstructed affected source that has an initial startup after the effective date of a relevant standard established under this part pursuant to section 112(d), (f), or (h) of the Act must comply with such standard upon startup of the source.

(3) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established under this part pursuant to section 112(d), 112(f), or 112(h) of the Act but before the effective date (that is, promulgation) of such standard shall comply with the relevant emission standard not later than the date 3 years after the effective date if:

(i) The promulgated standard (that is, the relevant standard) is more stringent than the proposed standard; for purposes of this paragraph, a finding that controls or compliance methods are "more stringent" must include control technologies or performance criteria and compliance or compliance assurance methods that are different

but are substantially equivalent to those required by the promulgated rule, as determined by the Administrator (or his or her authorized representative); and

(ii) The owner or operator complies with the standard as proposed during the 3-year period immediately after the effective date.

(4) The owner or operator of an affected source for which construction or reconstruction is commenced after the proposal date of a relevant standard established pursuant to section 112(d) of the Act but before the proposal date of a relevant standard established pursuant to section 112(f) shall not be required to comply with the section 112(f) emission standard until the date 10 years after the date construction or reconstruction is commenced, except that, if the section 112(f) standard is promulgated more than 10 years after construction or reconstruction is commenced, the owner or operator must comply with the standard as provided in paragraphs (b)(1) and (2) of this section.

(5) The owner or operator of a new source that is subject to the compliance requirements of paragraph (b)(3) or (4) of this section must notify the Administrator in accordance with § 63.9(d)

(6) [Reserved]

(7) When an area source becomes a major source by the addition of equipment or operations that meet the definition of new affected source in the relevant standard, the portion of the existing facility that is a new affected source must comply with all requirements of that standard applicable to new sources. The source owner or operator must comply with the relevant standard upon startup.

(c) Compliance dates for existing sources.

(1) After the effective date of a relevant standard established under this part pursuant to section 112(d) or 112(h) of the Act, the owner or operator of an existing source shall comply with such standard by the compliance date established by the Administrator in the applicable subpart(s) of this part. Except as otherwise provided for in section 112 of the Act, in no case will the compliance date established for an existing source in an applicable subpart of this part exceed 3 years after the effective date of such standard.

(2) If an existing source is subject to a standard established under this part pursuant to section 112(f) of the Act, the owner or operator must comply with the standard by the date 90 days after the standard's effective date, or by the date specified in an extension granted to the source by the Administrator under paragraph (i)(4)(ii) of this section, whichever is later.

(3)-(4) [Reserved]

(5) Except as provided in paragraph (b)(7) of this section, the owner or operator of an area source that increases its emissions of (or its potential to emit) hazardous air pollutants such that the source becomes a major source shall be subject to relevant standards for existing sources. Such sources must comply by the date specified in the standards for existing area sources that become major sources. If no such compliance date is specified in the standards, the source shall have a period of time to comply with the relevant emission standard that is equivalent to the compliance period specified in the relevant standard for existing sources in existence at the time the standard becomes effective.

(d) [Reserved]

(e) Operation and maintenance requirements.

(1)(i) At all times, including periods of startup, shutdown, and malfunction, the owner or operator must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. During a period of startup, shutdown, or malfunction, this general duty to minimize emissions requires that the owner or operator reduce emissions from the affected source to the greatest extent which is consistent with safety and good air pollution control practices. The general duty to minimize emissions during a period of startup, shutdown, or malfunction does not require the owner or operator to achieve emission levels that would be required by the applicable standard at other times if this is not consistent with safety and good air pollution control practices, nor does it require the owner or operator to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures (including the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section), review of operation and maintenance records, and inspection of the source.

(ii) Malfunctions must be corrected as soon as practicable after their occurrence in accordance with the startup, shutdown, and malfunction plan required in paragraph (e)(3) of this section. To the extent that an unexpected event arises during a startup, shutdown, or malfunction, an owner or operator must comply by minimizing emissions during such a startup, shutdown, and malfunction event consistent with safety and good air pollution control practices.

(iii) Operation and maintenance requirements established pursuant to section 112 of the Act are enforceable independent of emissions limitations or other requirements in relevant standards.

(2) [Reserved]

(3) Startup, shutdown, and malfunction plan. (i) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction, and a program of corrective action for malfunctioning process and air pollution control and monitoring equipment used to comply with the relevant standard. This plan must be developed by the owner or operator by the source's compliance date for that relevant standard. The purpose of the startup, shutdown, and malfunction plan is to --

(A) Ensure that, at all times, the owner or operator operates and maintains each affected source, including associated air pollution control and monitoring equipment, in a manner which satisfies the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(B) Ensure that owners or operators are prepared to correct malfunctions as soon as practicable after their occurrence in order to minimize excess emissions of hazardous air pollutants; and

(C) Reduce the reporting burden associated with periods of startup, shutdown, and malfunction (including corrective action taken to restore malfunctioning process and air pollution control equipment to its normal or usual manner of operation).

(ii) During periods of startup, shutdown, and malfunction, the owner or operator of an affected source must operate and maintain such source (including associated air pollution control and monitoring equipment) in accordance with the procedures specified in the startup, shutdown, and malfunction plan developed under paragraph (e)(3)(i) of this section.

(iii) When actions taken by the owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) are consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, the owner or operator must keep records for that event which demonstrate that the procedures specified in the plan were followed. These records may take the form of a "checklist," or other effective form of recordkeeping that confirms conformance with the startup, shutdown, and malfunction plan for that event. In addition, the owner or operator must keep records of these events as specified in § 63.10(b), including records of the occurrence and duration of each startup, shutdown, or malfunction of operation and each malfunction of the air pollution control and monitoring equipment. Furthermore, the owner or operator shall confirm that actions taken during the relevant reporting period during periods of startup, shutdown, and malfunction were consistent with the affected source's startup, shutdown and malfunction plan in the semiannual (or more frequent) startup, shutdown, and malfunction report required in § 63.10(d)(5).

(iv) If an action taken by the owner or operator during a startup, shutdown, or malfunction (including an action taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, then the owner or operator must record the actions taken for that event and must report such actions within 2 working days after commencing actions inconsistent with the plan, followed by a letter within 7 working days after the end of the event, in accordance with § 63.10(d)(5) (unless the owner or operator makes alternative reporting arrangements, in advance, with the Administrator).

(v) The owner or operator must maintain at the affected source a current startup, shutdown, and malfunction plan and must make the plan available upon request for inspection and copying by the Administrator. In addition, if the startup, shutdown, and malfunction plan is subsequently revised as provided in paragraph (e)(3)(viii) of this section, the owner or operator must maintain at the affected source each previous (i.e., superseded) version of the startup, shutdown, and malfunction plan, and must make each such previous version available for inspection and copying by the Administrator for a period of 5 years after revision of the plan. If at any time after adoption of a startup, shutdown, and malfunction plan the affected source ceases operation or is otherwise no longer subject to the provisions of this part, the owner or operator must retain a copy of the most recent plan for 5 years from the date the source ceases operation or is no longer subject to this part and must make the plan available upon request for inspection and copying by the Administrator. The Administrator may at any time request in writing that the owner or operator submit a copy of any startup, shutdown, and malfunction plan (or a portion thereof) which is maintained at the affected source or in the possession of the owner or operator. Upon receipt of such a request, the owner or operator must promptly submit a copy of the requested plan (or a portion thereof) to the Administrator. The Administrator must request that the owner or operator submit a particular startup, shutdown, or malfunction plan (or a portion thereof) whenever a member of the public submits a specific and reasonable request to examine or to receive a copy of that plan or portion of a

plan. The owner or operator may elect to submit the required copy of any startup, shutdown, and malfunction plan to the Administrator in an electronic format. If the owner or operator claims that any portion of such a startup, shutdown, and malfunction plan is confidential business information entitled to protection from disclosure under section 114(c) of the Act or 40 CFR 2.301, the material which is claimed as confidential must be clearly designated in the submission.

(vi) To satisfy the requirements of this section to develop a startup, shutdown, and malfunction plan, the owner or operator may use the affected source's standard operating procedures (SOP) manual, or an Occupational Safety and Health Administration (OSHA) or other plan, provided the alternative plans meet all the requirements of this section and are made available for inspection or submitted when requested by the Administrator.

(vii) Based on the results of a determination made under paragraph (e)(1)(i) of this section, the Administrator may require that an owner or operator of an affected source make changes to the startup, shutdown, and malfunction plan for that source. The Administrator must require appropriate revisions to a startup, shutdown, and malfunction plan, if the Administrator finds that the plan:

(A) Does not address a startup, shutdown, or malfunction event that has occurred;

(B) Fails to provide for the operation of the source (including associated air pollution control and monitoring equipment) during a startup, shutdown, or malfunction event in a manner consistent with the general duty to minimize emissions established by paragraph (e)(1)(i) of this section;

(C) Does not provide adequate procedures for correcting malfunctioning process and/or air pollution control and monitoring equipment as quickly as practicable; or

(D) Includes an event that does not meet the definition of startup, shutdown, or malfunction listed in § 63.2.

(viii) The owner or operator may periodically revise the startup, shutdown, and malfunction plan for the affected source as necessary to satisfy the requirements of this part or to reflect changes in equipment or procedures at the affected source. Unless the permitting authority provides otherwise, the owner or operator may make such revisions to the startup, shutdown, and malfunction plan without prior approval by the Administrator or the permitting authority. However, each such revision to a startup, shutdown, and malfunction plan must be reported in the semiannual report required by § 63.10(d)(5). If the startup, shutdown, and malfunction plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction but was not included in the startup, shutdown, and malfunction plan at the time the owner or operator developed the plan, the owner or operator must revise the startup, shutdown, and malfunction plan within 45 days after the event to include detailed procedures for operating and maintaining the source during similar malfunction events and a program of corrective action for similar malfunctions of process or air pollution control and monitoring equipment. In the event that the owner or operator makes any revision to the startup, shutdown, and malfunction plan which alters the scope of the activities at the source which are deemed to be a startup, shutdown, or malfunction, or otherwise modifies the applicability of any emission limit, work practice requirement, or other requirement in a standard established under this part, the revised plan shall not take effect until after the owner or operator has provided a written notice describing the revision to the permitting authority.

(ix) The title V permit for an affected source must require that the owner or operator adopt a startup, shutdown, and malfunction plan which conforms to the provisions of this part, and that the owner or operator operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. However, any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by this part shall not be deemed to constitute permit revisions under part 70 or part 71 of this chapter. Moreover, none of the procedures specified by the startup, shutdown, and malfunction plan for an affected source shall be deemed to fall within the permit shield provision in section 504(f) of the Act.

(f) Compliance with nonopacity emission standards –

(1) Applicability. The non-opacity emission standards set forth in this part shall apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the non-opacity emission standards set forth in this part, then that emission point must still be required to comply with the non-opacity emission standards and other applicable requirements.

(2) Methods for determining compliance.

(i) The Administrator will determine compliance with nonopacity emission standards in this part based on the results of performance tests conducted according to the procedures in § 63.7, unless otherwise specified in an applicable subpart of this part.

(ii) The Administrator will determine compliance with nonopacity emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, including the evaluation of monitoring data, as specified in § 63.6(e) and applicable subparts of this part.

(iii) If an affected source conducts performance testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if --

(A) The performance test was conducted within a reasonable amount of time before an initial performance test is required to be conducted under the relevant standard;

(B) The performance test was conducted under representative operating conditions for the source;

(C) The performance test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e) of this subpart; and

(D) The performance test was appropriately quality-assured, as specified in § 63.7(c).

(iv) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by review of records, inspection of the source, and other procedures specified in applicable subparts of this part.

(v) The Administrator will determine compliance with design, equipment, work practice, or operational emission standards in this part by evaluation of an owner or operator's conformance with operation and maintenance requirements, as specified in paragraph (e) of this section and applicable subparts of this part.

(3) Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with a non-opacity emission standard, as specified in paragraphs (f)(1) and (2) of this section, upon obtaining all the compliance information required by the relevant standard (including the written reports of performance test results, monitoring results, and other information, if applicable), and information available to the Administrator pursuant to paragraph (e)(1)(i) of this section.

(g) Use of an alternative nonopacity emission standard. (1) If, in the Administrator's judgment, an owner or operator of an affected source has established that an alternative means of emission limitation will achieve a reduction in emissions of a hazardous air pollutant from an affected source at least equivalent to the reduction in emissions of that pollutant from that source achieved under any design, equipment, work practice, or operational emission standard, or combination thereof, established under this part pursuant to section 112(h) of the Act, the Administrator will publish in the Federal Register a notice permitting the use of the alternative emission standard for purposes of compliance with the promulgated standard. Any Federal Register notice under this paragraph shall be published only after the public is notified and given the opportunity to comment. Such notice will restrict the permission to the stationary source(s) or category(ies) of sources from which the alternative emission standard will achieve equivalent emission reductions. The Administrator will condition permission in such notice on requirements to assure the proper operation and maintenance of equipment and practices required for compliance with the alternative emission standard and other requirements, including appropriate quality assurance and quality control requirements, that are deemed necessary.

(2) An owner or operator requesting permission under this paragraph shall, unless otherwise specified in an applicable subpart, submit a proposed test plan or the results of testing and monitoring in accordance with § 63.7 and § 63.8, a description of the procedures followed in testing or monitoring, and a description of pertinent conditions during testing or monitoring. Any testing or monitoring conducted to request permission to use an alternative nonopacity emission standard shall be appropriately quality assured and quality controlled, as specified in § 63.7 and § 63.8.

(3) The Administrator may establish general procedures in an applicable subpart that accomplish the requirements of paragraphs (g)(1) and (g)(2) of this section.

(h) Compliance with opacity and visible emission standards -- (1) Applicability. The opacity and visible emission standards set forth in this part must apply at all times except during periods of startup, shutdown, and malfunction, and as otherwise specified in an applicable subpart. If a startup, shutdown, or malfunction of one portion of an affected source does not affect the ability of particular emission points within other portions of the affected source to comply with the opacity and visible emission standards set forth in this part, then that emission point shall still be required to comply with the opacity and visible emission standards and other applicable requirements.

(2) Methods for determining compliance. (i) The Administrator will determine compliance with opacity and visible emission standards in this part based on the results of the test method specified in an applicable subpart. Whenever a continuous opacity monitoring system (COMS) is required to be installed to determine compliance

with numerical opacity emission standards in this part, compliance with opacity emission standards in this part shall be determined by using the results from the COMS. Whenever an opacity emission test method is not specified, compliance with opacity emission standards in this part shall be determined by conducting observations in accordance with Test Method 9 in appendix A of part 60 of this chapter or the method specified in paragraph (h)(7)(ii) of this section. Whenever a visible emission test method is not specified, compliance with visible emission standards in this part shall be determined by conducting observations in accordance with Test Method 22 in appendix A of part 60 of this chapter.

(ii) [Reserved]

(iii) If an affected source undergoes opacity or visible emission testing at startup to obtain an operating permit in the State in which the source is located, the results of such testing may be used to demonstrate compliance with a relevant standard if --

(A) The opacity or visible emission test was conducted within a reasonable amount of time before a performance test is required to be conducted under the relevant standard;

(B) The opacity or visible emission test was conducted under representative operating conditions for the source;

(C) The opacity or visible emission test was conducted and the resulting data were reduced using EPA-approved test methods and procedures, as specified in § 63.7(e); and

(D) The opacity or visible emission test was appropriately quality-assured, as specified in § 63.7(c) of this section.

(3) [Reserved]

(4) Notification of opacity or visible emission observations. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting opacity or visible emission observations in accordance with § 63.9(f), if such observations are required for the source by a relevant standard.

(5) Conduct of opacity or visible emission observations. When a relevant standard under this part includes an opacity or visible emission standard, the owner or operator of an affected source shall comply with the following:

(i) For the purpose of demonstrating initial compliance, opacity or visible emission observations shall be conducted concurrently with the initial performance test required in § 63.7 unless one of the following conditions applies:

(A) If no performance test under § 63.7 is required, opacity or visible emission observations shall be conducted within 60 days after achieving the maximum production rate at which a new or reconstructed source will be operated, but not later than 120 days after initial startup of the source, or within 120 days after the effective date of the relevant standard in the case of new sources that start up before the standard's effective date. If no performance test under § 63.7 is required, opacity or visible emission observations shall be conducted within 120 days after the compliance date for an existing or modified source; or

(B) If visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under § 63.7, or within the time period specified in paragraph (h)(5)(i)(A) of this section, the source's owner or operator shall reschedule the opacity or visible emission observations as soon after the initial performance test, or time period, as possible, but not later than 30 days thereafter, and shall advise the Administrator of the rescheduled date. The rescheduled opacity or visible emission observations shall be conducted (to the extent possible) under the same operating conditions that existed during the initial performance test conducted under § 63.7. The visible emissions observer shall determine whether visibility or other conditions prevent the opacity or visible emission observations from being made concurrently with the initial performance test in accordance with procedures contained in Test Method 9 or Test Method 22 in appendix A of part 60 of this chapter.

(ii) For the purpose of demonstrating initial compliance, the minimum total time of opacity observations shall be 3 hours (30 6-minute averages) for the performance test or other required set of observations (e.g., for fugitive-type emission sources subject only to an opacity emission standard).

(iii) The owner or operator of an affected source to which an opacity or visible emission standard in this part applies shall conduct opacity or visible emission observations in accordance with the provisions of this section, record the results of the evaluation of emissions, and report to the Administrator the opacity or visible emission results in accordance with the provisions of § 63.10(d).

(iv) [Reserved]

(v) Opacity readings of portions of plumes that contain condensed, uncombined water vapor shall not be used for purposes of determining compliance with opacity emission standards.

(6) Availability of records. The owner or operator of an affected source shall make available, upon request by the Administrator, such records that the Administrator deems necessary to determine the conditions under which the visual observations were made and shall provide evidence indicating proof of current visible observer emission certification.

(7) Use of a continuous opacity monitoring system. (i) The owner or operator of an affected source required to use a continuous opacity monitoring system (COMS) shall record the monitoring data produced during a performance test required under § 63.7 and shall furnish the Administrator a written report of the monitoring results in accordance with the provisions of § 63.10(e)(4).

(ii) Whenever an opacity emission test method has not been specified in an applicable subpart, or an owner or operator of an affected source is required to conduct Test Method 9 observations (see appendix A of part 60 of this chapter), the owner or operator may submit, for compliance purposes, COMS data results produced during any performance test required under § 63.7 in lieu of Method 9 data. If the owner or operator elects to submit COMS data for compliance with the opacity emission standard, he or she shall notify the Administrator of that decision, in writing, simultaneously with the notification under § 63.7(b) of the date the performance test is scheduled to begin. Once the owner or operator of an affected source has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent performance tests required under § 63.7, unless the owner or operator notifies the Administrator in writing to the contrary not

later than with the notification under § 63.7(b) of the date the subsequent performance test is scheduled to begin.

(iii) For the purposes of determining compliance with the opacity emission standard during a performance test required under § 63.7 using COMS data, the COMS data shall be reduced to 6-minute averages over the duration of the mass emission performance test.

(iv) The owner or operator of an affected source using a COMS for compliance purposes is responsible for demonstrating that he/she has complied with the performance evaluation requirements of § 63.8(e), that the COMS has been properly maintained, operated, and data quality-assured, as specified in § 63.8(c) and § 63.8(d), and that the resulting data have not been altered in any way.

(v) Except as provided in paragraph (h)(7)(ii) of this section, the results of continuous monitoring by a COMS that indicate that the opacity at the time visual observations were made was not in excess of the emission standard are probative but not conclusive evidence of the actual opacity of an emission, provided that the affected source proves that, at the time of the alleged violation, the instrument used was properly maintained, as specified in § 63.8(c), and met Performance Specification 1 in appendix B of part 60 of this chapter, and that the resulting data have not been altered in any way.

(8) Finding of compliance. The Administrator will make a finding concerning an affected source's compliance with an opacity or visible emission standard upon obtaining all the compliance information required by the relevant standard (including the written reports of the results of the performance tests required by § 63.7, the results of Test Method 9 or another required opacity or visible emission test method, the observer certification required by paragraph (h)(6) of this section, and the continuous opacity monitoring system results, whichever is/are applicable) and any information available to the Administrator needed to determine whether proper operation and maintenance practices are being used.

(9) Adjustment to an opacity emission standard. (i) If the Administrator finds under paragraph (h)(8) of this section that an affected source is in compliance with all relevant standards for which initial performance tests were conducted under § 63.7, but during the time such performance tests were conducted fails to meet any relevant opacity emission standard, the owner or operator of such source may petition the Administrator to make appropriate adjustment to the opacity emission standard for the affected source. Until the Administrator notifies the owner or operator of the appropriate adjustment, the relevant opacity emission standard remains applicable.

(ii) The Administrator may grant such a petition upon a demonstration by the owner or operator that --

(A) The affected source and its associated air pollution control equipment were operated and maintained in a manner to minimize the opacity of emissions during the performance tests;

(B) The performance tests were performed under the conditions established by the Administrator; and

(C) The affected source and its associated air pollution control equipment were incapable of being adjusted or operated to meet the relevant opacity emission standard.

(iii) The Administrator will establish an adjusted opacity emission standard for the affected source meeting the above requirements at a level at which the source will be able, as indicated by the performance and opacity tests, to meet the opacity emission standard at all times during which the source is meeting the mass or concentration

emission standard. The Administrator will promulgate the new opacity emission standard in the Federal Register.

(iv) After the Administrator promulgates an adjusted opacity emission standard for an affected source, the owner or operator of such source shall be subject to the new opacity emission standard, and the new opacity emission standard shall apply to such source during any subsequent performance tests.

(i) Extension of compliance with emission standards. (1) Until an extension of compliance has been granted by the Administrator (or a State with an approved permit program) under this paragraph, the owner or operator of an affected source subject to the requirements of this section shall comply with all applicable requirements of this part.

(2) Extension of compliance for early reductions and other reductions -- (i) Early reductions. Pursuant to section 112(i)(5) of the Act, if the owner or operator of an existing source demonstrates that the source has achieved a reduction in emissions of hazardous air pollutants in accordance with the provisions of subpart D of this part, the Administrator (or the State with an approved permit program) will grant the owner or operator an extension of compliance with specific requirements of this part, as specified in subpart D.

(ii) Other reductions. Pursuant to section 112(i)(6) of the Act, if the owner or operator of an existing source has installed best available control technology (BACT) (as defined in section 169(3) of the Act) or technology required to meet a lowest achievable emission rate (LAER) (as defined in section 171 of the Act) prior to the promulgation of an emission standard in this part applicable to such source and the same pollutant (or stream of pollutants) controlled pursuant to the BACT or LAER installation, the Administrator will grant the owner or operator an extension of compliance with such emission standard that will apply until the date 5 years after the date on which such installation was achieved, as determined by the Administrator.

(3) Request for extension of compliance. Paragraphs (i)(4) through (i)(7) of this section concern requests for an extension of compliance with a relevant standard under this part (except requests for an extension of compliance under paragraph (i)(2)(i) of this section will be handled through procedures specified in subpart D of this part).

(4)(i)(A) The owner or operator of an existing source who is unable to comply with a relevant standard established under this part pursuant to section 112(d) of the Act may request that the Administrator (or a State, when the State has an approved part 70 permit program and the source is required to obtain a part 70 permit under that program, or a State, when the State has been delegated the authority to implement and enforce the emission standard for that source) grant an extension allowing the source up to 1 additional year to comply with the standard, if such additional period is necessary for the installation of controls. An additional extension of up to 3 years may be added for mining waste operations, if the 1-year extension of compliance is insufficient to dry and cover mining waste in order to reduce emissions of any hazardous air pollutant. The owner or operator of an affected source who has requested an extension of compliance under this paragraph and who is otherwise required to obtain a title V permit shall apply for such permit or apply to have the source's title V permit revised to incorporate the conditions of the extension of compliance. The conditions of an extension of compliance granted under this paragraph will be incorporated into the affected source's title V permit according to the provisions of part 70 or Federal title V regulations in this chapter (42 U.S.C. 7661), whichever are applicable.

(B) Any request under this paragraph for an extension of compliance with a relevant standard must be submitted in writing to the appropriate authority no later than 120 days prior to the affected source's compliance date (as

specified in paragraphs (b) and (c) of this section), except as provided for in paragraph (i)(4)(i)(C) of this section. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the date of denial. Emission standards established under this part may specify alternative dates for the submittal of requests for an extension of compliance if alternatives are appropriate for the source categories affected by those standards.

(C) An owner or operator may submit a compliance extension request after the date specified in paragraph (i)(4)(i)(B) of this section provided the need for the compliance extension arose after that date, and before the otherwise applicable compliance date and the need arose due to circumstances beyond reasonable control of the owner or operator. This request must include, in addition to the information required in paragraph (i)(6)(i) of this section, a statement of the reasons additional time is needed and the date when the owner or operator first learned of the problems. Nonfrivolous requests submitted under this paragraph will stay the applicability of the rule as to the emission points in question until such time as the request is granted or denied. A denial will be effective as of the original compliance date.

(ii) The owner or operator of an existing source unable to comply with a relevant standard established under this part pursuant to section 112(f) of the Act may request that the Administrator grant an extension allowing the source up to 2 years after the standard's effective date to comply with the standard. The Administrator may grant such an extension if he/she finds that such additional period is necessary for the installation of controls and that steps will be taken during the period of the extension to assure that the health of persons will be protected from imminent endangerment. Any request for an extension of compliance with a relevant standard under this paragraph must be submitted in writing to the Administrator not later than 90 calendar days after the effective date of the relevant standard.

(5) The owner or operator of an existing source that has installed BACT or technology required to meet LAER [as specified in paragraph (i)(2)(ii) of this section] prior to the promulgation of a relevant emission standard in this part may request that the Administrator grant an extension allowing the source 5 years from the date on which such installation was achieved, as determined by the Administrator, to comply with the standard. Any request for an extension of compliance with a relevant standard under this paragraph shall be submitted in writing to the Administrator not later than 120 days after the promulgation date of the standard. The Administrator may grant such an extension if he or she finds that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(6)(i) The request for a compliance extension under paragraph (i)(4) of this section shall include the following information:

(A) A description of the controls to be installed to comply with the standard;

(B) A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(1) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated; and

(2) The date by which final compliance is to be achieved.

(3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

(4) The date by which final compliance is to be achieved;

(C) -- (D)

(ii) The request for a compliance extension under paragraph (i)(5) of this section shall include all information needed to demonstrate to the Administrator's satisfaction that the installation of BACT or technology to meet LAER controls the same pollutant (or stream of pollutants) that would be controlled at that source by the relevant emission standard.

(7) Advice on requesting an extension of compliance may be obtained from the Administrator (or the State with an approved permit program).

(8) Approval of request for extension of compliance. Paragraphs (i)(9) through (i)(14) of this section concern approval of an extension of compliance requested under paragraphs (i)(4) through (i)(6) of this section.

(9) Based on the information provided in any request made under paragraphs (i)(4) through (i)(6) of this section, or other information, the Administrator (or the State with an approved permit program) may grant an extension of compliance with an emission standard, as specified in paragraphs (i)(4) and (i)(5) of this section.

(10) The extension will be in writing and will --

(i) Identify each affected source covered by the extension;

(ii) Specify the termination date of the extension;

(iii) Specify the dates by which steps toward compliance are to be taken, if appropriate;

(iv) Specify other applicable requirements to which the compliance extension applies (e.g., performance tests); and

(v)(A) Under paragraph (i)(4), specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period; or

(B) Under paragraph (i)(5), specify any additional conditions that the Administrator deems necessary to assure the proper operation and maintenance of the installed controls during the extension period.

(11) The owner or operator of an existing source that has been granted an extension of compliance under paragraph (i)(10) of this section may be required to submit to the Administrator (or the State with an approved permit program) progress reports indicating whether the steps toward compliance outlined in the compliance schedule have been reached. The contents of the progress reports and the dates by which they shall be submitted will be specified in the written extension of compliance granted under paragraph (i)(10) of this section.

(12)(i) The Administrator (or the State with an approved permit program) will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(i) or (i)(5) of this section. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 30 calendar days after receipt of the original application and within 30 calendar days after receipt of any supplementary information that is submitted. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 30 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator (or the State with an approved permit program) will notify the owner or operator in writing of the Administrator's (or the State's) intention to issue the denial, together with --

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator (or the State) before further action on the request.

(iv) The Administrator's final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(13)(i) The Administrator will notify the owner or operator in writing of approval or intention to deny approval of a request for an extension of compliance within 30 calendar days after receipt of sufficient information to evaluate a request submitted under paragraph (i)(4)(ii) of this section. The 30-day approval or denial period will begin after the owner or operator has been notified in writing that his/her application is complete. The Administrator (or the State) will notify the owner or operator in writing of the status of his/her application, that is, whether the application contains sufficient information to make a determination, within 15 calendar days after receipt of the original application and within 15 calendar days after receipt of any supplementary information that is submitted.

(ii) When notifying the owner or operator that his/her application is not complete, the Administrator will specify the information needed to complete the application and provide notice of opportunity for the applicant to present, in writing, within 15 calendar days after he/she is notified of the incomplete application, additional information or arguments to the Administrator to enable further action on the application.

(iii) Before denying any request for an extension of compliance, the Administrator will notify the owner or operator in writing of the Administrator's intention to issue the denial, together with --

(A) Notice of the information and findings on which the intended denial is based; and

(B) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the intended denial, additional information or arguments to the Administrator before further action on the request.

(iv) A final determination to deny any request for an extension will be in writing and will set forth the specific grounds on which the denial is based. The final determination will be made within 30 calendar days after presentation of additional information or argument (if the application is complete), or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(14) The Administrator (or the State with an approved permit program) may terminate an extension of compliance at an earlier date than specified if any specification under paragraph (i)(10)(iii) or (iv) of this section is not met. Upon a determination to terminate, the Administrator will notify, in writing, the owner or operator of the Administrator's determination to terminate, together with:

(i) Notice of the reason for termination; and

(ii) Notice of opportunity for the owner or operator to present in writing, within 15 calendar days after he/she is notified of the determination to terminate, additional information or arguments to the Administrator before further action on the termination.

(iii) A final determination to terminate an extension of compliance will be in writing and will set forth the specific grounds on which the termination is based. The final determination will be made within 30 calendar days after presentation of additional information or arguments, or within 30 calendar days after the final date specified for the presentation if no presentation is made.

(15) [Reserved]

(16) The granting of an extension under this section shall not abrogate the Administrator's authority under section 114 of the Act.

(j) Exemption from compliance with emission standards. The President may exempt any stationary source from compliance with any relevant standard established pursuant to section 112 of the Act for a period of not more than 2 years if the President determines that the technology to implement such standard is not available and that it is in the national security interests of the United States to do so. An exemption under this paragraph may be extended for 1 or more additional periods, each period not to exceed 2 years.

[59 FR 12430, Mar. 16, 1994, as amended at 67 FR 16599, Apr. 5, 2002; 68 FR 32600, May 30, 2003]

§ 63.7 Performance testing requirements.

(a) Applicability and performance test dates.

(3) The Administrator may require an owner or operator to conduct performance tests at the affected source at any other time when the action is authorized by section 114 of the Act.

(b) Notification of performance test.

(1) The owner or operator of an affected source must notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review an approve the site-specific test plan required under paragraph (c) of this section and to have an observer present during the test.

(2) In the event the owner or operator is unable to conduct the performance test on the date specified in the notification requirement specified in paragraph (b)(1) of this section due to unforeseeable circumstances beyond his or her control, the owner or operator must notify the Administrator as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the owner or operator of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable Federal, State, or local requirement, nor will it prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(c) Quality assurance program.

(1) The results of the quality assurance program required in this paragraph will be considered by the Administrator when he/she determines the validity of a performance test.

(2)(i) Submission of site-specific test plan. Before conducting a required performance test, the owner or operator of an affected source shall develop and, if requested by the Administrator, shall submit a site-specific test plan to the Administrator for approval. The test plan shall include a test program summary, the test schedule, data quality objectives, and both an internal and external quality assurance (QA) program. Data quality objectives are the pretest expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of test data precision; an example of internal QA is the sampling and analysis of replicate samples.

(iii) The external QA program shall include, at a minimum, application of plans for a test method performance audit (PA) during the performance test. The PA's consist of blind audit samples provided by the Administrator and analyzed during the performance test in order to provide a measure of test data bias. The external QA program may also include systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iv) The owner or operator of an affected source shall submit the site-specific test plan to the Administrator upon the Administrator's request at least 60 calendar days before the performance test is scheduled to take place, that is, simultaneously with the notification of intention to conduct a performance test required under paragraph (b) of this section, or on a mutually agreed upon date.

(v) The Administrator may request additional relevant information after the submittal of a site-specific test plan.

(3) Approval of site-specific test plan.

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the site-specific test plan (if review of the site-specific test plan is requested) within 30 calendar days after receipt of the original plan and within 30 calendar days after receipt of any supplementary information that is submitted under paragraph (c)(3)(i)(B) of this section. Before disapproving any site-specific test plan, the Administrator will notify the applicant of the Administrator's intention to disapprove the plan together with --

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present, within 30 calendar days after he/she is notified of the intended disapproval, additional information to the Administrator before final action on the plan.

(ii) In the event that the Administrator fails to approve or disapprove the site-specific test plan within the time period specified in paragraph (c)(3)(i) of this section, the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the test method(s) specified in the relevant standard or with only minor changes to those tests methods (see paragraph (e)(2)(i) of this section), the owner or operator must conduct the performance test within the time specified in this section using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method when the Administrator approves the site-specific test plan (if review of the site-specific test plan is requested) or after the alternative method is approved (see paragraph (f) of this section). However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval 45 days after submission of the site-specific test plan or request to use an alternative method. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(iii) Neither the submission of a site-specific test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator's failure to approve or disapprove a plan in a timely manner shall --

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4)(i) Performance test method audit program. The owner or operator must analyze performance audit (PA) samples during each performance test. The owner or operator must request performance audit materials 30 days prior to the test date. Audit materials including cylinder audit gases may be obtained by contacting the appropriate EPA Regional Office or the responsible enforcement authority.

(ii) The Administrator will have sole discretion to require any subsequent remedial actions of the owner or operator based on the PA results.

(iii) If the Administrator fails to provide required PA materials to an owner or operator of an affected source in time to analyze the PA samples during a performance test, the requirement to conduct a PA under this paragraph shall be waived for such source for that performance test. Waiver under this paragraph of the requirement to conduct a PA for a particular performance test does not constitute a waiver of the requirement to conduct a PA for future required performance tests.

(d) Performance testing facilities. If required to do performance testing, the owner or operator of each new source and, at the request of the Administrator, the owner or operator of each existing source, shall provide performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such source. This includes:

(i) Constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures; and

(ii) Providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures;

(2) Safe sampling platform(s);

(3) Safe access to sampling platform(s);

(4) Utilities for sampling and testing equipment; and

(5) Any other facilities that the Administrator deems necessary for safe and adequate testing of a source.

(e) Conduct of performance tests.

(1) Performance tests shall be conducted under such conditions as the Administrator specifies to the owner or operator based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test, nor shall emissions in excess of the level of the relevant standard during periods of startup, shutdown, and malfunction be considered a violation of the relevant standard unless otherwise specified in the relevant standard or a determination of noncompliance is made under § 63.6(e). Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests.

(2) Performance tests shall be conducted and data shall be reduced in accordance with the test methods and procedures set forth in this section, in each relevant standard, and, if required, in applicable appendices of parts 51, 60, 61, and 63 of this chapter unless the Administrator --

(i) Specifies or approves, in specific cases, the use of a test method with minor changes in methodology (see definition in § 63.90(a)). Such changes may be approved in conjunction with approval of the site-specific test plan (see paragraph (c) of this section); or

(ii) Approves the use of an intermediate or major change or alternative to a test method (see definitions in § 63.90(a)), the results of which the Administrator has determined to be adequate for indicating whether a specific affected source is in compliance; or

(iii) Approves shorter sampling times or smaller sample volumes when necessitated by process variables or other factors; or

(iv) Waives the requirement for performance tests because the owner or operator of an affected source has demonstrated by other means to the Administrator's satisfaction that the affected source is in compliance with the relevant standard.

(3) Unless otherwise specified in a relevant standard or test method, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply. Upon receiving approval from the Administrator, results of a test run may be replaced with results of an additional test run in the event that --

(i) A sample is accidentally lost after the testing team leaves the site; or

(ii) Conditions occur in which one of the three runs must be discontinued because of forced shutdown; or

(iii) Extreme meteorological conditions occur; or

(iv) Other circumstances occur that are beyond the owner or operator's control.

(4) Nothing in paragraphs (e)(1) through (e)(3) of this section shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

(f) Use of an alternative test method –

(1)General. Until authorized to use an intermediate or major change or alternative to a test method, the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) The owner or operator of an affected source required to do performance testing by a relevant standard may use an alternative test method from that specified in the standard provided that the owner or operator --

(i) Notifies the Administrator of his or her intention to use an alternative test method at least 60 days before the performance test is scheduled to begin;

(ii) Uses Method 301 in appendix A of this part to validate the alternative test method. This may include the use of specific procedures of Method 301 if use of such procedures are sufficient to validate the alternative test method; and

(iii) Submits the results of the Method 301 validation process along with thnotification of intention and the justification for not using the specified test method. The owner or operator may submit the information required in this paragraph well in advance of the deadline specified in paragraph (f)(2)(i) of this section to ensure a timely review by the Administrator in order to meet the performance test date specified in this section or the relevant standard.

(3) The Administrator will determine whether the owner or operator's validation of the proposed alternative test method is adequate and issue an approval or disapproval of the alternative test method. If the owner or operator intends to demonstrate compliance by using an alternative to any test method specified in the relevant standard, the owner or operator is authorized to conduct the performance test using an alternative test method after the Administrator approves the use of the alternative method. However, the owner or operator is authorized to conduct the performance test using an alternative method in the absence of notification of approval/disapproval 45 days after submission of the request to use an alternative method and the request satisfies the requirements in paragraph (f)(2) of this section. The owner or operator is authorized to conduct the performance test within 60 calendar days after he/she is authorized to demonstrate compliance using an alternative test method. Notwithstanding the requirements in the preceding three sentences, the owner or operator may proceed to conduct the performance test as required in this section (without the Administrator's prior approval of the site-specific test plan) if he/she subsequently chooses to use the specified testing and monitoring methods instead of an alternative.

(4) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative test method for the purposes of demonstrating compliance with a relevant standard, the Administrator may require the use of a test method specified in a relevant standard.

(5) If the owner or operator uses an alternative test method for an affected source during a required performance test, the owner or operator of such source shall continue to use the alternative test method for subsequent performance tests at that affected source until he or she receives approval from the Administrator to use another test method as allowed under § 63.7(f).

(6) Neither the validation and approval process nor the failure to validate an alternative test method shall abrogate the owner or operator's responsibility to comply with the requirements of this part.

(g) Data analysis, recordkeeping, and reporting.

(1) Unless otherwise specified in a relevant standard or test method, or as otherwise approved by the Administrator in writing, results of a performance test shall include the analysis of samples, determination of emissions, and raw data. A performance test is "completed" when field sample collection is terminated. The owner or operator of an affected source shall report the results of the performance test to the Administrator before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator (see § 63.9(i)). The results of the performance test shall be submitted as part of the notification of compliance status required under § 63.9(h). Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall send the results of the performance test to the appropriate permitting authority.

(2) [Reserved]

(3) For a minimum of 5 years after a performance test is conducted, the owner or operator shall retain and make available, upon request, for inspection by the Administrator the records or results of such performance test and other data needed to determine emissions from an affected source.

(h) Waiver of performance tests.

(1) Until a waiver of a performance testing requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Individual performance tests may be waived upon written application to the Administrator if, in the Administrator's judgment, the source is meeting the relevant standard(s) on a continuous basis, or the source is being operated under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) Request to waive a performance test.

(i) If a request is made for an extension of compliance under § 63.6(i), the application for a waiver of an initial performance test shall accompany the information required for the request for an extension of compliance. If no extension of compliance is requested or if the owner or operator has requested an extension of compliance and the Administrator is still considering that request, the application for a waiver of an initial performance test shall be submitted at least 60 days before the performance test if the site-specific test plan under paragraph (c) of this section is not submitted.

(ii) If an application for a waiver of a subsequent performance test is made, the application may accompany any required compliance progress report, compliance status report, or excess emissions and continuous monitoring system performance report [such as those required under § 63.6(i), § 63.9(h), and § 63.10(e) or specified in a relevant standard or in the source's title V permit], but it shall be submitted at least 60 days before the performance test if the site-specific test plan required under paragraph (c) of this section is not submitted.

(iii) Any application for a waiver of a performance test shall include information justifying the owner or operator's request for a waiver, such as the technical or economic infeasibility, or the impracticality, of the affected source performing the required test.

(4) Approval of request to waive performance test.

The Administrator will approve or deny a request for a waiver of a performance test made under paragraph (h)(3) of this section when he/she --

(i) Approves or denies an extension of compliance under § 63.6(i)(8); or

(ii) Approves or disapproves a site-specific test plan under § 63.7(c)(3); or

(iii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iv) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

[59 FR 12430, Mar. 16, 1994, as amended at 65 FR 62215, Oct. 17, 2000; 67 FR 16602, Apr. 5, 2002]

§ 63.8 Monitoring requirements.

(a) Applicability.

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For the purposes of this part, all CMS required under relevant standards shall be subject to the provisions of this section upon promulgation of performance specifications for CMS as specified in the relevant standard or otherwise by the Administrator.

(3) [Reserved]

(b) Conduct of monitoring.

(1) Monitoring shall be conducted as set forth in this section and the relevant standard(s) unless the Administrator --

(i) Specifies or approves the use of minor changes in methodology for the specified monitoring requirements and procedures (see § 63.90(a) for definition); or

(ii) Approves the use of an intermediate or major change or alternative to any monitoring requirements or procedures (see § 63.90(a) for definition).

(iii) Owners or operators with flares subject to § 63.11(b) are not subject to the requirements of this section unless otherwise specified in the relevant standard.

(2)(i) When the emissions from two or more affected sources are combined before being released to the atmosphere, the owner or operator may install an applicable CMS for each emission stream or for the combined emissions streams, provided the monitoring is sufficient to demonstrate compliance with the relevant standard.

(ii) If the relevant standard is a mass emission standard and the emissions from one affected source are released to the atmosphere through more than one point, the owner or operator must install an applicable CMS at each emission point unless the installation of fewer systems is --

(A) Approved by the Administrator; or

(B) Provided for in a relevant standard (e.g., instead of requiring that a CMS be installed at each emission point before the effluents from those points are channeled to a common control device, the standard specifies that only one CMS is required to be installed at the vent of the control device).

(3) When more than one CMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CMS. However, when one CMS is used as a backup to another CMS, the owner or operator shall report the results from the CMS used to meet the monitoring requirements of this part. If both such CMS are used during a particular reporting period to meet the monitoring requirements of this part, then the owner or operator shall report the results from each CMS for the relevant compliance period.

(c) Operation and maintenance of continuous monitoring systems.

(1) The owner or operator of an affected source shall maintain and operate each CMS as specified in this section, or in a relevant standard, and in a manner consistent with good air pollution control practices. (i) The owner or operator of an affected source must maintain and operate each CMS as specified in § 63.6(e)(1).

(ii) The owner or operator must keep the necessary parts for routine repairs of the affected CMS equipment readily available.

(iii) The owner or operator of an affected source must develop and implement a written startup, shutdown, and malfunction plan for CMS as specified in § 63.6(e)(3).

(2)(i) All CMS must be installed such that representative measures of emissions or process parameters from the affected source are obtained. In addition, CEMS must be located according to procedures contained in the applicable performance specification(s).

(ii) Unless the individual subpart states otherwise, the owner or operator must ensure the read out (that portion of the CMS that provides a visual display or record), or other indication of operation, from any CMS required for compliance with the emission standard is readily accessible on site for operational control or inspection by the operator of the equipment.

(3) All CMS shall be installed, operational, and the data verified as specified in the relevant standard either prior to or in conjunction with conducting performance tests under § 63.7. Verification of operational status shall, at a minimum, include completion of the manufacturer's written specifications or recommendations for installation, operation, and calibration of the system.

(6) The owner or operator of a CMS that is not a CPMS, which is installed in accordance with the provisions of this part and the applicable CMS performance specification(s), must check the zero (low-level) and high-level calibration drifts at least once daily in accordance with the written procedure specified in the performance evaluation plan developed under paragraphs (e)(3)(i) and (ii) of this section. The zero (low-level) and high-level calibration drifts must be adjusted, at a minimum, whenever the 24-hour zero (low-level) drift exceeds two times the limits of the applicable performance specification(s) specified in the relevant standard. The system shall allow the amount of excess zero (low-level) and high-level drift measured at the 24-hour interval checks to be recorded and quantified whenever specified. For COMS, all optical and instrumental surfaces exposed to the effluent gases must be cleaned prior to performing the zero (low-level) and high-level drift adjustments; the optical surfaces and instrumental surfaces must be cleaned when the cumulative automatic zero compensation, if applicable, exceeds 4 percent opacity. The CPMS must be calibrated prior to use for the purposes of complying with this section. The CPMS must be checked daily for indication that the system is responding. If the CPMS system includes an internal system check, results must be recorded and checked daily for proper operation.

(7)(i) A CMS is out of control if --

(A) The zero (low-level), mid-level (if applicable), or high-level calibration drift (CD) exceeds two times the applicable CD specification in the applicable performance specification or in the relevant standard; or

(B) The CMS fails a performance test audit (e.g., cylinder gas audit), relative accuracy audit, relative accuracy test audit, or linearity test audit; or

(C) The COMS CD exceeds two times the limit in the applicable performance specification in the relevant standard.

(ii) When the CMS is out of control, the owner or operator of the affected source shall take the necessary corrective action and shall repeat all necessary tests which indicate that the system is out of control. The owner or operator shall take corrective action and conduct retesting until the performance requirements are below the applicable limits. The beginning of the out-of-control period is the hour the owner or operator conducts a performance check (e.g., calibration drift) that indicates an exceedance of the performance requirements established under this part. The end of the out-of-control period is the hour following the completion of corrective action and successful demonstration that the system is within the allowable limits. During the period the CMS is out of control, recorded data shall not be used in data averages and calculations, or to meet any data availability requirement established under this part.

(8) The owner or operator of a CMS that is out of control as defined in paragraph (c)(7) of this section shall submit all information concerning out-of-control periods, including start and end dates and hours and descriptions of corrective actions taken, in the excess emissions and continuous monitoring system performance report required in § 63.10(e)(3).

(d) Quality control program.

(1) The results of the quality control program required in this paragraph will be considered by the Administrator when he/she determines the validity of monitoring data.

(2) The owner or operator of an affected source that is required to use a CMS and is subject to the monitoring requirements of this section and a relevant standard shall develop and implement a CMS quality control program. As part of the quality control program, the owner or operator shall develop and submit to the Administrator for approval upon request a site-specific performance evaluation test plan for the CMS performance evaluation required in paragraph (e)(3)(i) of this section, according to the procedures specified in paragraph (e). In addition, each quality control program shall include, at a minimum, a written protocol that describes procedures for each of the following operations:

(i) Initial and any subsequent calibration of the CMS;

(ii) Determination and adjustment of the calibration drift of the CMS;

(iii) Preventive maintenance of the CMS, including spare parts inventory;

(iv) Data recording, calculations, and reporting;

(v) Accuracy audit procedures, including sampling and analysis methods; and

(vi) Program of corrective action for a malfunctioning CMS.

(3) The owner or operator shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of this part, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the owner or operator shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for

inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. Where relevant, e.g., program of corrective action for a malfunctioning CMS, these written procedures may be incorporated as part of the affected source's startup, shutdown, and malfunction plan to avoid duplication of planning and recordkeeping efforts.

(e) Performance evaluation of continuous monitoring systems –

(1) General. When required by a relevant standard, and at any other time the Administrator may require under section 114 of the Act, the owner or operator of an affected source being monitored shall conduct a performance evaluation of the CMS. Such performance evaluation shall be conducted according to the applicable specifications and procedures described in this section or in the relevant standard.

(2) Notification of performance evaluation. The owner or operator shall notify the Administrator in writing of the date of the performance evaluation simultaneously with the notification of the performance test date required under § 63.7(b) or at least 60 days prior to the date the performance evaluation is scheduled to begin if no performance test is required.

(3)(i) Submission of site-specific performance evaluation test plan. Before conducting a required CMS performance evaluation, the owner or operator of an affected source shall develop and submit a site-specific performance evaluation test plan to the Administrator for approval upon request. The performance evaluation test plan shall include the evaluation program objectives, an evaluation program summary, the performance evaluation schedule, data quality objectives, and both an internal and external QA program. Data quality objectives are the pre-evaluation expectations of precision, accuracy, and completeness of data.

(ii) The internal QA program shall include, at a minimum, the activities planned by routine operators and analysts to provide an assessment of CMS performance. The external QA program shall include, at a minimum, systems audits that include the opportunity for on-site evaluation by the Administrator of instrument calibration, data validation, sample logging, and documentation of quality control data and field maintenance activities.

(iii) The owner or operator of an affected source shall submit the site-specific performance evaluation test plan to the Administrator (if requested) at least 60 days before the performance test or performance evaluation is scheduled to begin, or on a mutually agreed upon date, and review and approval of the performance evaluation test plan by the Administrator will occur with the review and approval of the site-specific test plan (if review of the site-specific test plan is requested).

(iv) The Administrator may request additional relevant information after the submittal of a site-specific performance evaluation test plan.

(v) In the event that the Administrator fails to approve or disapprove the site-specific performance evaluation test plan within the time period specified in § 63.7(c)(3), the following conditions shall apply:

(A) If the owner or operator intends to demonstrate compliance using the monitoring method(s) specified in the relevant standard, the owner or operator shall conduct the performance evaluation within the time specified in this subpart using the specified method(s);

(B) If the owner or operator intends to demonstrate compliance by using an alternative to a monitoring method specified in the relevant standard, the owner or operator shall refrain from conducting the performance

evaluation until the Administrator approves the use of the alternative method. If the Administrator does not approve the use of the alternative method within 30 days before the performance evaluation is scheduled to begin, the performance evaluation deadlines specified in paragraph (e)(4) of this section may be extended such that the owner or operator shall conduct the performance evaluation within 60 calendar days after the Administrator approves the use of the alternative method. Notwithstanding the requirements in the preceding two sentences, the owner or operator may proceed to conduct the performance evaluation as required in this section (without the Administrator's prior approval of the site-specific performance evaluation test plan) if he/she subsequently chooses to use the specified monitoring method(s) instead of an alternative.

(vi) Neither the submission of a site-specific performance evaluation test plan for approval, nor the Administrator's approval or disapproval of a plan, nor the Administrator' failure to approve or disapprove a plan in a timely manner shall --

(A) Relieve an owner or operator of legal responsibility for compliance with any applicable provisions of this part or with any other applicable Federal, State, or local requirement; or

(B) Prevent the Administrator from implementing or enforcing this part or taking any other action under the Act.

(4) Conduct of performance evaluation and performance evaluation dates. The owner or operator of an affected source shall conduct a performance evaluation of a required CMS during any performance test required under § 63.7 in accordance with the applicable performance specification as specified in the relevant standard. Notwithstanding the requirement in the previous sentence, if the owner or operator of an affected source elects to submit COMS data for compliance with a relevant opacity emission standard as provided under § 63.6(h)(7), he/she shall conduct a performance evaluation of the COMS as specified in the relevant standard, before the performance test required under § 63.7 is conducted in time to submit the results of the performance evaluation as specified in paragraph (e)(5)(ii) of this section. If a performance test is not required, or the requirement for a performance test has been waived under § 63.7(h), the owner or operator of an affected source shall conduct the performance evaluation not later than 180 days after the appropriate compliance date for the affected source, as specified in § 63.7(a), or as otherwise specified in the relevant standard.

(5) Reporting performance evaluation results.

(i) The owner or operator shall furnish the Administrator a copy of a written report of the results of the performance evaluation simultaneously with the results of the performance test required under § 63.7 or within 60 days of completion of the performance evaluation if no test is required, unless otherwise specified in a relevant standard. The Administrator may request that the owner or operator submit the raw data from a performance evaluation in the report of the performance evaluation results.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under § 63.7 and described in § 63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation under this paragraph. The copies shall be provided at least 15 calendar days before the performance test required under § 63.7 is conducted.

(f) Use of an alternative monitoring method. –

(1) General. Until permission to use an alternative monitoring procedure (minor, intermediate, or major changes; see definition in § 63.90(a)) has been granted by the Administrator under this paragraph (f)(1), the owner or operator of an affected source remains subject to the requirements of this section and the relevant standard.

(2) After receipt and consideration of written application, the Administrator may approve alternatives to any monitoring methods or procedures of this part including, but not limited to, the following:

(i) Alternative monitoring requirements when installation of a CMS specified by a relevant standard would not provide accurate measurements due to liquid water or other interferences caused by substances within the effluent gases;

(ii) Alternative monitoring requirements when the affected source is infrequently operated;

(iii) Alternative monitoring requirements to accommodate CEMS that require additional measurements to correct for stack moisture conditions;

(iv) Alternative locations for installing CMS when the owner or operator can demonstrate that installation at alternate locations will enable accurate and representative measurements;

(v) Alternate methods for converting pollutant concentration measurements to units of the relevant standard;

(vi) Alternate procedures for performing daily checks of zero (low-level) and high-level drift that do not involve use of high-level gases or test cells;

(vii) Alternatives to the American Society for Testing and Materials (ASTM) test methods or sampling procedures specified by any relevant standard;

(viii) Alternative CMS that do not meet the design or performance requirements in this part, but adequately demonstrate a definite and consistent relationship between their measurements and the measurements of opacity by a system complying with the requirements as specified in the relevant standard. The Administrator may require that such demonstration be performed for each affected source; or

(ix) Alternative monitoring requirements when the effluent from a single affected source or the combined effluent from two or more affected sources is released to the atmosphere through more than one point.

(3) If the Administrator finds reasonable grounds to dispute the results obtained by an alternative monitoring method, requirement, or procedure, the Administrator may require the use of a method, requirement, or procedure specified in this section or in the relevant standard. If the results of the specified and alternative method, requirement, or procedure do not agree, the results obtained by the specified method, requirement, or procedure shall prevail.

(4)(i) Request to use alternative monitoring procedure. An owner or operator who wishes to use an alternative monitoring procedure must submit an application to the Administrator as described in paragraph (f)(4)(ii) of this section. The application may be submitted at any time provided that the monitoring procedure is not the performance test method used to demonstrate compliance with a relevant standard or other requirement. If the alternative monitoring procedure will serve as the performance test method that is to be used to demonstrate

compliance with a relevant standard, the application must be submitted at least 60 days before the performance evaluation is scheduled to begin and must meet the requirements for an alternative test method under § 63.7(f).

(ii) The application must contain a description of the proposed alternative monitoring system which addresses the four elements contained in the definition of monitoring in § 63.2 and a performance evaluation test plan, if required, as specified in paragraph (e)(3) of this section. In addition, the application must include information justifying the owner or operator's request for an alternative monitoring method, such as the technical or economic infeasibility, or the impracticality, of the affected source using the required method.

(iii) The owner or operator may submit the information required in this paragraph well in advance of the submittal dates specified in paragraph (f)(4)(i) above to ensure a timely review by the Administrator in order to meet the compliance demonstration date specified in this section or the relevant standard.

(iv) Application for minor changes to monitoring procedures, as specified in paragraph (b)(1) of this section, may be made in the site-specific performance evaluation plan.

(5) Approval of request to use alternative monitoring procedure.

(i) The Administrator will notify the owner or operator of approval or intention to deny approval of the request to use an alternative monitoring method within 30 calendar days after receipt of the original request and within 30 calendar days after receipt of any supplementary information that is submitted. If a request for a minor change is made in conjunction with site-specific performance evaluation plan, then approval of the plan will constitute approval of the minor change. Before disapproving any request to use an alternative monitoring method, the Administrator will notify the applicant of the Administrator's intention to disapprove the request together with --

(A) Notice of the information and findings on which the intended disapproval is based; and

(B) Notice of opportunity for the owner or operator to present additional information to the Administrator before final action on the request. At the time the Administrator notifies the applicant of his or her intention to disapprove the request, the Administrator will specify how much time the owner or operator will have after being notified of the intended disapproval to submit the additional information.

(ii) The Administrator may establish general procedures and criteria in a relevant standard to accomplish the requirements of paragraph (f)(5)(i) of this section.

(iii) If the Administrator approves the use of an alternative monitoring method for an affected source under paragraph (f)(5)(i) of this section, the owner or operator of such source shall continue to use the alternative monitoring method until he or she receives approval from the Administrator to use another monitoring method as allowed by § 63.8(f).

(6) Alternative to the relative accuracy test.

An alternative to the relative accuracy test for CEMS specified in a relevant standard may be requested as follows:

(i) Criteria for approval of alternative procedures. An alternative to the test method for determining relative accuracy is available for affected sources with emission rates demonstrated to be less than 50 percent of the

relevant standard. The owner or operator of an affected source may petition the Administrator under paragraph (f)(6)(ii) of this section to substitute the relative accuracy test in section 7 of Performance Specification 2 with the procedures in section 10 if the results of a performance test conducted according to the requirements in § 63.7, or other tests performed following the criteria in § 63.7, demonstrate that the emission rate of the pollutant of interest in the units of the relevant standard is less than 50 percent of the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the owner or operator may petition the Administrator to substitute the relative accuracy test with the procedures in section 10 of Performance Specification 2 if the control device exhaust emission rate is less than 50 percent of the level needed to meet the control efficiency requirement. The alternative procedures do not apply if the CEMS is used continuously to determine compliance with the relevant standard.

(ii) Petition to use alternative to relative accuracy test. The petition to use an alternative to the relative accuracy test shall include a detailed description of the procedures to be applied, the location and the procedure for conducting the alternative, the concentration or response levels of the alternative relative accuracy materials, and the other equipment checks included in the alternative procedure(s). The Administrator will review the petition for completeness and applicability. The Administrator's determination to approve an alternative will depend on the intended use of the CEMS data and may require specifications more stringent than in Performance Specification 2.

(iii) Rescission of approval to use alternative to relative accuracy test. The Administrator will review the permission to use an alternative to the CEMS relative accuracy test and may rescind such permission if the CEMS data from a successful completion of the alternative relative accuracy procedure indicate that the affected source's emissions are approaching the level of the relevant standard. The criterion for reviewing the permission is that the collection of CEMS data shows that emissions have exceeded 70 percent of the relevant standard for any averaging period, as specified in the relevant standard. For affected sources subject to emission limitations expressed as control efficiency levels, the criterion for reviewing the permission is that the collection of CEMS data shows that exhaust emissions have exceeded 70 percent of the level needed to meet the control efficiency requirement for any averaging period, as specified in the relevant standard. The owner or operator of the affected source shall maintain records and determine the level of emissions relative to the criterion for permission to use an alternative for relative accuracy testing. If this criterion is exceeded, the owner or operator shall notify the Administrator within 10 days of such occurrence and include a description of the nature and cause of the increased emissions. The Administrator will review the notification and may rescind permission to use an alternative and require the owner or operator to conduct a relative accuracy test of the CEMS as specified in section 7 of Performance Specification 2.

(g) Reduction of monitoring data.

(1) The owner or operator of each CMS must reduce the monitoring data as specified in paragraphs (g)(1) through (5) of this section.

(2) The owner or operator of each COMS shall reduce all data to 6-minute averages calculated from 36 or more data points equally spaced over each 6-minute period. Data from CEMS for measurement other than opacity, unless otherwise specified in the relevant standard, shall be reduced to 1-hour averages computed from four or more data points equally spaced over each 1-hour period, except during periods when calibration, quality assurance, or maintenance activities pursuant to provisions of this part are being performed. During these periods, a valid hourly average shall consist of at least two data points with each representing a 15-minute

period. Alternatively, an arithmetic or integrated 1-hour average of CEMS data may be used. Time periods for averaging are defined in § 63.2.

(3) The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O2 or ng/J of pollutant).

(4) All emission data shall be converted into units of the relevant standard for reporting purposes using the conversion procedures specified in that standard. After conversion into units of the relevant standard, the data may be rounded to the same number of significant digits as used in that standard to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16603, Apr. 5, 2002]

§ 63.9 Notification requirements.

(a) Applicability and general information.

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a notice that contains all the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.

(4)(i) Before a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in § 63.13).

(ii) After a State has been delegated the authority to implement and enforce notification requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit notifications to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each notification submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any notifications at its discretion.

(b) Initial notifications.

(1)(i) The requirements of this paragraph apply to the owner or operator of an affected source when such source becomes subject to a relevant standard.

(ii) If an area source that otherwise would be subject to an emission standard or other requirement established under this part if it were a major source subsequently increases its emissions of hazardous air pollutants (or its potential to emit hazardous air pollutants) such that the source is a major source that is subject to the emission standard or other requirement, such source shall be subject to the notification requirements of this section.

(iii) Affected sources that are required under this paragraph to submit an initial notification may use the application for approval of construction or reconstruction under § 63.5(d) of this subpart, if relevant, to fulfill the initial notification requirements of this paragraph.

(2) The owner or operator of an affected source that has an initial startup before the effective date of a relevant standard under this part shall notify the Administrator in writing that the source is subject to the relevant standard. The notification, which shall be submitted not later than 120 calendar days after the effective date of the relevant standard (or within 120 calendar days after the source becomes subject to the relevant standard), shall provide the following information:

(i) The name and address of the owner or operator;

(ii) The address (i.e., physical location) of the affected source;

(iii) An identification of the relevant standard, or other requirement, that is the basis of the notification and the source's compliance date;

(iv) A brief description of the nature, size, design, and method of operation of the source and an identification of the types of emission points within the affected source subject to the relevant standard and types of hazardous air pollutants emitted; and

(v) A statement of whether the affected source is a major source or an area source.

(3) [Reserved]

(4) The owner or operator of a new or reconstructed major affected source for which an application for approval of construction or reconstruction is required under § 63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new major-emitting affected source, reconstruct a major-emitting affected source, or reconstruct a major source such that the source becomes a major-emitting affected source with the application for approval of construction or reconstruction as specified in § 63.5(d)(1)(i); and

(ii) -- (iv) [Reserved]

(v) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(5) The owner or operator of a new or reconstructed affected source for which an application for approval of construction or reconstruction is not required under § 63.5(d) must provide the following information in writing to the Administrator:

(i) A notification of intention to construct a new affected source, reconstruct an affected source, or reconstruct a source such that the source becomes an affected source, and

(ii) A notification of the actual date of startup of the source, delivered or postmarked within 15 calendar days after that date.

(iii) Unless the owner or operator has requested and received prior permission from the Administrator to submit less than the information in § 63.5(d), the notification must include the information required on the application for approval of construction or reconstruction as specified in § 63.5(d)(1)(i).

(c) Request for extension of compliance. If the owner or operator of an affected source cannot comply with a relevant standard by the applicable compliance date for that source, or if the owner or operator has installed BACT or technology to meet LAER consistent with § 63.6(i)(5) of this subpart, he/she may submit to the Administrator (or the State with an approved permit program) a request for an extension of compliance as specified in § 63.6(i)(4) through § 63.6(i)(6).

(d) Notification that source is subject to special compliance requirements. An owner or operator of a new source that is subject to special compliance requirements as specified in § 63.6(b)(3) and § 63.6(b)(4) shall notify the Administrator of his/her compliance obligations not later than the notification dates established in paragraph (b) of this section for new sources that are not subject to the special provisions.

(e) Notification of performance test. The owner or operator of an affected source shall notify the Administrator in writing of his or her intention to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin to allow the Administrator to review and approve the site-specific test plan required under § 63.7(c), if requested by the Administrator, and to have an observer present during the test.

(f) Notification of opacity and visible emission observations. The owner or operator of an affected source shall notify the Administrator in writing of the anticipated date for conducting the opacity or visible emission observations specified in § 63.6(h)(5), if such observations are required for the source by a relevant standard. The notification shall be submitted with the notification of the performance test date, as specified in paragraph (e) of this section, or if no performance test is required or visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the initial performance test required under § 63.7, the owner or operator shall deliver or postmark the notification not less than 30 days before the opacity or visible emission observations are scheduled to take place.

(g) Additional notification requirements for sources with continuous monitoring systems. The owner or operator of an affected source required to use a CMS by a relevant standard shall furnish the Administrator written notification as follows:

(1) A notification of the date the CMS performance evaluation under § 63.8(e) is scheduled to begin, submitted simultaneously with the notification of the performance test date required under § 63.7(b). If no performance test is required, or if the requirement to conduct a performance test has been waived for an affected source under § 63.7(h), the owner or operator shall notify the Administrator in writing of the date of the performance evaluation at least 60 calendar days before the evaluation is scheduled to begin;

(2) A notification that COMS data results will be used to determine compliance with the applicable opacity emission standard during a performance test required by § 63.7 in lieu of Method 9 or other opacity emissions test method data, as allowed by § 63.6(h)(7)(ii), if compliance with an opacity emission standard is required for the source by a relevant standard. The notification shall be submitted at least 60 calendar days before the performance test is scheduled to begin; and

(3) A notification that the criterion necessary to continue use of an alternative to relative accuracy testing, as provided by § 63.8(f)(6), has been exceeded. The notification shall be delivered or postmarked not later than 10 days after the occurrence of such exceedance, and it shall include a description of the nature and cause of the increased emissions.

(h) Notification of compliance status.

(1) The requirements of paragraphs (h)(2) through (h)(4) of this section apply when an affected source becomes subject to a relevant standard.

(2)(i) Before a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit to the Administrator a notification of compliance status, signed by the responsible official who shall certify its accuracy, attesting to whether the source has complied with the relevant standard. The notification shall list --

(A) The methods that were used to determine compliance;

(B) The results of any performance tests, opacity or visible emission observations, continuous monitoring system (CMS) performance evaluations, and/or other monitoring procedures or methods that were conducted;

(C) The methods that will be used for determining continuing compliance, including a description of monitoring and reporting requirements and test methods;

(D) The type and quantity of hazardous air pollutants emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard;

(E) If the relevant standard applies to both major and area sources, an analysis demonstrating whether the affected source is a major source (using the emissions data generated for this notification);

(F) A description of the air pollution control equipment (or method) for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device (or method); and

(G) A statement by the owner or operator of the affected existing, new, or reconstructed source as to whether the source has complied with the relevant standard or other requirements.

(ii) The notification must be sent before the close of business on the 60th day following the completion of the relevant compliance demonstration activity specified in the relevant standard (unless a different reporting period is specified in the standard, in which case the letter must be sent before the close of business on the day the report of the relevant testing or monitoring results is required to be delivered or postmarked). For example, the

notification shall be sent before close of business on the 60th (or other required) day following completion of the initial performance test and again before the close of business on the 60th (or other required) day following the completion of any subsequent required performance test. If no performance test is required but opacity or visible emission observations are required to demonstrate compliance with an opacity or visible emission standard under this part, the notification of compliance status shall be sent before close of business on the 30th day following the completion of opacity or visible emission observations. Notifications may be combined as long as the due date requirement for each notification is met.

(3) After a title V permit has been issued to the owner or operator of an affected source, the owner or operator of such source shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under this part. After a title V permit has been issued to the owner or operator of an affected source, and each time a notification of compliance status is required under this part, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in the relevant standard.

(4) [Reserved]

(5) If an owner or operator of an affected source submits estimates or preliminary information in the application for approval of construction or reconstruction required in § 63.5(d) in place of the actual emissions data or control efficiencies required in paragraphs (d)(1)(ii)(H) and (d)(2) of § 63.5, the owner or operator shall submit the actual emissions data and other correct information as soon as available but no later than with the initial notification of compliance status required in this section.

(6) Advice on a notification of compliance status may be obtained from the Administrator.

(i) Adjustment to time periods or postmark deadlines for submittal and review of required communications.
(1)(i) Until an adjustment of a time period or postmark deadline has been approved by the Administrator under paragraphs (i)(2) and (i)(3) of this section, the owner or operator of an affected source remains strictly subject to the requirements of this part.

(ii) An owner or operator shall request the adjustment provided for in paragraphs (i)(2) and (i)(3) of this section each time he or she wishes to change an applicable time period or postmark deadline specified in this part.

(2) Notwithstanding time periods or postmark deadlines specified in this part for the submittal of information to the Administrator by an owner or operator, or the review of such information by the Administrator, such time periods or deadlines may be changed by mutual agreement between the owner or operator and the Administrator. An owner or operator who wishes to request a change in a time period or postmark deadline for a particular requirement shall request the adjustment in writing as soon as practicable before the subject activity is required to take place. The owner or operator shall include in the request whatever information he or she considers useful to convince the Administrator that an adjustment is warranted.

(3) If, in the Administrator's judgment, an owner or operator's request for an adjustment to a particular time period or postmark deadline is warranted, the Administrator will approve the adjustment. The Administrator will notify the owner or operator in writing of approval or disapproval of the request for an adjustment within 15 calendar days of receiving sufficient information to evaluate the request.

(4) If the Administrator is unable to meet a specified deadline, he or she will notify the owner or operator of any significant delay and inform the owner or operator of the amended schedule.

(j) Change in information already provided. Any change in the information already provided under this section shall be provided to the Administrator in writing within 15 calendar days after the change.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003]

§ 63.10 Recordkeeping and reporting requirements.

(a) Applicability and general information.

(1) The applicability of this section is set out in § 63.1(a)(4).

(2) For affected sources that have been granted an extension of compliance under subpart D of this part, the requirements of this section do not apply to those sources while they are operating under such compliance extensions.

(3) If any State requires a report that contains all the information required in a report listed in this section, an owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.

(4)(i) Before a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the appropriate Regional Office of the EPA (to the attention of the Director of the Division indicated in the list of the EPA Regional Offices in § 63.13).

(ii) After a State has been delegated the authority to implement and enforce recordkeeping and reporting requirements established under this part, the owner or operator of an affected source in such State subject to such requirements shall submit reports to the delegated State authority (which may be the same as the permitting authority). In addition, if the delegated (permitting) authority is the State, the owner or operator shall send a copy of each report submitted to the State to the appropriate Regional Office of the EPA, as specified in paragraph (a)(4)(i) of this section. The Regional Office may waive this requirement for any reports at its discretion.

(5) If an owner or operator of an affected source in a State with delegated authority is required to submit periodic reports under this part to the State, and if the State has an established timeline for the submission of periodic reports that is consistent with the reporting frequency(ies) specified for such source under this part, the owner or operator may change the dates by which periodic reports under this part shall be submitted (without changing the frequency of reporting) to be consistent with the State's schedule by mutual agreement between the owner or operator and the State. For each relevant standard established pursuant to section 112 of the Act, the allowance in the previous sentence applies in each State beginning 1 year after the affected source's compliance date for that standard. Procedures governing the implementation of this provision are specified in § 63.9(i).

(6) If an owner or operator supervises one or more stationary sources affected by more than one standard established pursuant to section 112 of the Act, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required for each source shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the latest compliance date for any relevant standard established pursuant to section 112 of the Act for any such affected source(s). Procedures governing the implementation of this provision are specified in § 63.9(i).

(7) If an owner or operator supervises one or more stationary sources affected by standards established pursuant to section 112 of the Act (as amended November 15, 1990) and standards set under part 60, part 61, or both such parts of this chapter, he/she may arrange by mutual agreement between the owner or operator and the Administrator (or the State permitting authority) a common schedule on which periodic reports required by each relevant (i.e., applicable) standard shall be submitted throughout the year. The allowance in the previous sentence applies in each State beginning 1 year after the stationary source is required to be in compliance with the relevant section 112 standard, or 1 year after the stationary source is required to be in compliance with the applicable part 60 or part 61 standard, whichever is latest. Procedures governing the implementation of this provision are specified in § 63.9(i).

(b) General recordkeeping requirements.

(1) The owner or operator of an affected source subject to the provisions of this part shall maintain files of all information (including all reports and notifications) required by this part recorded in a form suitable and readily available for expeditious inspection and review. The files shall be retained for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent 2 years of data shall be retained on site. The remaining 3 years of data may be retained off site. Such files may be maintained on microfilm, on a computer, on computer floppy disks, on magnetic tape disks, or on microfiche.

(2) The owner or operator of an affected source subject to the provisions of this part shall maintain relevant records for such source of --

(i) The occurrence and duration of each startup, shutdown, or malfunction of operation (i.e., process equipment);

(ii) The occurrence and duration of each malfunction of the required air pollution control and monitoring equipment;

(iii) All required maintenance performed on the air pollution control and monitoring equipment;

(iv) Actions taken during periods of startup, shutdown, and malfunction (including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) when such actions are different from the procedures specified in the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3));

(v) All information necessary to demonstrate conformance with the affected source's startup, shutdown, and malfunction plan (see § 63.6(e)(3)) when all actions taken during periods of startup, shutdown, and malfunction

(including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation) are consistent with the procedures specified in such plan. (The information needed to demonstrate conformance with the startup, shutdown, and malfunction plan may be recorded using a "checklist," or some other effective form of recordkeeping, in order to minimize the recordkeeping burden for conforming events);

(vi) Each period during which a CMS is malfunctioning or inoperative (including out-of-control periods);

(vii) All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report);

(A) This paragraph applies to owners or operators required to install a continuous emissions monitoring system (CEMS) where the CEMS installed is automated, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. An automated CEMS records and reduces the measured data to the form of the pollutant emission standard through the use of a computerized data acquisition system. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain the most recent consecutive three averaging periods of subhourly measurements and a file that contains a hard copy of the data acquisition system algorithm used to reduce the measured data into the reportable form of the standard.

(B) This paragraph applies to owners or operators required to install a CEMS where the measured data is manually reduced to obtain the reportable form of the standard, and where the calculated data averages do not exclude periods of CEMS breakdown or malfunction. In lieu of maintaining a file of all CEMS subhourly measurements as required under paragraph (b)(2)(vii) of this section, the owner or operator shall retain all subhourly measurements for the most recent reporting period. The subhourly measurements shall be retained for 120 days from the date of the most recent summary or excess emission report submitted to the Administrator.

(C) The Administrator or delegated authority, upon notification to the source, may require the owner or operator to maintain all measurements as required by paragraph (b)(2)(vii), if the administrator or the delegated authority determines these records are required to more accurately assess the compliance status of the affected source.

(viii) All results of performance tests, CMS performance evaluations, and opacity and visible emission observations;

(ix) All measurements as may be necessary to determine the conditions of performance tests and performance evaluations;

(x) All CMS calibration checks;

(xi) All adjustments and maintenance performed on CMS;

(xii) Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this part, if the source has been granted a waiver under paragraph (f) of this section;

(xiii) All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under § 63.8(f)(6); and

(xiv) All documentation supporting initial notifications and notifications of compliance status under § 63.9.

(3) Recordkeeping requirement for applicability determinations. If an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f), and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under this part) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the Administrator to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of this part for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with EPA guidance materials published to assist sources in making applicability determinations under section 112, if any. The requirements to determine applicability of a standard under § 63.1(b)(3) and to record the results of that determination under paragraph (b)(3) of this section shall not by themselves create an obligation for the owner or operator to obtain a title V permit.

(c) Additional recordkeeping requirements for sources with continuous monitoring systems. In addition to complying with the requirements specified in paragraphs (b)(1) and (b)(2) of this section, the owner or operator of an affected source required to install a CMS by a relevant standard shall maintain records for such source of --

(1) All required CMS measurements (including monitoring data recorded during unavoidable CMS breakdowns and out-of-control periods);

(2)-(4) [Reserved]

(5) The date and time identifying each period during which the CMS was inoperative except for zero (low-level) and high-level checks;

(6) The date and time identifying each period during which the CMS was out of control, as defined in § 63.8(c)(7);

(9) [Reserved]

(10) The nature and cause of any malfunction (if known);

(11) The corrective action taken or preventive measures adopted;

(12) The nature of the repairs or adjustments to the CMS that was inoperative or out of control;

(13) The total process operating time during the reporting period; and

(14) All procedures that are part of a quality control program developed and implemented for CMS under § 63.8(d).

(15) In order to satisfy the requirements of paragraphs (c)(10) through (c)(12) of this section and to avoid duplicative recordkeeping efforts, the owner or operator may use the affected source's startup, shutdown, and malfunction plan or records kept to satisfy the recordkeeping requirements of the startup, shutdown, and malfunction plan specified in § 63.6(e), provided that such plan and records adequately address the requirements of paragraphs (c)(10) through (c)(12).

(d) General reporting requirements.

(1) Notwithstanding the requirements in this paragraph or paragraph (e) of this section, the owner or operator of an affected source subject to reporting requirements under this part shall submit reports to the Administrator in accordance with the reporting requirements in the relevant standard(s).

(2) Reporting results of performance tests. Before a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of any performance test under § 63.7 to the Administrator. After a title V permit has been issued to the owner or operator of an affected source, the owner or operator shall report the results of a required performance test to the appropriate permitting authority. The owner or operator of an affected source shall report the results of the performance test to the Administrator (or the State with an approved permit program) before the close of business on the 60th day following the completion of the performance test, unless specified otherwise in a relevant standard or as approved otherwise in writing by the Administrator. The results of the performance test shall be submitted as part of the notification of compliance status required under § 63.9(h).

(3) Reporting results of opacity or visible emission observations. The owner or operator of an affected source required to conduct opacity or visible emission observations by a relevant standard shall report the opacity or visible emission results (produced using Test Method 9 or Test Method 22, or an alternative to these test methods) along with the results of the performance test required under § 63.7. If no performance test is required, or if visibility or other conditions prevent the opacity or visible emission observations from being conducted concurrently with the performance test required under § 63.7, the owner or operator shall report the opacity or visible emission results before the close of business on the 30th day following the completion of the opacity or visible emission observations.

(4) Progress reports. The owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under § 63.6(i) shall submit such reports to the Administrator (or the State with an approved permit program) by the dates specified in the written extension of compliance.

(5)(i) Periodic startup, shutdown, and malfunction reports. If actions taken by an owner or operator during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan (see § 63.6(e)(3)), the owner or operator shall state such information in a startup, shutdown, and malfunction report. Such a report shall identify any instance where any action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the affected

source's startup, shutdown, and malfunction plan, but the source does not exceed any applicable emission limitation in the relevant emission standard. Such a report shall also include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report shall consist of a letter, containing the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, that shall be submitted to the Administrator semiannually (or on a more frequent basis if specified otherwise in a relevant standard or as established otherwise by the permitting authority in the source's title V permit). The startup, shutdown, and malfunction report shall be delivered or postmarked by the 30th day following the end of each calendar half (or other calendar reporting period, as appropriate). If the owner or operator is required to submit excess emissions and continuous monitoring system performance (or other periodic) reports under this part, the startup, shutdown, and malfunction reports required under this paragraph may be submitted simultaneously with the excess emissions and continuous monitoring system performance (or other) reports. If startup, shutdown, and malfunction reports are submitted with excess emissions and continuous monitoring system performance (or other periodic) reports, and the owner or operator receives approval to reduce the frequency of reporting for the latter under paragraph (e) of this section, the frequency of reporting for the startup, shutdown, and malfunction reports also may be reduced if the Administrator does not object to the intended change. The procedures to implement the allowance in the preceding sentence shall be the same as the procedures specified in paragraph (e)(3) of this section.

(ii) Immediate startup, shutdown, and malfunction reports. Notwithstanding the allowance to reduce the frequency of reporting for periodic startup, shutdown, and malfunction reports under paragraph (d)(5)(i) of this section, any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the affected source's startup, shutdown, and malfunction plan, and the source exceeds any applicable emission limitation in the relevant emission standard, the owner or operator shall report the actions taken for that event within 2 working days after commencing actions inconsistent with the plan followed by a letter within 7 working days after the end of the event. The immediate report required under this paragraph (d)(5)(ii) shall consist of a telephone call (or facsimile (FAX) transmission) to the Administrator within 2 working days after commencing actions inconsistent with the plan, and it shall be followed by a letter, delivered or postmarked within 7 working days after the end of the event, that contains the name, title, and signature of the owner or operator or other responsible official who is certifying its accuracy, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and describing all excess emissions and/or parameter monitoring exceedances which are believed to have occurred. Notwithstanding the requirements of the previous sentence, after the effective date of an approved permit program in the State in which an affected source is located, the owner or operator may make alternative reporting arrangements, in advance, with the permitting authority in that State. Procedures governing the arrangement of alternative reporting requirements under this paragraph (d)(5)(ii) are specified in § 63.9(i).

(e) Additional reporting requirements for sources with continuous monitoring systems –

(1) General. When more than one CEMS is used to measure the emissions from one affected source (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required for each CEMS.

(2) Reporting results of continuous monitoring system performance evaluations. (i) The owner or operator of an affected source required to install a CMS by a relevant standard shall furnish the Administrator a copy of a written report of the results of the CMS performance evaluation, as required under § 63.8(e), simultaneously with the results of the performance test required under § 63.7, unless otherwise specified in the relevant standard.

(ii) The owner or operator of an affected source using a COMS to determine opacity compliance during any performance test required under § 63.7 and described in § 63.6(d)(6) shall furnish the Administrator two or, upon request, three copies of a written report of the results of the COMS performance evaluation conducted under § 63.8(e). The copies shall be furnished at least 15 calendar days before the performance test required under § 63.7 is conducted.

(f) Waiver of recordkeeping or reporting requirements.

(1) Until a waiver of a recordkeeping or reporting requirement has been granted by the Administrator under this paragraph, the owner or operator of an affected source remains subject to the requirements of this section.

(2) Recordkeeping or reporting requirements may be waived upon written application to the Administrator if, in the Administrator's judgment, the affected source is achieving the relevant standard(s), or the source is operating under an extension of compliance, or the owner or operator has requested an extension of compliance and the Administrator is still considering that request.

(3) If an application for a waiver of recordkeeping or reporting is made, the application shall accompany the request for an extension of compliance under § 63.6(i), any required compliance progress report or compliance status report required under this part (such as under § 63.6(i) and § 63.9(h)) or in the source's title V permit, or an excess emissions and continuous monitoring system performance report required under paragraph (e) of this section, whichever is applicable. The application shall include whatever information the owner or operator considers useful to convince the Administrator that a waiver of recordkeeping or reporting is warranted.

(4) The Administrator will approve or deny a request for a waiver of recordkeeping or reporting requirements under this paragraph when he/she --

(i) Approves or denies an extension of compliance; or

(ii) Makes a determination of compliance following the submission of a required compliance status report or excess emissions and continuous monitoring systems performance report; or

(iii) Makes a determination of suitable progress towards compliance following the submission of a compliance progress report, whichever is applicable.

(5) A waiver of any recordkeeping or reporting requirement granted under this paragraph may be conditioned on other recordkeeping or reporting requirements deemed necessary by the Administrator.

(6) Approval of any waiver granted under this section shall not abrogate the Administrator's authority under the Act or in any way prohibit the Administrator from later canceling the waiver. The cancellation will be made only after notice is given to the owner or operator of the affected source.

[59 FR 12430, Mar. 16, 1994, as amended at 64 FR 7468, Feb. 12, 1999; 67 FR 16604, Apr. 5, 2002; 68 FR 32601, May 30, 2003]

§ 63.12 State authority and delegations.

(a) The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from --

(1) Adopting and enforcing any standard, limitation, prohibition, or other regulation applicable to an affected source subject to the requirements of this part, provided that such standard, limitation, prohibition, or regulation is not less stringent than any requirement applicable to such source established under this part;

(2) Requiring the owner or operator of an affected source to obtain permits, licenses, or approvals prior to initiating construction, reconstruction, modification, or operation of such source; or

(3) Requiring emission reductions in excess of those specified in subpart D of this part as a condition for granting the extension of compliance authorized by section 112(i)(5) of the Act.

(b)(1) Section 112(l) of the Act directs the Administrator to delegate to each State, when appropriate, the authority to implement and enforce standards and other requirements pursuant to section 112 for stationary sources located in that State. Because of the unique nature of radioactive material, delegation of authority to implement and enforce standards that control radionuclides may require separate approval.

(2) Subpart E of this part establishes procedures consistent with section 112(l) for the approval of State rules or programs to implement and enforce applicable Federal rules promulgated under the authority of section 112. Subpart E also establishes procedures for the review and withdrawal of section 112 implementation and enforcement authorities granted through a section 112(l) approval.

(c) All information required to be submitted to the EPA under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act, provided that each specific delegation may exempt sources from a certain Federal or State reporting requirement. The Administrator may permit all or some of the information to be submitted to the appropriate State agency only, instead of to the EPA and the State agency.

§ 63.13 Addresses of State air pollution control agencies and EPA Regional Offices.

(a) All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted to the appropriate Regional Office of the U.S. Environmental Protection Agency indicated in the following list of EPA Regional Offices.

EPA Region I (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont), Director, Air, Pesticides and Toxics Division, J.F.K. Federal Building, Boston, MA 02203-2211.

EPA Region II (New Jersey, New York, Puerto Rico, Virgin Islands), Director, Air and Waste Management Division, 26 Federal Plaza, New York, NY 10278.

EPA Region III (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia), Director, Air Protection Division, 1650 Arch Street, Philadelphia, PA 19103.

EPA Region IV (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee). Director, Air, Pesticides and Toxics Management Division, Atlanta Federal Center, 61 Forsyth Street, Atlanta, GA 30303-3104.

EPA Region V (Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin), Director, Air and Radiation Division, 77 West Jackson Blvd., Chicago, IL 60604-3507.

EPA Region VI (Arkansas, Louisiana, New Mexico, Oklahoma, Texas), Director, Air, Pesticides and Toxics, 1445 Ross Avenue, Dallas, TX 75202-2733.

EPA Region VII (Iowa, Kansas, Missouri, Nebraska), Director, Air, RCRA, and Toxics Division, U.S. Environmental Protection Agency, 901 N. 5th Street, Kansas City, KS 66101.

EPA Region VIII (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming), Director, Air and Toxics Division, 999 18th Street, 1 Denver Place, Suite 500, Denver, CO 80202-2405.

EPA Region IX (Arizona, California, Hawaii, Nevada, American Samoa, Guam), Director, Air and Toxics Division, 75 Hawthorne Street, San Francisco, CA 94105.

EPA Region X (Alaska, Idaho, Oregon, Washington), Director, Office of Air Quality, 1200 Sixth Avenue (OAQ-107), Seattle, WA 98101.

(b) All information required to be submitted to the Administrator under this part also shall be submitted to the appropriate State agency of any State to which authority has been delegated under section 112(l) of the Act. The owner or operator of an affected source may contact the appropriate EPA Regional Office for the mailing addresses for those States whose delegation requests have been approved.

(c) If any State requires a submittal that contains all the information required in an application, notification, request, report, statement, or other communication required in this part, an owner or operator may send the appropriate Regional Office of the EPA a copy of that submittal to satisfy the requirements of this part for that communication.

[59 FR 12430, Mar. 16, 1994, as amended at 63 FR 66061, Dec. 1, 1998; 67 FR 4184, Jan. 29, 2002; 68 FR 32601, May 30, 2003; 68 FR 35792, June 17, 2003]

§ 63.14 Incorporations by reference.

(a) The materials listed in this section are incorporated by reference in the corresponding sections noted. These incorporations by reference were approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. These materials are incorporated as they exist on the date of the approval, and notice of any change in these materials will be published in the Federal Register. The materials are available for purchase at the corresponding addresses noted below, and all are available for inspection at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC, at the Air and Radiation Docket

and Information Center, U.S. EPA, 401 M St., SW., Washington, DC, and at the EPA Library (MD-35), U.S. EPA, Research Triangle Park, North Carolina.

(b) The following materials are available for purchase from at least one of the following addresses: American Society for Testing and Materials (ASTM), 100 Barr Harbor Drive, Post Office Box C700, West Conshohocken, PA 19428-2959; or ProQuest, 300 North Zeeb Road, Ann Arbor, MI 48106.

(1) ASTM D523-89, Standard Test Method for Specular Gloss, IBR approved for § 63.782.

(2) ASTM D1193-77, 91, Standard Specification for Reagent Water, IBR approved for Appendix A: Method 306, Sections 7.1.1 and 7.4.2.

(3) ASTM D1331-89, Standard Test Methods for Surface and Interfacial Tension of Solutions of Surface Active Agents, IBR approved for Appendix A: Method 306B, Sections 6.2, 11.1, and 12.2.2.

(4) ASTM D1475-90, Standard Test Method for Density of Paint, Varnish Lacquer, and Related Products, IBR approved for § 63.788, Appendix A.

(5) ASTM D1946-77, 90, 94, Standard Method for Analysis of Reformed Gas by Gas Chromatography, IBR approved for § 63.11(b)(6).

(6) ASTM D2369-93, 95, Standard Test Method for Volatile Content of Coatings, IBR approved for § 63.788, Appendix A.

(7) ASTM D2382-76, 88, Heat of Combustion of Hydrocarbon Fuels by Bomb Calorimeter (High-Precision Method), IBR approved for § 63.11(b)(6).

(8) ASTM D2879-83, 96, Test Method for Vapor Pressure-Temperature Relationship and Initial Decomposition Temperature of Liquids by Isoteniscope, IBR approved for § 63.111 of Subpart G.

(9) ASTM D3257-93, Standard Test Methods for Aromatics in Mineral Spirits by Gas Chromatography, IBR approved for § 63.786(b).

(10) ASTM 3695-88, Standard Test Method for Volatile Alcohols in Water by Direct Aqueous-Injection Gas Chromatography, IBR approved for § 63.365(e)(1) of Subpart O.

(11) ASTM D3792-91, Standard Method for Water Content of Water-Reducible Paints by Direct Injection into a Gas Chromatograph, IBR approved for § 63.788, Appendix A.

(12) ASTM D3912-80, Standard Test Method for Chemical Resistance of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(13) ASTM D4017-90, 96a, Standard Test Method for Water in Paints and Paint Materials by the Karl Fischer Titration Method, IBR approved for § 63.788, Appendix A.

(14) ASTM D4082-89, Standard Test Method for Effects of Gamma Radiation on Coatings for Use in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(15) ASTM D4256-89, 94, Standard Test Method for Determination of the Decontaminability of Coatings Used in Light-Water Nuclear Power Plants, IBR approved for § 63.782.

(16) ASTM D4809-95, Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter (Precision Method), IBR approved for § 63.11(b)(6).

(17) ASTM E180-93, Standard Practice for Determining the Precision of ASTM Methods for Analysis and Testing of Industrial Chemicals, IBR approved for § 63.786(b).

(18) ASTM E260-91, 96, General Practice for Packed Column Gas Chromatography, IBR approved for §§ 63.750(b)(2) and 63.786(b)(5).

(19) [Reserved]

(20) [Reserved]

(21) ASTM D2099-00, Standard Test Method for Dynamic Water Resistance of Shoe Upper Leather by the Maeser Water Penetration Tester, IBR approved for § 63.5350.

(22) [Reserved]

(23) [Reserved]

(24) ASTM D2697-86 (Reapproved 1998), "Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings," IBR approved for § 63.4141(b)(1), 63.4941(b)(1), and 63.5160(c).

(25) ASTM D6093-97, "Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer," IBR approved for § 63.4141(b)(1), 63.4941(b)(1), and 63.5160(c).

(26) ASTM D1475-98, Standard Test Method for Density of Liquid Coatings, Inks, and Related Products, IBR approved for § 63.4141(b)(3) and 63.4141(c).

(27) ASTM D 6522-00, Standard Test Method for Determination of Nitrogen Oxides, Carbon Monoxide, and Oxygen Concentrations in Emissions from Natural Gas Fired Reciprocating Engines, Combustion Turbines, Boilers, and Process Heaters Using Portable Analyzers, IBR approved for § 63.9307(c)(2).

(28) [Reserved]

(29) ASTM D6420-99, Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry, IBR approved for § 63.5799 and 63.5850.

(c) The materials listed below are available for purchase from the American Petroleum Institute (API), 1220 L Street, NW., Washington, DC 20005.

(1) API Publication 2517, Evaporative Loss from External Floating-Roof Tanks, Third Edition, February 1989, IBR approved for § 63.111 of subpart G of this part.

(2) API Publication 2518, Evaporative Loss from Fixed-roof Tanks, Second Edition, October 1991, IBR approved for § 63.150(g)(3)(i)(C) of subpart G of this part.

(3) API Manual of Petroleum Measurement Specifications (MPMS) Chapter 19.2, Evaporative Loss From Floating-Roof Tanks (formerly API Publications 2517 and 2519), First Edition, April 1997, IBR approved for § 63.1251 of subpart GGG of this part.

(d) State and Local Requirements. The materials listed below are available at the Air and Radiation Docket and Information Center, U.S. EPA, 401 M St., SW., Washington, DC.

(1) California Regulatory Requirements Applicable to the Air Toxics Program, January 5, 1999, IBR approved for § 63.99(a)(5)(ii) of subpart E of this part.

(2) New Jersey's Toxic Catastrophe Prevention Act Program, (July 20, 1998), Incorporation By Reference approved for § 63.99 (a)(30)(i) of subpart E of this part.

(3)(i) Letter of June 7, 1999 to the U.S. Environmental Protection Agency Region 3 from the Delaware Department of Natural Resources and Environmental Control requesting formal full delegation to take over primary responsibility for implementation and enforcement of the Chemical Accident Prevention Program under Section 112(r) of the Clean Air Act Amendments of 1990.

(ii) Delaware Department of Natural Resources and Environmental Control, Division of Air and Waste Management, Accidental Release Prevention Regulation, sections 1 through 5 and sections 7 through 14, effective January 11, 1999, IBR approved for § 63.99(a)(8)(i) of subpart E of this part.

(iii) State of Delaware Regulations Governing the Control of Air Pollution (October 2000), IBR approved for § 63.99(a)(8)(ii)-(v) of subpart E of this part.

(4) Massachusetts Regulations Applicable to Hazardous Air Pollutants (July 2002). Incorporation By Reference approved for § 63.99(a)(21)(ii) of subpart E of this part.

(5) New Hampshire Regulations Applicable to Hazardous Air Pollutants, March, 2003. Incorporation by Reference approved for § 63.99(a)(29)(iii) of subpart E of this part.

(e) The materials listed below are available for purchase from the National Institute of Standards and Technology, Springfield, VA 22161, (800) 553-6847.

(1) Handbook 44, Specificiations, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices 1998, IBR approved for § 63.1303(e)(3).

(2) [Reserved]

(f) The following material is available from the National Council of the Paper Industry for Air and Stream Improvement, Inc. (NCASI), P. O. Box 133318, Research Triangle Park, NC 27709-3318 or at http://www.ncasi.org: NCASI Method DI/MEOH-94.02, Methanol in Process Liquids GC/FID (Gas Chromatography/Flame Ionization Detection), August 1998, Methods Manual, NCASI, Research Triangle Park, NC, IBR approved for § 63.457(c)(3)(ii) of subpart S of this part.

(g) The materials listed below are available for purchase from AOAC International, Customer Services, Suite 400, 2200 Wilson Boulevard, Arlington, Virginia, 22201-3301, Telephone (703) 522-3032, Fax (703) 522-5468.

(1) AOAC Official Method 978.01 Phosphorus (Total) in Fertilizers, Automated Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(2) AOAC Official Method 969.02 Phosphorus (Total) in Fertilizers, Alkalimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(3) AOAC Official Method 962.02 Phosphorus (Total) in Fertilizers, Gravimetric Quinolinium Molybdophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(4) AOAC Official Method 957.02 Phosphorus (Total) in Fertilizers, Preparation of Sample Solution, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(5) AOAC Official Method 929.01 Sampling of Solid Fertilizers, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(6) AOAC Official Method 929.02 Preparation of Fertilizer Sample, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(7) AOAC Official Method 958.01 Phosphorus (Total) in Fertilizers, Spectrophotometric Molybdovanadophosphate Method, Sixteenth edition, 1995, IBR approved for § 63.626(d)(3)(vi).

(h) The materials listed below are available for purchase from The Association of Florida Phosphate Chemists, P.O. Box 1645, Bartow, Florida, 33830, Book of Methods Used and Adopted By The Association of Florida Phosphate Chemists, Seventh Edition 1991, IBR.

(1) Section IX, Methods of Analysis for Phosphate Rock, No. 1 Preparation of Sample, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(2) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus -- P2O5 or Ca3(PO4)2, Method A-Volumetric Method, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(3) Section IX, Methods of Analysis for Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method B -- Gravimetric Quimociac Method, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(4) Section IX, Methods of Analysis For Phosphate Rock, No. 3 Phosphorus-P2O5 or Ca3(PO4)2, Method C -- Spectrophotometric Method, IBR approved for § 63.606(c)(3)(ii) and § 63.626(c)(3)(ii).

(5) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method A -- Volumetric Method, IBR approved for § 63.606(c)(3)(ii), § 63.626(c)(3)(ii), and § 63.626(d)(3)(v).

(6) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method B -- Gravimetric Quimociac Method, IBR approved for § 63.606(c)(3)(ii), § 63.626(c)(3)(ii), and § 63.626(d)(3)(v).

(7) Section XI, Methods of Analysis for Phosphoric Acid, Superphosphate, Triple Superphosphate, and Ammonium Phosphates, No. 3 Total Phosphorus-P2O5, Method C -- Spectrophotometric Method, IBR approved for § 63.606(c)(3)(ii), § 63.626(c)(3)(ii), and § 63.626(d)(3)(v).

(i) The following materials are available for purchase from at least one of the following addresses: ASME International, Orders/Inquiries, P.O. Box 2900, Fairfield, NJ 07007-2900; or Global Engineering Documents, Sales Department, 15 Inverness Way East, Englewood, CO 80112.

(1) ASME standard number QHO-1-1994, "Standard for the Qualification and Certification of Hazardous Waste Incinerator Operators," IBR approved for § 63.1206(c)(6)(iii).

(2) ASME standard number QHO-1a-1996 Addenda to QHO-1-1994, "Standard for the Qualification and Certification of Hazardous Waste Incinerator Operators," IBR approved for § 63.1206(c)(6)(iii).

(3) ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses [Part 10, Instruments and Apparatus]," IBR approved for § 63.865(b), 63.3360(e)(1)(iii), 63.4166(a)(3), 63.4965(a)(3), and 53.5160(d)(1)(iii).

(j) [Reserved]

(k) The following material may be obtained from U.S. EPA, Office of Solid Waste (5305W), 1200 Pennsylvania Avenue, NW., Washington, DC 20460:

(1) Method 9071B, "n-Hexane Extractable Material(HEM) for Sludge, Sediment, and Solid Samples," (Revision 2, April 1998) as published in EPA Publication SW-846: "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods." The incorporation by reference of Method 9071B is approved for Section 63.7824(e) of Subpart FFFFF of this part.

[59 FR 12430, Mar. 16, 1994]

Editorial Note: For Federal Register citations affecting § 63.14, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and on GPO Access.

§ 63.15 Availability of information and confidentiality.

(a) Availability of information.

(1) With the exception of information protected through part 2 of this chapter, all reports, records, and other information collected by the Administrator under this part are available to the public. In addition, a copy of each permit application, compliance plan (including the schedule of compliance), notification of compliance status, excess emissions and continuous monitoring systems performance report, and title V permit is available to the public, consistent with protections recognized in section 503(e) of the Act.

(2) The availability to the public of information provided to or otherwise obtained by the Administrator under this part shall be governed by part 2 of this chapter.

(b) Confidentiality.

(1) If an owner or operator is required to submit information entitled to protection from disclosure under section 114(c) of the Act, the owner or operator may submit such information separately. The requirements of section 114(c) shall apply to such information.

(2) The contents of a title V permit shall not be entitled to protection under section 114(c) of the Act; however, information submitted as part of an application for a title V permit may be entitled to protection from disclosure.

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

G002 Gasoline Underground Storage Tank (UST)
G003 Diesel Underground Storage Tank (UST)
P082 Seacoal Preparation And Storage
P084 Misc. Sand Blast Cleaning
P085 Pattern Shop Woodworking Operations
P413 Job Floor
P913 Bentonite Unloading System
T001 Waste Oil Holding Tank
T002 Liquid Parting Agent Tank
T003 Re-refined Hydraulic Oil Tank
T004 TEA Tank
Z004 Miscellaneous Natural Gas Combustion < 10 mmBtu/hr
Z005 Maintenance Cleaners
Z006 No. 3 Cleaning Line Weld Booth
Z007 Parts Washers
Z008 10,000-Gallon Resin East Tank C30
Z009 10,000-Gallon Resin West Tank C29
Z010 8,000-Gallon Resin West Tank C24
Z011 8,000-Gallon Resin Middle Tank C25
Z012 5,500-Gallon Resin East Tank C26
Z013 Coal and Flyash Storage Piles and Handling Operations
Z406 Personnel Comfort Ventilation - Core Line 7
Z412 Personnel Comfort Ventilation - 4.6L Core Line
Z414 Personnel Comfort Ventilation - TMEP Core Line
Z416 Personnel Comfort Ventilation - 5.0L Core Line
Z456 Personnel Comfort Ventilation - Core Line 5
Z701 Resin Tank 1
Z702 Resin Tank 2
Z703 TEA Tank 1
Z704 Scrubber Effluent Tank 1
Z705 Maintenance Cold Cleaner

Z706 Outdoor Scrap Sand Handling
Z707 Miscellaneous R&D Operations
Z708 Air Makeup Unit Heater #1 (Cleveland Aluminum Casting Plant)
Z709 Air Makeup Unit Heater #2 (Cleveland Aluminum Casting Plant)
Z710 Air Makeup Unit Heater #3 (Cleveland Aluminum Casting Plant)
Z711 Air Makeup Unit Heater #4 (Cleveland Aluminum Casting Plant)
Z712 Air Makeup Unit Heater #5 (Cleveland Aluminum Casting Plant)
Z713 Air Makeup Unit Heater #6 (Cleveland Aluminum Casting Plant)
Z714 Air Makeup Unit Heater #7 (Cleveland Aluminum Casting Plant)
Z715 Air Makeup Unit Heater #8 (Cleveland Aluminum Casting Plant)
Z716 Air Makeup Unit Heater #9 (Cleveland Aluminum Casting Plant)
Z717 Air Makeup Unit Heater #10 (Cleveland Aluminum Casting Plant)

Each insignificant emissions unit at this facility must comply with all applicable State and Federal regulations, as well as any emission limitations and/or control requirements contained within a Permit to Install for the emissions unit.

The following emissions units were shut down on the respective dates and may possibly be used for credit during future netting scenarios: P031 shut down 1/1/01; and P097 shut down 9/1/00.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Blast # 7 (B007)
Activity Description: Hot Blast # 7 - 32.1 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
32.1 mmBtu/hr natural gas-fired heater for providing heated combustion air to a cupola	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb of PE per mmBtu of actual heat input

2. Additional Terms and Conditions

2.a Chapter 3745-18 does not establish an SO_2 emission limitation for this emissions unit because the emissions unit burns only natural gas, LPG or propane.

II Operational Restrictions

1. The permittee shall burn only natural gas (or LPG or propane as back-up fuel) in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, LPG or propane, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, LPG or propane, was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
For the use of natural gas, compliance with the above PE limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0321 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs of PE/mmcf), and dividing by the maximum hourly heat input capacity of the emissions unit (32.1 mmBtu/hr).

The above PE factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2.

If required, the permittee shall determine compliance with the above emission limitation pursuant to OAC rule 3745-17-03(B)(9).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
none	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Blast # 1 (B008)
Activity Description: Hot Blast # 1 - 28.9 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
28.9 mmBtu/hr natural gas-fired heater for providing heated combustion air to a cupola	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb of PE per mmBtu of actual heat input

2. Additional Terms and Conditions

2.a Chapter 3745-18 does not establish an SO2 emission limitation for this emissions unit because the emissions unit burns only natural gas, LPG or propane.

II Operational Restrictions

1. The permittee shall burn only natural gas (or LPG or propane as back-up fuel) in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, LPG or propane, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, LPG or propane, was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
For the use of natural gas, compliance with the above PE limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0289 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs of PE/mmcf), and dividing by the maximum hourly heat input capacity of the emissions unit (28.9 mmBtu/hr).

The above PE factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2.

If required, the permittee shall determine compliance with the above emission limitation pursuant to OAC rule 3745-17-03(B)(9).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Blast # 2 (B010)
Activity Description: Hot Blast # 2 - 28.9 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
28.9 mmBtu/hr natural gas-fired heater for providing heated combustion air to a cupola	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb of PE per mmBtu of actual heat input

2. Additional Terms and Conditions

2.a Chapter 3745-18 does not establish an SO2 emission limitation for this emissions unit because the emissions unit burns only natural gas, LPG or propane.

II Operational Restrictions

1. The permittee shall burn only natural gas (or LPG or propane as back-up fuel) in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, LPG or propane, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, LPG or propane, was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
For the use of natural gas, compliance with the above PE limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0289 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs of PE/mmcf), and dividing by the maximum hourly heat input capacity of the emissions unit (28.9 mmBtu/hr).

The above PE factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2.

If required, the permittee shall determine compliance with the above emission limitation pursuant to OAC rule 3745-17-03(B)(9).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Blast # 3 (B011)
Activity Description: Hot Blast # 3 - 28.9 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
28.9 mmBtu/hr natural gas-fired heater for providing heated combustion air to a cupola	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(B)(1)	0.020 lb of PE per mmBtu of actual heat input

2. Additional Terms and Conditions

2.a Chapter 3745-18 does not establish an SO2 emission limitation for this emissions unit because the emissions unit burns only natural gas, LPG or propane.

II Operational Restrictions

1. The permittee shall burn only natural gas (or LPG or propane as back-up fuel) in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, LPG or propane, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, LPG or propane, was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
For the use of natural gas, compliance with the above PE limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (0.0289 mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs of PE/mmcf), and dividing by the maximum hourly heat input capacity of the emissions unit (28.9 mmBtu/hr).

The above PE factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2.

If required, the permittee shall determine compliance with the above emission limitation pursuant to OAC rule 3745-17-03(B)(9).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 1 (B020)
Activity Description: Coal Fired, Chain Grate Boiler # 1 - 77 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
77 mmBtu/hr coal-fired, chain-grate boiler # 1, with multiclone no. B020A, baghouse no. B020B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(C)(1)	0.12 lb of PE/mmBtu of actual heat input
	40 CFR 52.1881(b)(15)(xvii)	4.2 lbs of sulfur dioxide (SO2)/mmBtu of actual heat input

2. **Additional Terms and Conditions**

2.a Exemption from Visible PE Limitations During Start-up:

Based upon Ford Motor Company's satisfactory demonstration to the Director that a longer start-up time period is necessary for this emissions unit, the "three hours from the moment of start-up" exemption period specified in OAC rule 3745-17-07(A)(3)(a)(ii) is hereby extended to "six hours from the moment of start-up."

II Operational Restrictions

1. Coal Quality Specifications:

   The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the SO2 emission limitation of 4.2 pounds of SO2/mmBtu of actual heat input.

   Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or coal supplier for each shipment of coal.

2. Baghouse Operational Restriction:

   The pressure drop across the baghouse shall be maintained within the range of 1 to 7 inches of water column during normal operation and except during periods of start-up and shutdown and at conditions below 30 degrees F.

3. Multiclone Operational Restriction:

   The pressure drop across the multiclone shall be maintained within the range of 2 to 6 inches of water column while the emissions unit is in operation, except during periods of start-up and shutdown.

III Monitoring and/or Recordkeeping

1. Requirements for the Sampling and Analysis of the Coal Burned:
   The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal, and analyze the coal sample for sulfur content (percent by weight) and heat content (Btu/pound of coal) for each shipment of coal. The analytical methods for, sulfur content and heat content, shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. Record Keeping Requirements for Coal Usage and Quality:

For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received, the permittee's or coal supplier's analyses for sulfur and heat content, and the calculated SO2 emission rate (in lbs/mmBtu).

3. Record Keeping Requirements for the Extension of Exemption from Visible PE Limitations During Start-up:

   The permittee shall record the date, time and duration of each start-up of emissions units B020 through B024. These records shall be maintained by the facility for a period of not less than five years and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request during normal business hours.

4. Baghouse Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

5. Continuous Emission Monitoring System:

   The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

6. Continuous Opacity Monitoring - Certified Systems
   Statement of Certification:

   A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the visible PE from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13.

   The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on instantaneous (one-minute) and six-minute block average bases, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system that is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

9. Multiclone Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the multiclone while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the permittee's recommendations, instructions, or operating manual(s). The permittee shall record the pressure drop across the multiclone on a once per day basis for each day the emissions unit is in operation.

10. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. Reporting Requirements for the Coal Usage and Quality Data:

   The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet and/or dry) for each shipment of coal that is received for burning in this emissions unit. The permittee's or coal supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/lb) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:

   a. the total quantity of coal received in each shipment (tons);

   b. the calculated SO2 emission rate (lbs of SO2/mmBtu) for each shipment.

   These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. Baghouse Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.2. of these terms and conditions.

3. Multiclone Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the multiclone did not comply with the allowable range specified in section A.II.3. of these terms and conditions as well as the corrective actions that were taken to achieve compliance.

4. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each six-minute block average above the applicable opacity limitation(s).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the analyzer while the emissions unit was operating also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
0.12 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(9).

1c. Emission Limitation -
4.2 lbs of SO2/mmBtu of actual heat input

Applicable Compliance Method:

a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

b. If testing is required to determine compliance with the emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method: Method 6 of 40 CFR, Part 60, Appendix A.

2.a.. Except as otherwise provided in section A.V.2.b, the permittee shall conduct, or have conducted, emission testing for emissions units B020 through B024 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the limitation for PE.

The following test method shall be employed to determine compliance with the limitation for PE: Method 5 of 40 CFR, Part 60, Appendix A and the procedures of OAC rule 3745-17-03(B)(9).

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the times and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2.b. Special Stack Testing Procedures for Boilers # 1 through # 5:

Due to the difficulties inherent in individually testing boilers # 1 through 5 (emissions units B020 through B024), which are vented to one stack, compliance with the PE limitation in section A.I.1. of these terms and conditions shall be determined by simultaneously testing not less than three of the above boilers, of which boiler # 5 (B024) shall be one, unless it has been shut down. In the event that boiler # 5 has been shut down pursuant to this section, the permittee shall have the discretion to select a substitute test boiler. The permittee shall make its selection of the boilers to be tested no later than thirty (30) days prior to the required test. The average PE rate derived from the testing of the selected boilers shall be considered representative of emissions emanating from boilers # 1 through # 5.

The appropriate Ohio EPA District Office or local air agency shall schedule and conduct visible PE evaluations simultaneously with the performance of all stack tests required pursuant to this permit. For purposes of this permit, visible PE evaluations shall be conducted in accordance with paragraph (B)(1) of OAC rule 3745-17-03 using the methods and procedures specified in USEPA Reference Method 9.

2.c. During all stack tests required pursuant to this permit, the permittee shall burn coal that is representative of the coal that was burned during the preceding calendar quarter, except that the permittee may burn coal during such stack tests that contains a higher ash content, a lower heat content and/or a higher fines content than representative of the coal burned during the preceding calendar quarter for the purpose of obtaining less restrictive coal quality specifications than those specified in the terms and conditions of this permit.

Nothing in these Special Stack Testing Procedures, or the permit of which it is a part, shall be construed to prevent the permittee from ceasing operation of any boiler at this facility provided that the permittee shall not recommence operation of said boiler unless it is in compliance with the emission standards and limitations of this permit.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
77 mmBtu/hr coal-fired, chain-grate boiler # 1, with multiclone no. B020A, baghouse no. B020B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-18-24(Y)	4.2 lbs of SO2/mmBtu of actual heat input

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation -
   4.2 lbs of SO2/mmBtu of actual heat input

   Applicable Compliance Method:

   a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

   b. If testing is required to determine compliance with the allowable emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method:

   Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 2 (B021)
Activity Description: Coal Fired, Chain Grate Boiler # 2 - 122 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired, chain-grate boiler # 2, with multiclone no. B021A, baghouse no. B021B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(C)(1)	0.12 lb of PE/mmBtu of actual heat input
	40 CFR 52.1881(b)(15)(xvii)	4.2 lbs of sulfur dioxide (SO2)/mmBtu of actual heat input

2. **Additional Terms and Conditions**

2.a Exemption from Visible PE Limitations During Start-up:

Based upon Ford Motor Company's satisfactory demonstration to the Director that a longer start-up time period is necessary for this emissions unit, the "three hours from the moment of start-up" exemption period specified in OAC rule 3745-17-07(A)(3)(a)(ii) is hereby extended to "six hours from the moment of start-up."

II Operational Restrictions

1. Coal Quality Specifications:

   The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the SO2 emission limitation of 4.2 pounds of SO2/mmBtu of actual heat input.

   Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or coal supplier for each shipment of coal.

2. Baghouse Operational Restriction:

   The pressure drop across the baghouse shall be maintained within the range of 1 to 7 inches of water column during normal operation and except during periods of start-up and shutdown and at conditions below 30 degrees F.

3. Multiclone Operational Restriction:

   The pressure drop across the multiclone shall be maintained within the range of 3 to 6 inches of water column while the emissions unit is in operation, except during periods of start-up and shutdown.

III Monitoring and/or Recordkeeping

1. Requirements for the Sampling and Analysis of the Coal Burned:

   The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal, and analyze the coal sample for sulfur content (percent by weight) and heat content (Btu/pound of coal) for each shipment of coal. The analytical methods for sulfur content and heat content, shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. Record Keeping Requirements for Coal Usage and Quality:

   For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received, the permittee's or coal supplier's analyses for sulfur and heat content, and the calculated SO2 emission rate (in lbs/mmBtu).

3. Record Keeping Requirements for the Extension of Exemption from Visible PE Limitations During Start-up:

   The permittee shall record the date, time and duration of each start-up of emissions units B020 through B024. These records shall be maintained by the facility for a period of not less than five years and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request during normal business hours.

4. Baghouse Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

5. Continuous Emission Monitoring System:

   The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

6. Continuous Opacity Monitoring - Certified Systems
   Statement of Certification:

   A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the visible PE from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on instantaneous (one-minute) and six-minute block average bases, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system that is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

9. Multiclone Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the multiclone while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the permittee's recommendations, instructions, or operating manual(s). The permittee shall record the pressure drop across the multiclone on a once per day basis for each day the emissions unit is in operation.

10. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. Reporting Requirements for the Coal Usage and Quality Data:

   The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet and/or dry) for each shipment of coal that is received for burning in this emissions unit. The permittee's or coal supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/lb) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:

   a. the total quantity of coal received in each shipment (tons);

   b. the calculated SO2 emission rate (lbs of SO2/mmBtu) for each shipment.

   These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. Baghouse Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.2. of these terms and conditions.

3. Multiclone Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the multiclone did not comply with the allowable range specified in section A.II.3. of these terms and conditions as well as the corrective actions that were taken to achieve compliance.

4. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each six-minute block average above the applicable opacity limitation(s).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the analyzer while the emissions unit was operating also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
0.12 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(9).

1c. Emission Limitation -
4.2 lbs of SO2/mmBtu of actual heat input

Applicable Compliance Method:

a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

b. If testing is required to determine compliance with the emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method: Method 6 of 40 CFR, Part 60, Appendix A.

2.a. Except as otherwise provided in section A.V.2.b, the permittee shall conduct, or have conducted, emission testing for emissions units B020 through B024 in accordance with the following requirements:

The emission testing shall be conducted within twelve (12) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the limitation for PE.

The following test method shall be employed to determine compliance with the limitation for PE: Method 5 of 40 CFR, Part 60, Appendix A and the procedures of OAC rule 3745-17-03(B)(9). Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the times and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2.b. Special Stack Testing Procedures for Boilers # 1 through # 5:

Due to the difficulties inherent in individually testing boilers # 1 through 5 (emissions units B020 through B024), which are vented to one stack, compliance with the PE limitation in section A.I.1. of these terms and conditions shall be determined by simultaneously testing not less than three of the above boilers, of which boiler # 5 (B024) shall be one, unless it has been shut down. In the event that boiler # 5 has been shut down pursuant to this section, the permittee shall have the discretion to select a substitute test boiler. The permittee shall make its selection of the boilers to be tested no later than thirty (30) days prior to the required test. The average PE rate derived from the testing of the selected boilers shall be considered representative of emissions emanating from boilers # 1 through # 5.

The appropriate Ohio EPA District Office or local air agency shall schedule and conduct visible PE evaluations simultaneously with the performance of all stack tests required pursuant to this permit. For purposes of this permit, visible PE evaluations shall be conducted in accordance with paragraph (B)(1) of OAC rule 3745-17-03 using the methods and procedures specified in USEPA Reference Method 9.

2.c. During all stack tests required pursuant to this permit, the permittee shall burn coal that is representative of the coal that was burned during the preceding calendar quarter, except that the permittee may burn coal during such stack tests that contains a higher ash content, a lower heat content and/or a higher fines content than representative of the coal burned during the preceding calendar quarter for the purpose of obtaining less restrictive coal quality specifications than those specified in the terms and conditions of this permit.

Nothing in these Special Stack Testing Procedures, or the permit of which it is a part, shall be construed to prevent the permittee from ceasing operation of any boiler at this facility provided that the permittee shall not recommence operation of said boiler unless it is in compliance with the emission standards and limitations of this permit.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired, chain-grate boiler # 2, with multiclone no. B021A, baghouse no. B021B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-18-24(Y)	4.2 lbs of SO2/mmBtu of actual heat input

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation -
   4.2 lbs of SO2/mmBtu of actual heat input

   Applicable Compliance Method:

   a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

   b. If testing is required to determine compliance with the allowable emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method:

   Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 3 (B022)
Activity Description: Coal Fired, Chain Grate Boiler # 3 - 122 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired, chain-grate boiler # 3, with multiclone no. B022A, baghouse no. B022B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(C)(1)	0.12 lb of PE/mmBtu of actual heat input
	40 CFR 52.1881(b)(15)(xvii)	4.2 lbs of sulfur dioxide (SO2)/mmBtu of actual heat input

2. Additional Terms and Conditions

2.a Exemption from Visible PE Limitations During Start-up:

Based upon Ford Motor Company's satisfactory demonstration to the Director that a longer start-up time period is necessary for this emissions unit, the "three hours from the moment of start-up" exemption period specified in OAC rule 3745-17-07(A)(3)(a)(ii) is hereby extended to "six hours from the moment of start-up."

II Operational Restrictions

1. Coal Quality Specifications:

   The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the SO2 emission limitation of 4.2 pounds of SO2/mmBtu of actual heat input.

   Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or coal supplier for each shipment of coal.

2. Baghouse Operational Restriction:

   The pressure drop across the baghouse shall be maintained within the range of 1 to 7 inches of water column during normal operation and except during periods of start-up and shutdown and at conditions below 30 degrees F.

3. Multiclone Operational Restriction:

   The pressure drop across the multiclone shall be maintained within the range of 2 to 6 inches of water column while the emissions unit is in operation, except during periods of start-up and shutdown.

III Monitoring and/or Recordkeeping

1. Requirements for the Sampling and Analysis of the Coal Burned:

   The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal, and analyze the coal sample for sulfur content (percent by weight) and heat content (Btu/pound of coal) for each shipment of coal. The analytical methods for sulfur content, and heat content, shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. Record Keeping Requirements for Coal Usage and Quality:

   For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received, the permittee's or coal supplier's analyses for sulfur and heat content, and the calculated SO2 emission rate (in lbs/mmBtu).

3. Record Keeping Requirements for the Extension of Exemption from Visible PE Limitations During Start-up:

   The permittee shall record the date, time and duration of each start-up of emissions units B020 through B024. These records shall be maintained by the facility for a period of not less than five years and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request during normal business hours.

4. Baghouse Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

5. Continuous Emission Monitoring System:

   The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

6. Continuous Opacity Monitoring - Certified Systems
   Statement of Certification:

   A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the visible PE from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on instantaneous (one-minute) and six-minute block average bases, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system that is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

9. Multiclone Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the multiclone while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the permittee's recommendations, instructions, or operating manual(s). The permittee shall record the pressure drop across the multiclone on a once per day basis for each day the emissions unit is in operation.

10. The permittee shall collect and record, for each control system, the breakdowns of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. Reporting Requirements for the Coal Usage and Quality Data:

   The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet and/or dry) for each shipment of coal that is received for burning in this emissions unit. The permittee's or coal supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/lb) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:

   a. the total quantity of coal received in each shipment (tons);

   b. the calculated SO2 emission rate (lbs of SO2/mmBtu) for each shipment.

   These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. Baghouse Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.2. of these terms and conditions.

3. Multiclone Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the multiclone did not comply with the allowable range specified in section A.II.3. of these terms and conditions as well as the corrective actions that were taken to achieve compliance.

4. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each six-minute block average above the applicable opacity limitation(s).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the analyzer while the emissions unit was operating also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
0.12 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(9).

1c. Emission Limitation -
4.2 lbs of SO2/mmBtu of actual heat input

Applicable Compliance Method:

a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

b. If testing is required to determine compliance with the emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method: Method 6 of 40 CFR, Part 60, Appendix A.

2.a. Except as otherwise provided in section A.V.2.b, the permittee shall conduct, or have conducted, emission testing for emissions units B020 through B024 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the limitation for PE.

The following test method shall be employed to determine compliance with the limitation for PE: Method 5 of 40 CFR, Part 60, Appendix A and the procedures of OAC rule 3745-17-03(B)(9). Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the times and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2.b. Special Stack Testing Procedures for Boilers # 1 through # 5:

Due to the difficulties inherent in individually testing boilers # 1 through 5 (emissions units B020 through B024), which are vented to one stack, compliance with the PE limitation in section A.I.1. of these terms and conditions shall be determined by simultaneously testing not less than three of the above boilers, of which boiler # 5 (B024) shall be one, unless it has been shut down. In the event that boiler # 5 has been shut down pursuant to this section, the permittee shall have the discretion to select a substitute test boiler. The permittee shall make its selection of the boilers to be tested no later than thirty (30) days prior to the required test. The average PE rate derived from the testing of the selected boilers shall be considered representative of emissions emanating from boilers # 1 through # 5.

The appropriate Ohio EPA District Office or local air agency shall schedule and conduct visible PE evaluations simultaneously with the performance of all stack tests required pursuant to this permit. For purposes of this permit, visible PE evaluations shall be conducted in accordance with paragraph (B)(1) of OAC rule 3745-17-03 using the methods and procedures specified in USEPA Reference Method 9.

2.c. During all stack tests required pursuant to this permit, the permittee shall burn coal that is representative of the coal that was burned during the preceding calendar quarter, except that the permittee may burn coal during such stack tests that contains a higher ash content, a lower heat content and/or a higher fines content than representative of the coal burned during the preceding calendar quarter for the purpose of obtaining less restrictive coal quality specifications than those specified in the terms and conditions of this permit.

Nothing in these Special Stack Testing Procedures, or the permit of which it is a part, shall be construed to prevent the permittee from ceasing operation of any boiler at this facility provided that the permittee shall not recommence operation of said boiler unless it is in compliance with the emission standards and limitations of this permit.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired, chain-grate boiler # 3, with multiclone no. B022A, baghouse no. B022B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-18-24(Y)	4.2 lbs of SO2/mmBtu of actual heat input

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation -
   4.2 lbs of SO2/mmBtu of actual heat input

   Applicable Compliance Method:

   a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

   b. If testing is required to determine compliance with the allowable emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method:

   Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 4 (B023)
Activity Description: Coal Fired, Chain Grate Boiler # 4 - 122 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired, chain-grate boiler # 4, with multiclone no. B023A, baghouse no. B023B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(C)(1)	0.12 lb of PE/mmBtu of actual heat input
	40 CFR 52.1881(b)(15)(xvii)	4.2 lbs of sulfur dioxide (SO2)/mmBtu of actual heat input

2. **Additional Terms and Conditions**

2.a Exemption from Visible PE Limitations During Start-up:

Based upon Ford Motor Company's satisfactory demonstration to the Director that a longer start-up time period is necessary for this emissions unit, the "three hours from the moment of start-up" exemption period specified in OAC rule 3745-17-07(A)(3)(a)(ii) is hereby extended to "six hours from the moment of start-up."

II Operational Restrictions

1. Coal Quality Specifications:

   The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the SO2 emission limitation of 4.2 pounds of SO2/mmBtu of actual heat input.

   Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or coal supplier for each shipment of coal.

2. Baghouse Operational Restriction:

   The pressure drop across the baghouse shall be maintained within the range of 1 to 7 inches of water column during normal operation and except during periods of start-up and shutdown and at conditions below 30 degrees F.

3. Multiclone Operational Restriction:

   The pressure drop across the multiclone shall be maintained within the range of 2 to 6 inches of water column while the emissions unit is in operation, except during periods of start-up and shutdown.

III Monitoring and/or Recordkeeping

1. Requirements for the Sampling and Analysis of the Coal Burned:

   The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal, and analyze the coal sample for sulfur content (percent by weight) and heat content (Btu/pound of coal) for each shipment of coal. The analytical methods for sulfur content and heat content, shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. Record Keeping Requirements for Coal Usage and Quality:

   For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received, the permittee's or coal supplier's analyses for sulfur and heat content, and the calculated SO2 emission rate (in lbs/mmBtu).

3. Record Keeping Requirements for the Extension of Exemption from Visible PE Limitations During Start-up:

   The permittee shall record the date, time and duration of each start-up of emissions units B020 through B024. These records shall be maintained by the facility for a period of not less than five years and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request during normal business hours.

4. Baghouse Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

5. Continuous Emission Monitoring System:

   The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

6. Continuous Opacity Monitoring - Certified Systems
   Statement of Certification:

   A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the visible PE from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13.

The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on instantaneous (one-minute) and six-minute block average bases, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system that is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

9. Multiclone Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the multiclone while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the permittee's recommendations, instructions, or operating manual(s). The permittee shall record the pressure drop across the multiclone on a once per day basis for each day the emissions unit is in operation.

10. The permittee shall collect and record, for each control system, the breakdowns of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. Reporting Requirements for the Coal Usage and Quality Data:

   The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet and/or dry) for each shipment of coal that is received for burning in this emissions unit. The permittee's or coal supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/lb) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:

   a. the total quantity of coal received in each shipment (tons);

   b. the calculated SO2 emission rate (lbs of SO2/mmBtu) for each shipment.

   These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. Baghouse Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.2. of these terms and conditions.

3. Multiclone Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the multiclone did not comply with the allowable range specified in section A.II.3. of these terms and conditions as well as the corrective actions that were taken to achieve compliance.

4. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each six-minute block average above the applicable opacity limitation(s).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the analyzer while the emissions unit was operating also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtime for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
0.12 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(9).

1c. Emission Limitation -
4.2 lbs of SO2/mmBtu of actual heat input

Applicable Compliance Method:

a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

b. If testing is required to determine compliance with the emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method: Method 6 of 40 CFR, Part 60, Appendix A.

2.a. Except as otherwise provided in section A.V.2.b, the permittee shall conduct, or have conducted, emission testing for emissions units B020 through B024 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the limitation for PE.

The following test method shall be employed to determine compliance with the limitation for PE: Method 5 of 40 CFR, Part 60, Appendix A and the procedures of OAC rule 3745-17-03(B)(9). Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the times and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2.b. Special Stack Testing Procedures for Boilers # 1 through # 5:

Due to the difficulties inherent in individually testing boilers # 1 through 5 (emissions units B020 through B024), which are vented to one stack, compliance with the PE limitation in section A.I.1. of these terms and conditions shall be determined by simultaneously testing not less than three of the above boilers, of which boiler # 5 (B024) shall be one, unless it has been shut down. In the event that boiler # 5 has been shut down pursuant to this section, the permittee shall have the discretion to select a substitute test boiler. The permittee shall make its selection of the boilers to be tested no later than thirty (30) days prior to the required test. The average PE rate derived from the testing of the selected boilers shall be considered representative of emissions emanating from boilers # 1 through # 5.

The appropriate Ohio EPA District Office or local air agency shall schedule and conduct visible PE evaluations simultaneously with the performance of all stack tests required pursuant to this permit. For purposes of this permit, visible PE evaluations shall be conducted in accordance with paragraph (B)(1) of OAC rule 3745-17-03 using the methods and procedures specified in USEPA Reference Method 9.

2.c. During all stack tests required pursuant to this permit, the permittee shall burn coal that is representative of the coal that was burned during the preceding calendar quarter, except that the permittee may burn coal during such stack tests that contains a higher ash content, a lower heat content and/or a higher fines content than representative of the coal burned during the preceding calendar quarter for the purpose of obtaining less restrictive coal quality specifications than those specified in the terms and conditions of this permit.

Nothing in these Special Stack Testing Procedures, or the permit of which it is a part, shall be construed to prevent the permittee from ceasing operation of any boiler at this facility provided that the permittee shall not recommence operation of said boiler unless it is in compliance with the emission standards and limitations of this permit.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired, chain-grate boiler # 4, with multiclone no. B023A, baghouse no. B023B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-18-24(Y)	4.2 lbs of SO2/mmBtu of actual heat input

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation -
   4.2 lbs of SO2/mmBtu of actual heat input

   Applicable Compliance Method:

   a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

   b. If testing is required to determine compliance with the allowable emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method:

   Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 5 (B024)
Activity Description: Natural Gas and Coal Fired, Spreader Stoker Boiler # 5 - 122 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr natural gas and/or coal-fired, spreader-stoker boiler # 5, with multiclone no. B024A, baghouse no. B024B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-10(C)(1)	0.12 lb of PE/mmBtu of actual heat input
	40 CFR 52.1881(b)(15)(xvii)	4.2 lbs of sulfur dioxide (SO2)/mmBtu of actual heat input

2. **Additional Terms and Conditions**

2.a Exemption from Visible PE Limitations During Start-up:

Based upon Ford Motor Company's satisfactory demonstration to the Director that a longer start-up time period is necessary for this emissions unit, the "three hours from the moment of start-up" exemption period specified in OAC rule 3745-17-07(A)(3)(a)(ii) is hereby extended to "six hours from the moment of start-up."

II Operational Restrictions

1. Coal Quality Specifications:

   The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficient to comply with the SO2 emission limitation of 4.2 pounds of SO2/mmBtu of actual heat input;

   Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or coal supplier for each shipment of coal.

2. Baghouse Operational Restriction:

   The pressure drop across the baghouse shall be maintained within the range of 1 to 7 inches of water column during normal operation and except during periods of start-up and shutdown and at conditions below 30 degrees F.

3. Multiclone Operational Restriction:

   The pressure drop across the multiclone shall be maintained within the range of 2 to 6 inches of water column while the emissions unit is in operation, except during periods of start-up and shutdown.

III Monitoring and/or Recordkeeping

1. Requirements for the Sampling and Analysis of the Coal Burned:

   The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal, and analyze the coal sample for sulfur content (percent by weight) and heat content (Btu/pound of coal) for each shipment of coal. The analytical methods for sulfur content, and heat content, shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. Record Keeping Requirements for Coal Usage and Quality:

For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received, the permittee's or coal supplier's analyses for sulfur and heat content, and the calculated SO2 emission rate (in lbs/mmBtu).

3. Record Keeping Requirements for the Extension of Exemption from Visible PE Limitations During Start-up:

   The permittee shall record the date, time and duration of each start-up of emissions units B020 through B024. These records shall be maintained by the facility for a period of not less than five years and shall be made available to the appropriate Ohio EPA District Office or local air agency upon request during normal business hours.

4. Baghouse Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

5. Continuous Emission Monitoring System:

   The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

6. Continuous Opacity Monitoring - Certified Systems
   Statement of Certification:

   A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the visible PE from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13.

   The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on instantaneous (one minute) and six-minute block average bases, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. The permittee shall maintain a written quality assurance/quality control plan for the continuous opacity monitoring system that is designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system must be kept on site and available for inspection during regular office hours.

9. Multiclone Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the multiclone while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the permittee's recommendations, instructions, or operating manual(s). The permittee shall record the pressure drop across the multiclone on a once per day basis for each day the emissions unit is in operation.

10. The permittee shall collect and record, for each control system, the breakdowns of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. Reporting Requirements for the Coal Usage and Quality Data:

   The permittee shall submit, on a quarterly basis, copies of the permittee's or coal supplier's analyses (wet and/or dry) for each shipment of coal that is received for burning in this emissions unit. The permittee or coal supplier's analyses shall document the sulfur content (percent by weight) and heat content (Btu/lb) of each shipment of coal. The following information shall also be included with the copies of the permittee's or coal supplier's analyses:

   a. the total quantity of coal received in each shipment (tons);

   b. the calculated SO2 emission rate (lbs of SO2/mmBtu) for each shipment.

   These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal shipments received during the previous calendar quarters.

2. Baghouse Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.2. of these terms and conditions.

3. Multiclone Pressure Drop Reporting Requirements:

   The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the multiclone did not comply with the allowable range specified in section A.II.3. of these terms and conditions as well as the corrective actions that were taken to achieve compliance.

4. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each six-minute block average above the applicable opacity limitation(s).

   The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

   If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the analyzer while the emissions unit was operating also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall address the data obtained during the previous calendar quarter.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtime for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
0.12 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(9).

1c. Emission Limitation -
4.2 lbs of SO2/mmBtu of actual heat input

Applicable Compliance Method:

a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

b. If testing is required to determine compliance with the emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method: Method 6 of 40 CFR, Part 60, Appendix A.

2.a. Except as otherwise provided in section A.V.2.b, the permittee shall conduct, or have conducted, emission testing for emissions units B020 through B024 in accordance with the following requirements:

The emission testing shall be conducted within twelve (12) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the limitation for PE.

The following test method shall be employed to determine compliance with the limitation for PE: Method 5 of 40 CFR, Part 60, Appendix A and the procedures of OAC rule 3745-17-03(B)(9). Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test dates, the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the times and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2.b. Special Stack Testing Procedures for Boilers # 1 through # 5:

Due to the difficulties inherent in individually testing boilers # 1 through 5 (emissions units B020 through B024), which are vented to one stack, compliance with the PE limitation in section A.I.1. of these terms and conditions shall be determined by simultaneously testing not less than three of the above boilers, of which boiler # 5 (B024) shall be one, unless it has been shut down. In the event that boiler # 5 has been shut down pursuant to this section, the permittee shall have the discretion to select a substitute test boiler. The permittee shall make its selection of the boilers to be tested no later than thirty (30) days prior to the required test. The average PE rate derived from the testing of the selected boilers shall be considered representative of emissions emanating from boilers # 1 through # 5.

The appropriate Ohio EPA District Office or local air agency shall schedule and conduct visible PE evaluations simultaneously with the performance of all stack tests required pursuant to this permit. For purposes of this permit, visible PE evaluations shall be conducted in accordance with paragraph (B)(1) of OAC rule 3745-17-03 using the methods and procedures specified in USEPA Reference Method 9.

2.c. During all stack tests required pursuant to this permit, the permittee shall burn coal that is representative of the coal that was burned during the preceding calendar quarter, except that the

permittee may burn coal during such stack tests that contains a higher ash content, a lower heat content and/or a higher fines content than representative of the coal burned during the preceding calendar quarter for the purpose of obtaining less restrictive coal quality specifications than those specified in the terms and conditions of this permit.

Nothing in these Special Stack Testing Procedures, or the permit of which it is a part, shall be construed to prevent the permittee from ceasing operation of any boiler at this facility provided that the permittee shall not recommence operation of said boiler unless it is in compliance with the emission standards and limitations of this permit.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired, spreader-stoker boiler # 5 (with natural gas as a supplemental fuel), with multiclone no. B024A, baghouse no. B024B, and an opacity monitor on a stack shared by boilers # 1 through # 5	OAC rule 3745-18-24(Y)	4.2 lbs of SO2/mmBtu of actual heat input

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation -
   4.2 lbs of SO2/mmBtu of actual heat input

   Applicable Compliance Method:

   a. Compliance with the above SO2 emission limitation shall be determined by the record keeping requirements in sections A.III.1. and A.III.2. of the terms and conditions of this permit or, if required, by emission testing.

   b. If testing is required to determine compliance with the allowable emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method:

   Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Boiler # 6 (B025)
Activity Description: Coal Fired With Up To 10 % Shredded Tire Material, Spreader Stoker Boiler # 6 - 122 mmBTU/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired spreader-stoker boiler # 6, modified to allow for the combustion of coal or a mixture of coal and up to 10 % by weight of shredded tire, with a multiclone, an electrostatic precipitator (ESP), and an opacity monitor on the ESP stack	OAC rule 3745-31-05 (PTI 13-1490)	The sulfur dioxide (SO2) emission limitation established pursuant to this rule is less stringent than that established in 40 CFR, Part 52.1881(b)(15). The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-17-10(C)(1), 3745-21-08, and 3745-23-06.
	OAC rule 3745-17-10(C)(1)	0.11 lb of particulate emissions (PE)/mmBtu of actual heat input
	40 CFR 52.1881(b)(15)	1.65 lbs of SO2/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

OAC rule 3745-21-08	See A.I..2.a.
OAC rule 3745-23-06	See A.I.2.b.

2. Additional Terms and Conditions

2.a Stack tests were performed in June 1982 and May 1985, which determined compliance with the PE limitation. Visible PE readings were taken by the Cleveland Bureau of Air Pollution Control during these tests. These readings indicated opacity values, averaged over the entire reading period for each test, of 1.6 percent (%) (June 1982, without shredded tire) and 0.14 % (May 1985, with 10 % by weight shredded tire). Should visible PE readings exceed the above values significantly on a continued basis, the permittee may be required to determine compliance with the PE limitation at the higher opacity levels.

II Operational Restrictions

1. Coal Quality Specifications:

The quality of the coal burned in this emissions unit shall meet a sulfur content that is sufficiently low to comply with the allowable SO2 emission limitation of 1.65 pounds of SO2/mmBtu of actual heat input.

Compliance with the above-mentioned specification shall be determined by using the analytical results provided by the permittee or coal/shredded tire supplier for each shipment of coal/shredded tires.

2. Use of Shredded Tires as a Fuel Supplement to Coal:

If shredded tires are used as a fuel supplement, the use of shredded tires shall be limited to the following parameters maintained during the compliance stack tests of May 2 and 3, 1985:

a. the shredded tire content of the fuel fired in this emissions unit shall be not more than 10 % by weight of the final coal-shredded tire mixture; and

b. the shredded tires shall have the following specifications:

no loose steel or fiber;
size less than 1 1/2 inch;
not less than 19,300 Btu/lb of shredded tires;
less than 1 % sulfur by weight; and
less than 5.5 % ash by weight.

3. Multiclone Operational Restriction:

The pressure drop across the multiclone while the emissions unit is in operation shall be maintained within the range of 3 to 6 inches of water column at all times while the emissions unit is in operation.

4. The permittee shall operate the multiclone and the ESP at all times while this emissions unit is in operation.

5. The average total combined power input (in kilowatts) to all fields of the ESP, for any 3-hour block of time when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emission test that determined that the emissions unit was in compliance with the PE limitation.

III Monitoring and/or Recordkeeping

1. Requirements for the Sampling and Analysis of the Coal Burned:

   The permittee shall collect or require the coal supplier to collect a representative grab sample of each shipment of coal that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the coal sampling in accordance with ASTM method D2234, Collection of a Gross Sample of Coal, and analyze the coal sample for sulfur content (percent by weight) and heat content (Btu/lb of coal) for each shipment of coal. The analytical methods for sulfur content, and heat content shall be: ASTM method D3177, Total Sulfur in the Analysis Sample of Coal and Coke or ASTM method D4239, Sulfur in the Analysis Sample of Coal and Coke Using High Temperature Tube Furnace Combustion Methods; and ASTM method D2015, Gross Calorific Value of Solid Fuel by the Adiabatic Bomb Calorimeter, ASTM method D3286, Gross Calorific Value of Coal and Coke by the Isothermal Bomb Calorimeter, or ASTM method D1989, Standard Test Method for Gross Calorific Value of Coal and Coke by Microprocessor Controlled Isoperibol Calorimeters. Alternative, equivalent methods may be used upon written approval by the appropriate Ohio EPA District Office or local air agency.

2. Requirements for the Sampling and Analysis of the Shredded Tires Burned:

   The permittee shall collect or require the tire supplier to collect a representative grab sample of each shipment of tires that is received for burning in this emissions unit. The permittee shall perform or require the supplier to perform the sampling in accordance with a method approved by the appropriate Ohio EPA District Office or local air agency and analyze the shredded tire sample for heat content (Btu/lb of shredded tire), and sulfur content (percent by weight). The analytical methods for heat content and sulfur content shall be approved by the appropriate Ohio EPA District Office or local air agency.

3. Record Keeping Requirements for Coal and Shredded Tire Usage and Quality:

For each shipment of coal received for burning in this emissions unit, the permittee shall maintain records of the total quantity of coal received and the permittee's or coal supplier's analyses for ash content, sulfur and heat content.

For each shipment of shredded tires received for burning in this emissions unit, the permittee shall maintain records of the total quantity of shredded tires received and the permittee's or tire supplier's analyses for size, heat content, sulfur content and ash content.

4. Multiclone Pressure Drop Monitoring and Record Keeping Requirements:

   The permittee shall properly operate and maintain equipment to monitor the pressure drop across the multiclone while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the multiclone once per day for each day the emissions unit is in operation.

5. Continuous Emission Monitoring System:

   The permittee shall monitor the performance of the ESP control system by continuously monitoring and recording the opacity of the visible PE from the ESP stack using a continuous opacity monitor, which shall be calibrated, maintained and operated in accordance with the procedures set forth in 40 CFR, Part 60, Appendix B.

   The continuous emission monitoring system consists of all the equipment used to acquire data and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

6. Continuous Emission Monitoring - Certified Systems
   Statement of Certification:

   A statement of certification of the existing continuous opacity monitoring system shall be maintained on site and shall consist of a letter from Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR, Part 60, Appendix B, Performance Specification 1. Proof of certification shall be made available to the appropriate Ohio EPA District Office or local air agency upon request.

7. The permittee shall operate and maintain existing equipment to continuously monitor and record the opacity of the visible PE from this emissions unit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR 60.13.

   The permittee shall maintain records of all data obtained by the continuous opacity monitoring system including, but not limited to, percent opacity on an instantaneous (one-minute) and

six-minute block average bases, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

8. Within 180 days of placing Boiler No. 6 in operation, the permittee shall develop a written quality assurance/quality control plan for the continuous opacity monitoring system designed to ensure continuous valid and representative readings of opacity. The plan shall include, as a minimum, conducting and recording daily automatic zero/span checks, provisions for conducting a quarterly audit of the continuous opacity monitoring system, and a description of preventive maintenance activities. The plan shall describe step by step procedures for ensuring that the provisions of sections 7.1.4, 7.4.1, 7.4.2, and Table 1-1 of Performance Specification 1 are maintained on a continuous basis. The quality assurance/quality control plan and a logbook dedicated to the continuous opacity monitoring system shall be kept on site and available for inspection during regular office hours.

9. The permittee shall properly operate and maintain equipment to continuously monitor the secondary voltage, in kilovolts, and the secondary current, in amps, in all fields of the ESP while the emissions unit is in operation. The secondary voltage and secondary current monitors shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:

   a. the secondary voltage, in kilovolts (kV), and the secondary current in amps, for each transformer rectifier (TR) set in the ESP;

   b. the power input (in kilowatts) of each TR set for each hour (calculated by multiplying the secondary voltage (in kV) by the secondary current (in amps) for each TR set); and

   c. the total power input to the ESP for each hour (add together the power inputs for all the TR sets operating during the hour).

10. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. Reporting Requirements for the Coal and Shredded Tire Usage and Quality Data:

   The permittee shall submit, on a quarterly basis, copies of the permittee's or coal and shredded tire suppliers' analyses (wet and/or dry) for each shipment of coal and shredded tires that is received for burning in this emissions unit. The permittee's or coal and shredded tire suppliers' analyses shall document the sulfur content (percent by weight) and heat content (Btu/lb) of each

shipment of coal and shredded tires. The following information shall also be included with the copies of the permittee's or coal and shredded tire suppliers' analyses:

(a) the total quantity of coal received in each shipment (tons);
(b) the total quantity of shredded tires received in each shipment (tons);
(c) the weighted* average ash content (percent by weight) of the coal received during each calendar month;
(d) the weighted* average ash content (percent by weight) of the shredded tires received during each calendar month;
(e) the weighted* average sulfur content (percent by weight) of the coal received during each calendar month;
(f) the weighted* average sulfur content (percent by weight) of the shredded tires received during each calendar month;
(g) the weighted* average heat content (Btu/lb) of the coal received during each calendar month;
(h) the weighted* average heat content (Btu/lb) of the shredded tires received during each calendar month;
(i) the weighted* average SO2 emission rate (lbs of SO2/mmBtu of actual heat input) from the coal received each calendar month;
(j) the weighted* average SO2 emission rate (lbs of SO2/mmBtu of actual heat input) from the shredded tires received each calendar month;
(k) the weighted* average size (inches) of the shredded tires.

1. *In proportion to the quantity of coal or shredded tires received in each shipment during the calendar month.

These quarterly reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall cover the coal and the shredded tire shipments received during the previous calendar quarters.

2. Multiclone Pressure Drop Reporting Requirements:

The permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the multiclone did not comply with the allowable range specified in section A.II.3. of these terms and conditions as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting all instances of opacity values in excess of the limitations specified in OAC rule 3745-17-07(A), detailing the date, commencement and completion times, duration, magnitude (percent opacity), reason (if known), and corrective actions taken (if any) of each six-minute block average above the applicable opacity limitation(s).

The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous opacity monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall address the data obtained during the previous calendar quarter.

4. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP did not comply with the operational restriction specified in section A.II.5. of these terms and conditions.

5. The permittee shall submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.

6. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

7. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
0.11 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(9).

1c. Emission Limitation -
1.65 lbs of SO2/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the SO2 emission limitation shall be determined by the record keeping requirements in section A.III.3. of these terms and conditions or, if required, by emission testing.

If testing is required to determine compliance with the allowable emission limit of 1.65 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method:

Method 6 of 40 CFR, Part 60, Appendix A.

1d. Operational Restriction:
The quality of the coal burned in this emissions unit shall meet the following specifications on an "as-burned or as-received" wet basis:

a. less than 7.48 % ash by weight for only coal firing and less than 10.0 % ash by weight for coal-shredded tire firing;

b. a sulfur content that is sufficient to comply with the allowable SO2 emission limitation of 1.65 pounds of SO2/mmBtu of actual heat input;

c. a heat content greater than 12,599 Btu/lb of coal; and

d. a content of coal fines (percent by weight less than 1/4 inch in diameter) less than 38.06 %.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirements in section A.III.3. of these terms and conditions.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

This emissions unit, which is presently shutdown, shall be stack tested within 60 days of start-up, since repairs were made on the ESP, the stack and the opacity monitor, and the emissions unit has not been tested since 1985. This emissions unit shall also be tested 2.5 years following the start-up.

The emission testing shall be conducted to determine compliance with the allowable mass emission rate of 0.11 lb of PE/mmBtu of actual heat input.

The following test method shall be employed to determine compliance with the allowable mass emission rate:

Method 5 of 40 CFR, Part 60, Appendix A.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity and with shredded tires (if use of this supplemental fuel is contemplated).

Not later than 30 days prior to the proposed test dates, the permittee shall submit "Intent to Test" notifications to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notifications shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the times and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of each emission test shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of each test.

3. During all stack tests required pursuant to this permit, the permittee shall burn coal that is representative of the coal that was burned during the preceding calendar quarter, except that the permittee may burn coal during such stack tests that contains a higher ash content, a lower heat content and/or a higher fines content than representative of the coal burned during the preceding calendar quarter for the purpose of obtaining less restrictive coal quality specifications than those prescribed in the terms and conditions of this permit.

4. During all stack tests required pursuant to this permit, the permittee shall burn shredded tires that are representative of the shredded tires that were burned during the preceding calendar quarter (if shredded tires were burned during the preceding calendar quarter), except that the permittee may

burn shredded tires during such stack tests that contain a higher ash content, a lower heat content and/or a larger lump size than representative of the shredded tires burned during the preceding calendar quarter for the purpose of obtaining less restrictive quality specifications for shredded tires than those prescribed in the terms and conditions of this permit.

5. Nothing in this permit shall be construed to prevent the permittee from ceasing operation of this boiler at this facility provided that the permittee shall not recommence operation of said boiler unless it is in compliance with the emission limitations of this permit.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
122 mmBtu/hr coal-fired spreader-stoker boiler # 6, modified to allow for the combustion of coal or a mixture of coal and up to 10% by weight of shredded tire, with multiclone, an electrostatic precipitator (ESP), and a Thermo Electron Model 400 continuous opacity monitor on the ESP stack	OAC rule 3745-18-24(A)	4.2 lbs of SO2/mmBtu of actual heat input

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation -
   4.2 lbs of SO2/mmBtu of actual heat input

   Applicable Compliance Method:

   a. Compliance with the SO2 emission limit shall be determined by the record keeping requirements in section A.III.3. of these terms and conditions or, if required, by stack testing.

   b. If testing is required to determine compliance with the allowable emission limit of 4.2 lbs of SO2/mmBtu of actual heat input, testing shall be conducted using the following method:

      Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Plant Roadways & Parking Areas (F001)
Activity Description: Paved and Unpaved Roadways & Parking Areas

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
unpaved roadways and parking areas (option 1*)	OAC rule 3745-17-08(E) and (F)*	Appendix B ("Work Practice Plan for the Control of Fugitive Dust Emissions from Unpaved Roadways at the Ford Motor Company, Cleveland Casting Plant") See sections A.I.2.a, A.I.2.f, A.I.2.g, A.III.5., and A.IV.2.
unpaved roadways and parking areas (option 2*)	OAC rule 3745-17-08(E) and (F)* and (B)(2)	Reasonably available control measures to minimize or eliminate visible particulate emissions of fugitive dust consisting of the periodic application of asphalt, oil, water, or other suitable dust suppression chemicals to unpaved surfaces that can cause emissions of fugitive dust See section A.I.2.a.
	OAC rule 3745-17-07(B)(5)	There shall be no visible particulate emissions from any unpaved roadway or parking area except for

		a period of time not to exceed thirteen minutes during any sixty-minute observation period.
paved roadways and parking areas	OAC rule 3745-17-12(I)(1)	See sections A.I.2.a and A.I.2.d. *Pursuant to OAC rule 3745-17-08(E) and as of the effective date of this permit, the permittee has elected to, and shall, comply with option 1. In the event that the permittee desires to be subject to and comply with the alternative option pursuant to OAC rule 3745-17-08(E), the permittee must notify Ohio EPA pursuant to OAC rule 3745-17-08(F).

2. Additional Terms and Conditions

2.a This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

2.b The paved roadways and parking areas covered by this permit and subject to the requirements of OAC rule 3745-17-12 are listed below:

paved roadways:

PR1, PR2, PR3 & PR4

paved parking areas:

PP1, PP2, PP3, PP4, PP5, PP6

2.c The unpaved roadways and parking areas covered by this permit and subject to the requirements of OAC rule 3745-17-08 are listed below:
unpaved roadways:

road segment ID	road segment length	surface composition
UR1	0.65 mile	dirt
UR2	0.53 mile	dirt
UR3	0.25 mile	dirt

unpaved parking areas:

all

2.d For the paved roadways and parking areas, visible particulate emissions shall not exceed 5 % opacity, as determined in accordance with paragraph (B)(3) of OAC rule 3745-17-03.

2.e In accordance with the permittee's permit application, the permittee has agreed to sweep the paved roadways and parking areas at sufficient frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.f Dust control program for unpaved roadways (option 1):

i. The permittee shall employ the following dust control measures on all of the unpaved roadways identified in Figure I of Appendix B of OAC rule 3745-17-08 such that the program achieves and maintains a minimum of 75 percent control efficiency, as determined by the methodology set forth in the USEPA's reference document entitled Control of Open Fugitive Dust Sources (EPA-450/3-88-008), Section 3.0, "Unpaved Roads":

(a) All unpaved roadways shall be treated with a dust suppressant solution, consisting of either a petroleum resin emulsion, asphalt emulsion or acrylic cement in water, and applied at a coverage dilution with water at a ratio of not more than 10 parts of water to one part of concentrate. Such

treatments shall be performed in accordance with the following schedule and on a year-round basis, except as otherwise provided in section A.I.2.f.i.(b) of these terms and conditions:

segments	minimum application frequency
UR1	every four and one-half weeks
UR2, UR3	every six and one-half weeks

(b) The requirements of section A.I.2.f.i.(a) of these terms and conditions may be suspended during any one of the following events:

(i) when the unpaved roadways are visibly wetted as a result of a precipitation of equal to or greater than one quarter inch of rainfall as measured by an on-site rain gauge or rainfall data provided by the National Weather Service at Cleveland Hopkins Airport; or

(ii) when the unpaved roadways are covered with snow and/or ice.

Resumption of the treatment requirements in section A.I.2.f.i.(a) of these terms and conditions shall occur within five (5) days after cessation of the above event(s).

ii. Any dust suppressant spray truck used for treating unpaved roadways pursuant to section A.I.2.f.i.(a) of these terms and conditions shall be operated and maintained in order to apply dust suppressant solution at a coverage rate of at least 0.25 gallon per square yard at the specified frequency.

2.g Changes to dust control program in section A.I.2.f of these terms and conditions:

i. The permittee may petition Ohio EPA for written approval of different treatment methods, treatment schedules and procedures or reporting requirements different from those required herein. Such alternative practices must be demonstrated to Ohio EPA and the U.S. Environmental Protection Agency to result in equivalent dust control effectiveness in accordance with the document entitled Control of Open Fugitive Dust Sources (EPA-450/3-88-008). The permittee reserves the right to contest any disapproval of such petition in the appropriate judicial forum.

ii. In the event that the permittee certifies that the use of all or a portion of an unpaved roadway identified in Figure I of Appendix B of OAC rule 3745-17-08 has been discontinued, the dust suppressant solution application program for that roadway may be terminated or reduced. If the permittee begins to utilize any new unpaved roadway, parking area, or other vehicular activity area not shown in Figure I of Appendix B of OAC rule 3745-17-08, it shall notify the appropriate Ohio EPA District Office or local air agency in the reports required pursuant to

section A.IV.2. of these terms and conditions and treat the roadway or area in accordance with the procedures contained herein.

iii. The appropriate Ohio EPA District Office or local air agency shall not be precluded from requiring adjustments, including increased chemical suppressant application, if on-site inspections reveal that the program contained herein does not prevent excessive visible dust entrainment and emissions from a particular roadway or surface.

iv. In the event that an unpaved roadway that has been chemically treated becomes completely hardened and cemented by such treatment so as to become like a paved road as demonstrated by observation, by compaction tests and silt analyses or in the event that the permittee paves any unpaved roadway or area, that roadway or area shall be treated as a paved surface and shall be subject to the requirements of paragraph (I)(1) of OAC rule 3745-17-12.

2.h The permittee shall comply with the following requirements for unpaved roadways and parking areas (option 2):

i. The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas by applying a dust suppressant solution at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally effective control measures to ensure compliance.

ii. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for an unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

iii. Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or

parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

iv. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered if the control measure is necessary for the materials being transported.

v. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. Except as otherwise provided in this section and excluding unpaved roadways and parking areas subject to option 1, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

paved roadways	minimum inspection frequency
PR1 - PR4	daily (except holidays)

paved parking areas	minimum inspection frequency
PP1 - PP6	daily (except holidays)

unpaved roadways	minimum inspection frequency
road segment ID	
UR1	daily (except holidays)
UR2	daily (except holidays)
UR3	daily (except holidays)

unpaved parking areas	minimum inspection frequency
all	daily (except holidays)

No inspection of a roadway segment or parking area is necessary on a day that the control measures are applied.

2. The purpose of the inspections in section A.III.1. is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection of a roadway segment or parking area is needed if control measures are applied that day. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee shall maintain records of the following information for the paved roadways and parking areas and the unpaved roadways and parking areas subject to option 2:

   a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

   c. the dates the control measures were implemented; and

   d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

   The information required in 4.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

4. The permittee shall maintain records concerning the dust control program for option 1 in accordance with the following:

   The following information shall be recorded on a daily basis:

   a. for periods during which the treatment requirements of section A.I.2.f.i.(a) of these terms and conditions have been suspended pursuant to the provisions of section A.I.2.f.i.(b) of these terms and conditions:

      i. the date(s) of suspension;

      ii. the specific treatment operations suspended;

      iii. the daily precipitation in inches of water and/or the presence of snow and/or ice cover, whichever is/are applicable;

   b. the date each unpaved roadway was treated;

c. an identification of each unpaved roadway or portion thereof which was treated;

d. an identification of the dust suppressant spray vehicle employed for the treatment;

e. the name of the operator who performed the treatment;

f. the type of chemical dust suppressant applied to each unpaved roadway;

g. the dilution ratio (gallons of chemical dust suppressant to gallons of water); and

h. the amount of dust suppressant solution applied to each unpaved roadway (gallons per square yard).

IV Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences for the paved roadways and parking areas and for the unpaved roadways and parking areas subject to option 2:

   a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

   b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

   The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

2. Pursuant to option 1 for unpaved roadways and parking areas, the permittee shall submit to the appropriate Ohio EPA District Office or local air agency, within five (5) days of any non-compliance with the requirements of section A.I.2.f of these terms and conditions, a report which includes a detailed explanation of the cause of such non-compliance, all remedial actions required, and the date by which compliance was or will be reestablished.

V Testing Requirements

1. Compliance with the emission limitations and control requirements in sections A.I.1. and A.I.2. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible particulate emissions of fugitive dust from paved roadways and parking areas shall not exceed 5 % opacity.

Applicable Compliance Method:
Compliance with the above visible emission limitation shall be determined in accordance with the procedures specified in OAC rule 3745-17-03(B)(3).

1b. Emission Limitation -
There shall be no visible particulate emissions from any unpaved roadway or parking area except for a period of time not to exceed thirteen minutes during any sixty-minute observation period.

Applicable Compliance Method:
Compliance with the above visible emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(4).

1c. Compliance with the 75 % percent control efficiency requirement specified for the dust control program for option 1 shall be determined by the methodology set forth in USEPA's reference document entitled Control of Open Fugitive Dust Sources (EPA-450/3-88-008), Section 3.0, "Unpaved Roads."

1d. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Coke, Stone, Steel, Scrap Sand Handling (F003)
Activity Description: Coke, Stone, Steel, Scrap Sand Handling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
coke, stone, steel, and scrap sand handling, front-end loaders, belt conveyor, and truck dumping	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (See sections A.I.b. through A.I.d.)

2. Additional Terms and Conditions

2.a The material handling operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

belt conveyor
front-end loaders
loading & unloading operations

2.b The permittee shall employ reasonably available control measures for the above-identified material handling operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to perform the following control measures to ensure compliance:

material handling operation	control measure
belt conveyor, front-end loaders, loading & unloading operations	apply sufficient chemical dust suppressant at the unloading station to control dust emissions from all subsequent conveyor and transfer points

Nothing in this permit shall prohibit the permittee from employing other equally effective control measures to ensure compliance.

2.c For each material handling operation that is not adequately enclosed, the above-identified control measures shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.

2.d Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II Operational Restrictions

1. Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequency:

material handling operations	minimum inspection frequency
all	daily

2. The above-mentioned inspections shall be performed during representative, normal operating conditions.

3. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

   c. the dates the control measures were implemented; and

   d. on a calendar quarter basis, the total number of days the control measures were implemented.

   The information in 4.d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation reports that identify all of the following occurrences:

   a. each day during which an inspection was not performed by the required frequency; and

   b. each instance when a control measure, that was to be performed as a result of an inspection, was not implemented.

V Testing Requirements

1. Compliance with the visible emission limitation for the material handling operations identified above shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 7 Holding Furnace (F005)
Activity Description: Cupola 7 100 Ton Electric Induction Holding Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 ton electric induction holding furnace, controlled by baghouse no. 78 (also known as D unit baghouse) (Formerly, this emissions unit was completely vented to stack B-76.)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(2)	5.4 lbs of PE/hr

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations,

instructions and/or operating manuals. The permittee shall collect and record the pressure drop across baghouse no. 78 once for each day that the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
5.40 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). Because emissions from F005 cannot be isolated from the multiple emissions units vented to baghouse no. 78, compliance with this limitation will be assumed as long as compliance with the PE limitation (0.0055 grain per actual cubic foot of exhaust gases) in OAC rule 3745-17-12(I)(9) for baghouse no. 78 is maintained.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F005, F025, P160, P161, P162, P192, P193, P194, P290, P291, P412, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration of PE for baghouse no. 78 (0.0055 grain per actual cubic foot of exhaust gases).

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to

Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Molding Basement Refuse Pan Conveyors (F023)
Activity Description: Molding Basement Refuse Pan Conveyors

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
molding basement refuse pan conveyors, controlled by baghouses nos. 53, 54, and 56 (also known as east pulse flow, west pulse flow, and F unit, respectively) and wet scrubbers nos. 35 and 36 (also known as 5-2 and 5-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1135)	The particulate emission limitations established pursuant to this rule are less stringent than the limitation in OAC rule 3745-17-12(I)(13).
	OAC rule 3745-17-12(I)(3)(a)	Particulate emissions (PE) from baghouse no. 56 serving emissions units F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-12(I)(3)(b)	PE from baghouses nos. 53 and 54 serving this emissions unit shall not exceed 0.0059 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-12(I)(3)(c)	PE from wet scrubbers nos. 35 and 36 serving emissions unit F023 shall not exceed 0.010 grain per

	actual cubic foot of total exhaust gases.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack, except stacks E-21 and E-22, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stacks E-21 and E-22 are exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks E-21 and E-22.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouses nos. 53, 54 and 56, and wet scrubbers no. 35 and 36.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks E-21 and E-22, serving this emissions unit, in lieu of the 20 % and 60 % opacity limitations specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks E-21 and E-22, serving this emissions unit, any visible particulate emissions greater than 57 and 24 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks E-21 and E-22, serving this emissions unit, visible particulate emissions exceeding 57 % opacity, as a six-minute average, for stack E-21, and 24 % opacity, as a six-minute average, for stack E-22, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 63 % opacity, as a six-minute average, for stack E-21, and 60 % opacity, as a six-minute average, for stack E-22, at any time.

II Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, while the emissions unit is in operation.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT . Once MACT is implemented, the obsolete monitoring requirements will be considered void.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, or operating manual(s). The permittee shall collect and record the pressure drop across each baghouse once for each day the emissions unit is in operation.

2. The permittee shall properly operate and maintain equipment to monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT . Once MACT is implemented, the obsolete monitoring requirements will be considered void.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emission from the baghouses & wet scrubbers nos. 35 and 36 (except stacks E-21 and E-22). The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water pump motor amperage for either scrubber or the pressure drop across either scrubber did not comply with allowable ranges specified in sections A.II.2. and A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse and wet scrubbers nos. 35 and 36 (except stacks E-21 and E-22) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from any stack, excluding stacks E-21 and E-22, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stacks E-21 and E-22 serving this emissions unit shall not exceed 57 and 24 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 56 serving emissions units F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation -
PE from wet scrubbers nos. 35 and 36 serving this emissions unit shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation -
PE from baghouses nos. 53 and 54 serving this emissions unit shall not exceed 0.0059 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F023, P113, P148, and P186 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentrations of PE for baghouse no. 56 (0.0063 gr/acf) and baghouses nos. 53 and 54 (0.0059 gr/acf). [Testing was performed on March 3, 1999 for wet scrubber no. 35 and September 3, 1992 for wet scrubber no. 36. The results of these tests demonstrated compliance with the PE limitation for these scrubbers (0.010 gr/acf). Therefore, no additional testing is required by this permit.]

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentrations for PE: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Knockout House Refuse Handling System (F024)
Activity Description: Knockout House Refuse Handling System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
knockout house refuse handling system controlled by wet scrubbers nos. 101, 102, 104, 111, 112, 113, and 114 (also known as # 1 KOH, #2 KOH, #4 KOH, #5 KOH, #6 KOH, #7 KOH, and #8 KOH, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-559)	The particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(4)	See section A.I.2.b.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 101, 102, 104, 111, 112, 113, and 114.

2.b PE from each of wet scrubbers nos. 101, 102, 104, 111, 112, 113, and 114 serving emissions units F024, P091, and P092 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

II Operational Restrictions

1. The pressure drop across each scrubber shall be maintained within the range of 4.0 to 8.0 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

2. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water pump motor amperage for any of the scrubbers did not comply with allowable range specified in section A.II.2. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the scrubbers did not comply with allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1. and A.I.2. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitations:
PE from each of wet scrubbers nos. 101, 102, 104, 111, 112, 113, and 114 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F024, P091, and P092 in accordance with the following requirements:

   The emission testing shall be conducted within six (6) months prior to permit expiration.

   The emission testing shall be conducted to determine compliance with the allowable concentration for PE from each of wet scrubbers nos. 101, 102, 104, 111, 112, 113, and 114 (0.010 grain per actual cubic foot of total exhaust gases).

   The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

   The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or

   local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 3 Holding Furnace (F025)
Activity Description: Cupola 3 100 Ton Electric Induction Holding Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100-ton electric induction holding furnace controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-1236)	The particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13).
	OAC rule 3745-17-12(I)(5)	See sections A.I.2.b and A.I.2.c.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

2.b PE from baghouse no. 78 serving emissions units F025, P160, P161, P162, P192, P193, P194, P290 (only those emissions that were vented to stack D-35 prior to June 14, 1991), P291, P412, and P907 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

2.c This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

II Operational Restrictions

1. The pressure drop across baghouse no. 78 shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain monitoring equipment to monitor pressure drop across baghouse no. 78 when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, or operating manual(s). The permittee shall monitor and record the pressure drop across baghouse no. 78 once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify periods of time during which the pressure drop across baghouse no. 78 did not comply with the allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1. and A.I.2. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 78 serving emissions units F025, P160, P161, P162, P192, P193, P194, P290 (only those emissions that were vented to stack D-35 prior to June 14, 1991), P291, P412, and P907 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P160, P161, P162, P192, P193, P194, P290 (only those emissions that were vented to stack D-35 prior to June 14, 1991), P291, P412, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #1 (F026)
Activity Description: Natural Gas-Fired Makeup Air Heater #1 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #2 (F027)
Activity Description: Natural Gas-Fired Makeup Air Heater #2 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #3 (F028)
Activity Description: Natural Gas-Fired Makeup Air Heater #3 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #4 (F029)
Activity Description: Natural Gas-Fired Makeup Air Heater #4- 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #5 (F030)
Activity Description: Natural Gas-Fired Makeup Air Heater #5- 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #6 (F031)
Activity Description: Natural Gas-Fired Makeup Air Heater #6- 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #7 (F032)
Activity Description: Natural Gas-Fired Makeup Air Heater #7 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #8 (F033)
Activity Description: Natural Gas-Fired Makeup Air Heater #8 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #9 (F034)
Activity Description: Natural Gas-Fired Makeup Air Heater #9 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #10 (F035)
Activity Description: Natural Gas-Fired Makeup Air Heater #10 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #11 (F036)
Activity Description: Natural Gas-Fired Makeup Air Heater #11 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #13 (F037)
Activity Description: Natural Gas-Fired Makeup Air Heater #13 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #14 (F038)
Activity Description: Natural Gas-Fired Makeup Air Heater #14 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #15 (F039)
Activity Description: Natural Gas-Fired Makeup Air Heater #15 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #16 (F040)
Activity Description: Natural Gas-Fired Makeup Air Heater #16 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #17 (F041)
Activity Description: Natural Gas-Fired Makeup Air Heater #17 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #18 (F042)
Activity Description: Natural Gas-Fired Makeup Air Heater #18 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #19 (F043)
Activity Description: Natural Gas-Fired Makeup Air Heater #19 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #20 (F044)
Activity Description: Natural Gas-Fired Makeup Air Heater #20 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #21 (F045)
Activity Description: Natural Gas-Fired Makeup Air Heater #21 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #22 (F046)
Activity Description: Natural Gas-Fired Makeup Air Heater #22 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #23 (F047)
Activity Description: Natural Gas-Fired Makeup Air Heater #23 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #24 (F048)
Activity Description: Natural Gas-Fired Makeup Air Heater #24 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #25 (F049)
Activity Description: Natural Gas-Fired Makeup Air Heater #25 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #26 (F050)
Activity Description: Natural Gas-Fired Makeup Air Heater #26 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #27 (F051)
Activity Description: Natural Gas-Fired Makeup Air Heater #27 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #28 (F052)
Activity Description: Natural Gas-Fired Makeup Air Heater #28 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #29 (F053)
Activity Description: Natural Gas-Fired Makeup Air Heater #29 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #30 (F054)
Activity Description: Natural Gas-Fired Makeup Air Heater #30 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #31 (F055)
Activity Description: Natural Gas-Fired Makeup Air Heater #31 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #32 (F056)
Activity Description: Natural Gas-Fired Makeup Air Heater #32 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #33 (F057)
Activity Description: Natural Gas-Fired Makeup Air Heater #33 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #34 (F058)
Activity Description: Natural Gas-Fired Makeup Air Heater #34 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #35 (F059)
Activity Description: Natural Gas-Fired Makeup Air Heater #35 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #36 (F060)
Activity Description: Natural Gas-Fired Makeup Air Heater #36 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #37 (F061)
Activity Description: Natural Gas-Fired Makeup Air Heater #37 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #38 (F062)
Activity Description: Natural Gas-Fired Makeup Air Heater #38 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #39 (F063)
Activity Description: Natural Gas-Fired Makeup Air Heater #39 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #40 (F064)
Activity Description: Natural Gas-Fired Makeup Air Heater #40 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #41 (F065)
Activity Description: Natural Gas-Fired Makeup Air Heater #41 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #42 (F066)
Activity Description: Natural Gas-Fired Makeup Air Heater #42 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #43 (F067)
Activity Description: Natural Gas-Fired Makeup Air Heater #43 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #44 (F068)
Activity Description: Natural Gas-Fired Makeup Air Heater #44 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #45 (F069)
Activity Description: Natural Gas-Fired Makeup Air Heater #45 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #46 (F070)
Activity Description: Natural Gas-Fired Makeup Air Heater #46 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #47 (F071)
Activity Description: Natural Gas-Fired Makeup Air Heater #47 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #48 (F072)
Activity Description: Natural Gas-Fired Makeup Air Heater #48 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #49 (F073)
Activity Description: Natural Gas-Fired Makeup Air Heater #49 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #50 (F074)
Activity Description: Natural Gas-Fired Makeup Air Heater #50 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #51 (F075)
Activity Description: Natural Gas-Fired Makeup Air Heater #51 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #52 (F076)
Activity Description: Natural Gas-Fired Makeup Air Heater #52 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #53 (F077)
Activity Description: Natural Gas-Fired Makeup Air Heater #53 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Makeup Air Heater #54 (F078)
Activity Description: Natural Gas-Fired Makeup Air Heater #54 - 10 mm Btu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
10 mm Btu/hr direct natural gas-fired makeup air space heater	OAC rule 3745-17-07(B)(1)	Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as specified by rule.
	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible particulate emissions of fugitive dust. See A.I.2.a.

2. Additional Terms and Conditions

2.a No control measures are required for this emissions unit.

II Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the visible particulate emission limitation specified in section A.I.1. of these terms and conditions shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

2. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V-6 Block Paint Spray Booth (K001)
Activity Description: V-6 Block Paint Spray Booth

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
V-6 block paint spray booth	OAC rule 3745-31-05(A)(3) (PTI 13-1466)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A)(1), 3745-17-11(B)(1), and 3745-21-09(U)(1)(d).
	OAC rule 3745-21-09(U)(1)(d)	The volatile organic compound (VOC) content of the coatings shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)(1)	0.551 lb of PE/hr

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

None

III Monitoring and/or Record keeping

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The name and identification number of each coating employed.

   b. The VOC content of each coating employed, in pounds per gallon (excluding water and exempt solvents), as applied.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing of any monthly record showing the use of noncomplying coatings (i.e., for VOC content). The notification shall include a copy of such record and shall be sent to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of the calendar month.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA Office or local air agency) by January 31 and July 31 or each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
3.5 lbs of VOC/gal of coating, excluding water and exempt solvents

Applicable Compliance Method:
Compliance with the above VOC content limitation shall be determined pursuant to the monitoring and record keeping in section A.III. of these terms and conditions.

1b. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1c. Emission Limitation -
0.551 lb of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the following method:

To determine the actual worst case PE rate (E), the following equation shall be used for the paint spraying operations:

E = (maximum coating solids usage rate, in pounds per hour) x (1-TE) x (1-CE)

where:

E = PE rate (lbs/hr)

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.60 considering 40 CFR 60.453)

CE = fractional control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the above PE limitation pursuant to OAC rule 3745-17-03(B)(10).

2. USEPA Method 24 or 24A shall be used to determine the VOC content for all coatings employed in this emissions unit. If, pursuant to section 4.3 of Method 24, 40 CFR, Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to determine compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: V-6 Head Paint Spray Booth (K002)
Activity Description: V-6 Head Paint Spray Booth

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
V-6 head paint spray booth	OAC rule 3745-31-05(A)(3) (PTI 13-1466)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A)(1), 3745-17-11(B)(1), and 3745-21-09(U)(1)(d).
	OAC rule 3745-21-09(U)(1)(d)	The volatile organic compound (VOC) content of the coatings shall not exceed 3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as applied.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-11(B)(1)	0.551 lb of PE/hr

2. Additional Terms and Conditions

2.a None

II Operational Restrictions

None

III Monitoring and/or Record keeping

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The name and identification number of each coating employed.

   b. The VOC content of each coating employed, in pounds per gallon (excluding water and exempt solvents), as applied.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing of any monthly record showing the use of noncomplying coatings (i.e., for VOC content). The notification shall include a copy of such record and shall be sent to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of the calendar month.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA Office or local air agency) by January 31 and July 31 or each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
3.5 lbs of VOC/gal of coating, excluding water and exempt solvents

Applicable Compliance Method:
Compliance with the above VOC content limitation shall be determined pursuant to the monitoring and record keeping in section A.III. of these terms and conditions.

1b. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1c. Emission Limitation -
0.551 lb of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the following method:

To determine the actual worst case PE rate (E), the following equation shall be used for the paint spraying operations:

E = (maximum coating solids usage rate, in pounds per hour) x (1-TE) x (1-CE)

where:

E = PE emission rate (lbs/hr)

TE = fractional transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used (0.60 considering 40 CFR 60.453)

CE = fractional control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the above PE limitation pursuant to OAC rule 3745-17-03(B)(10).

2. USEPA Method 24 or 24A shall be used to determine the VOC content for all coatings employed in this emissions unit. If, pursuant to section 4.3 of Method 24, 40 CFR, Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to determine compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 2 Holding Furnace (P026)
Activity Description: Cupola 2 50 Ton Electric Induction Holding Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
50-ton electric induction holding furnace controlled by baghouse no. 68 (also known as no. 456) (This emissions unit has been changed from an electric arc furnace to an electric induction furnace.)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(6)	PE from the baghouse serving this emissions unit shall not exceed 0.005 grain per actual cubic foot of total exhaust gases.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 68.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be

calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall record the pressure drop across the baghouse once for each day this emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly written deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE shall not exceed 0.005 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
If required, compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 Cleaning Line (P027)
Activity Description: No. 1 Cleaning Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 castings cleaning line, including shot blast cleaning and grinding equipment consisting of grinders, shakeouts, definner (burr remover), roll overs, shot blast cabinet, and other associated equipment including transfer and material handling equipment, controlled by baghouses nos. 82 and 93 (also known as A unit and B unit, respectively) in parallel	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(7)(a)	PE from baghouse no. 82 serving emissions units P027 through P032, P038, P039, P041, P042, and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P030 and P031 are now permanently shut down, and P041 is now vented to baghouse no. 92.)
	OAC rule 3745-17-12(I)(7)(b)	PE from baghouse no. 93, serving emissions units P027 through P029 and P102, shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouses nos. 82 and 93.

II Operational Restrictions

1. The pressure drop across each of baghouses nos. 82 and 93 shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(a)*, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed the following during any calendar day:

   a. a total of 67.4 hours; or

   b. if the PE from emissions unit P045 are vented to baghouse no. 92 (also known as C unit) or emissions unit P045 is permanently shut down, a total of 71.4 hours.

   (The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed a total of 71.4 hours in any calendar day.)

   * This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across each baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P027 through P029, P032, P033, P035, and P036 (and for the total combined operating hours for such units) to document compliance with the daily operating hours restriction specified in section A.II.2. of the terms and conditions of this permit.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across either baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 82 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation:
PE from baghouse no. 93 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P029, P032, P038, P039, P042, P102, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentrations for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentrations for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, the permittee shall perform visible emission readings during each test run, using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions units operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 Cleaning Line (P028)
Activity Description: No. 2 Cleaning Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 castings cleaning line including shot blast cleaning and grinding equipment consisting of rough and flashing grinders, shakeouts, shot blast cabinets, rollovers, magna-flux station, transfer conveyors, punch-out station, and other associated equipment, including material handling equipment, controlled by baghouses nos. 82 and 93 (also known as A unit and B unit, respectively) in parallel	OAC rule 3745-31-05(A)(3) (PTI 13-2200)	Visible particulate emissions (PE) of fugitive dust from this emissions unit shall not exceed 0 % opacity. The PE limitation established by this rule for baghouse no. 82 is less stringent than that in OAC rule 3745-17-12(I)(7)(a). See section A.I.2.b.
	OAC rule 3745-31-05(A)(3) (PTI 13-2841)	PE from this emissions unit shall not exceed 10.12 lbs/hr; emissions of particulate matter less than 10 microns in diameter (PM-10) from this emissions unit shall not exceed 4.34 lbs/hr; and PM-10 emissions shall not exceed 0.005 grain per dry standard cubic foot from each of baghouses nos. 82 and 93. The requirements of this rule for baghouses no. 82 and 93 also include compliance with the

	requirements of OAC rules 3745-17-12(I)(7)(a) and (b). See sections A.I.2.c.i., ii., and iii.
OAC rule 3745-17-12(I)(7)(a)	PE from baghouse no. 82 serving emissions units P027 through P032, P038, P039, P041, P042, and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P031 is now permanently shut down, and P041 is now vented to baghouse no. 92.)
OAC rule 3745-17-12(I)(7)(b)	PE from baghouse no. 93 serving emissions units P027 through P029 and P102 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouses nos. 82 and 93.

2.b The exhaust flow rates of the axial flow blast cabinet section and of the shot and spot blast cabinet section shall not be less than 70,835 actual cubic feet per minute and 115,514 actual cubic feet per minute, respectively, at any time while the emissions unit is in operation.

2.c i. All PE from the block transfer (process belt), knock-off station (process belt), V-8 hi-frequency shakeout, #1 V-8 grinder 12-1, #2 V-8 grinder 12-2, V-8 axial flow cabinet, rollover, V-8 hi-frequency shakeout, V-8 axial flow blast, rollover, and V-8 hi-frequency shakeout shall be vented to baghouse no. 82.

ii. All PE from the #1 V-8 grinder and #2 V-8 grinder shall be vented to baghouse no. 93.

iii. PE from the stacks of baghouses nos. 82 and 93 shall not exceed 5 % opacity, as a six-minute average.

iv. Exhaust flow rates from baghouses nos. 82 and 93 shall not exceed 499,800 and 99,000 actual cubic feet per minute, respectively, at any time while the emissions unit is in operation.

v. At no time shall the existing zero V-8 axial flow blast cabinet system, the modified #2 V-8 axial flow blast cabinet system and the no. 3 shot blast cabinet system be in operation at the same time. These systems ae "dampered" such that only two can be operated at the same time.

vi. The permittee shall install and operate a device or devices that will automatically record the specific daily operating hours of each of emissions units P027 through P029, P032, P033, P035 and P036.

vii. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not get airborne and does not accumulate underneath the baghouses. Any accumulation of dust under any of the baghouses or on any part of the roof or floor near the baghouses shall be deemed a violation of this condition.

viii. This emissions unit consists of multiple pieces of equipment. Some equipment are exhausted into baghouse no. 82 and some are exhausted into baghouse no. 93. Other emissions units not listed in this permit are also exhausted into these baghouses. The hourly emission limitations for this emissions unit were calculated based on the percentage of air flow contribution of the emissions units to each baghouse multiplied by the allowable concentration for each baghouse.

II Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(a)*, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed the following during any calendar day:

   a. a total of 67.4 hours; or

b. if the PE from emissions unit P045 are vented to baghouse no. 92 (also known as C unit) or emissions unit P045 is permanently shut down, a total of 71.4 hours.

(The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed a total of 71.4 hours in any calendar day.)

* This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

3. The daily operating hours for this emissions unit, shall not exceed a total of 18 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor that monitors pressure drop across each baghouse while the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across each baghouse once for each day this emissions unit is in operation.

2. The permittee shall record the operating hours (and combined operating hours) for each day that any of the following emissions units are in operation:
emissions units P027 through P029, P032, P033, P035, and P036.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall maintain daily records of the operation times of each of the zero V-8 axial flow blast cabinet and the #2 V-8 axial flow blast cabinet.

5. The permittee shall perform daily checks for any visible fugitive particulate emissions from this emissions unit. The presence or absence of any visible fugitive particulate emissions shall be noted in an operations log. If visible fugitive particulate emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

b. the total duration of any visible fugitive particulate emission incident; and
c. any corrective actions taken to eliminate the visible fugitive particulate emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.5. are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2841, issued on April 27, 1994. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

7. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouses serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across either or both baghouses did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit a report to the appropriate Ohio EPA District Office or local air agency identifying any exceedance of the daily operating hour restriction specified in section A.II.3. within forty-five days of the exceedance. This report shall summarize the reason for the exceedance and the corrective action taken.

4. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

5. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the zero V-8 axial flow blast cabinet, the #2 V-8 axial flow blast cabinet, and the no. 3 shot blast cabinet are operated simultaneously as well as the reason(s) that more than two of the three were in operation.

   The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time that the dampers in the system designed to allow only two of the three systems to operate at any one time are not operating properly, and any corrective actions taken to repair the damper system.

6. The permittee shall submit quarterly written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the area where baghouse dust is unloaded and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

7. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1. through A.VI.6. are as stringent as or more stringent than the reporting requirements contained in PTI 13-2841, issued on April 27, 1994. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

8. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack baghouse this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1. and A.I.2. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
PE from baghouse no. 82 serving emissions units P027 through P029, P032, P038, P039, P042, and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1b. Emission Limitation:
PE from baghouse no. 93 serving emissions units P027 through P029 and P102 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation:
10.12 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE limitations for baghouses nos. 82 and 93 is maintained.

1d. Emission Limitation:
4.34 lbs of PM-10/hr

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined using Method 201 of 40 CFR, Part 51, Appendix M. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PM-10 emission limitations for baghouses nos. 82 and 93 is maintained.

1e. Emission Limitation:
Visible PE from the stacks of baghouses nos. 82 and 93 shall not exceed 5 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1f. Emission Limitation:
PM-10 emissions shall not exceed 0.005 grain per dry standard cubic foot from each of baghouses nos. 82 and 93.

Applicable Compliance Method:
Compliance with the above PM-10 limitation shall be determined using Method 201 of 40 CFR, Part 51, Appendix M.

1g. Emission Limitation -
Visible PE of fugitive dust from this emissions unit shall not exceed 0 % opacity.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P030, P032, P038, P039, P042, P102 and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentrations for PE and PM-10 for each of baghouses nos. 82 and 93 and, if possible, the allowable PE and PM-10 rates for this emissions unit.

The following test methods shall be employed to determine compliance with the allowable PE and PM-10 concentrations for the baghouses and, if possible, the PE and PM-10 rates for this emissions unit: Method 5 of 40 CFR, Part 60, Appendix A and Method 201 of 40 CFR, Part 51, Appendix M for PE and PM-10, respectively. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 9. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid

characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Cleaning Line (P029)
Activity Description: No. 3 Cleaning Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 castings cleaning line, including shot blast cleaning and grinding equipment consisting of grinders, shakeouts, shot blast cabinet, knock-off, punch-out, chipping, definners (burr remover), and other associated equipment, including transfer and material handling equipment, controlled by baghouses nos. 82, 92, and 93 (also known as A unit, C unit, and B unit, respectively) in parallel	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(7)(a)	PE from baghouse no. 82 serving emissions units P027 through P029, P032, P038, P039, P042, and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P030 and P031 are now permanently shut down, and P041 is now vented to baghouse no. 92.)
	OAC rule 3745-17-12(I)(7)(b)	PE from baghouse no. 93 serving emissions units P027 through P029 and P102 shall not exceed 0.014

	grain per actual cubic foot of total exhaust gases.
OAC rule 3745-17-12(I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouses nos. 82, 92, and 93.

II Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(a)*, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed the following during any calendar day:

   a. a total of 67.4 hours; or

   b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 71.4 hours.

   (The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed a total of 71.4 hours in any calendar day.)

   * This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed

to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor that monitors pressure drop across each baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across each baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P027 through P029, P032, P033, P035, and P036 (and the total combined operating hours of such units) to document compliance with the daily operating hours restriction specified in section A.II.2. of the terms and conditions of this permit.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across any baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 82 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation:
PE from baghouse no. 93 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation:
PE from baghouse no. 92 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P029, P032, P033, P035, P036, P038, P039, P040, P042, P050, P102, P411, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentrations for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentrations for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 6 Cleaning Line (P032)
Activity Description: No. 6 Cleaning Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 6 castings cleaning line, including shot blast cleaning and grinding equipment consisting of grinders, shakeouts, shot blast cabinets, and other associated equipment,including transfer and material handling equipment, controlled by baghouses nos. 82 and 92 (also known as A unit and C unit, respectively) in parallel	OAC rule 3745-31-05(A)(3) (PTI 13-1038)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(7)(a)	Particulate emissions (PE) from baghouse no. 82 serving emissions units P027 through P029, P038, P039, P042, and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P030 and P031 are now permanently shut down, and P041 is now vented to baghouse no. 92.)
	OAC rule 3745-17-12(I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per

	actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)
OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouses nos. 82 and 92.

II Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(a)*, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed the following during any calendar day:

   a. a total of 67.4 hours; or

   b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 71.4 hours.

   (The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed a total of 71.4 hours in any calendar day.)

   * This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor that monitors pressure drop across each baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across each baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P027 through P029, P032, P033, P035, and P036 (and the total combined operating hours of such units) to document compliance with the daily operating hours restriction specified in section A.II.2. of the terms and conditions of this permit.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across either baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack baghouse this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 82 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation:
PE from baghouse no. 92 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P029, P032, P033, P035, P036, P038, P039 through P042, P050, P411, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentrations for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentrations for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 Cleaning Line (P033)
Activity Description: No. 7 Cleaning Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 castings cleaning line, including shot blast cleaning and grinding equipment consisting of grinders, shakeouts, shot blast cabinet, load belt, and refuse feeder conveyor, and other associated equipment, including conveyors and material handling equipment, controlled by baghouse no. 92 (also known as C unit)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 92.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(a)*, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed the following during any calendar day:

   a. a total of 67.4 hours; or

   b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 71.4 hours.

   (The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed a total of 71.4 hours in any calendar day.)

   * This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor that monitors pressure drop across the baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P027 through P029, P032, P033, P035, and P036 (and the total combined operating hours of such units) to document compliance with the daily operating hours restriction specified in section A.II.2. of the terms and conditions of this permit.

3. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this

emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 92 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P029, P032 through P036, P040, P050, and P411 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid

characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 9 Cleaning Line (P035)
Activity Description: No. 9 Cleaning Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 9 castings cleaning line, including shot blast cleaning and grinding equipment consisting of grinders and shakeouts, and other associated equipment, including transfer and material handling equipment controlled by baghouse no. 92 (also known as C unit)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 92.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(a)*, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed the following during any calendar day:

   a. a total of 67.4 hours; or

   b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 71.4 hours.

   (The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed a total of 71.4 hours in any calendar day.)

   * This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor that monitors pressure drop across the baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P027 through P029, P032, P033, P035, and P036 (and the total combined operating hours of such units) to document compliance with the daily operating hours restriction specified in section A.II.2. of the terms and conditions of this permit.

3. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this

emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 92 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P029, P032, P033, P035, P036, P040, P050, and P411 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid

characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 10 Cleaning Line (P036)
Activity Description: No. 10 Cleaning Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 10 castings cleaning line, including shot blast cleaning and grinding equipment consisting of grinders, shakeouts, a rotoblast cabinet, and other associated equipment, including transfer and material handling equipment controlled by baghouse no. 92 (also known as C unit)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 92.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(a)*, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed the following during any calendar day:

   a. a total of 67.4 hours; or

   b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 71.4 hours.

   (The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P027 through P029, P032, P033, P035, and P036 shall not exceed a total of 71.4 hours in any calendar day.)

   * This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor that monitors pressure drop across the baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P027 through P029, P032, P033, P035, and P036 (and the total combined operating hours of such units) to document compliance with the daily operating hours restriction specified in section A.II.2. of the terms and conditions of this permit.

3. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this

emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 92 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P029, P033, P035, P036, P040, P050, and P411 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid

characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 Unhook Station (P038)
Activity Description: No. 2 Unhook Station

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 unhook station, and associated equipment, including an unhook station, unloading and cooling conveyors, and primary shakeout, controlled by baghouse no. 82 (also known as A unit)	OAC rule 3745-17-12(I)(7)(a)	Particulate emissions (PE) from baghouse no. 82 serving emissions units P027 through P029, P032, P038, P039, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P030 and P031 are now permanently shut down, and P041 is now vented to baghouse no. 92.)
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 82.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in

operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 82 serving emissions units P027 through P032, P038, P039, P041, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P029, P032, P038, P039, P042, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse

using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Unhook Station (P039)
Activity Description: No. 3 Unhook Station

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 unhook station and associated equipment, including an unhook station, unloading and cooling conveyors and primary shakeout, controlled by baghouse no. 82 (also known as A unit)	OAC rule 3745-17-12(I)(7)(a)	Particulate emissions (PE) from baghouse no. 82 serving emissions units P027 through P029, P032, P038, P039, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P030 and P031 are now permanently shut down, and P041 is now vented to baghouse no. 92.)
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 82.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 82 serving emissions units P027 through P032, P038, P039, P041, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P029, P032, P038, P039, P042, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A.

In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 4 Dump Station (P040)
Activity Description: No. 4 Dump Station

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 4 dump station and associated equipment, including a dump station, unloading and cooling conveyors, and primary shakeout, controlled by baghouse no. 92 (also known as C unit)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12 (I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 92.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse, when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all times that the pressure drop reading across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 92 serving emissions units P029 through P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Methods:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P029, P032, P033, P035, P036, P040, P041, P050, P411, P415, and P908 in accordance with the following requirements:

The emission testing shall be conducted 2.5 years after the issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who

will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 5 Dump Station (P041)
Activity Description: No. 5 Dump Station

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 5 casting dump station and associated equipment, including an unloading and cooling conveyor and primary shakeout, controlled by baghouse no. 92 (also known as C unit) - Formerly this emissions unit was completely vented to baghouse no. 82 (also known as A unit).	OAC rule 3745-17-12(I)(7)(a)	Particulate emissions (PE) from baghouse no. 82 serving emissions units P027 through P029, P032, P038, P039, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. [Emissions from this emissions unit are now vented to baghouse no. 92, serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411, with a PE limitation from OAC rule 3745-17-12(I)(7)(c) of 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)]
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to the baghouse.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the

allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 82 serving emissions units P027 through P032, P038, P039, P041, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (The permittee has vented this emissions unit to baghouse no. 92, which has a PE limitation of 0.014 grain per actual cubic foot of total exhaust gases.)

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P029, P032, P033, P035, P036, P040, P050, and P411 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 6 & 7 Dump Stations (P042)
Activity Description: No. 6 & 7 Dump Stations

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
nos. 6 and 7 casting dump stations and associated equipment, each including an unloading and cooling conveyor and primary shakeout, controlled by baghouse no. 82 (also known as A unit)	OAC rule 3745-17-12(I)(7)(a)	Particulate emissions (PE) from baghouse no. 82 serving emissions units P027 through P029, P032, P038, P039, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P030 and P031 are now permanently shut down, and P041 is now vented to baghouse no. 92.)
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 82.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in

operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 82 serving emissions units P027 through P032, P038, P039, P041, P042 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027, through P029, P032, P038, P039, P041, P042, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse

using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cleaning Room Scrap Reclamation (P050)
Activity Description: Cleaning Room Scrap Reclamation

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
sprue/scrap cleaning room reclamation system and associated equipment, controlled by baghouse no. 92 (also known as C unit)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 are now permanently shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 92.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor that monitors the pressure drop across the baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day this emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 92 serving emissions units P029 through P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P029, P032, P033, P035, P036, P040, P041, P050, P411, P415, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A.

In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 5 (P056)
Activity Description: Core Line 5

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
core line no. 5 [The line includes 16 isocure (cold cure) core machines, sand pumps, sand heaters/coolers, core sand mixers, shot definner, wash slusher, (non-photochemically reactive material) core wash dip tank, 2 core wash dry ovens and assembly fixture conveyor.]	OAC rule 3745-31-05(A)(3) (PTI 13-1362)	See sections A.I.2.g. and A.I.2.h. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-17-10(B)(1), 3745-17-11(B)(1), 3745-21-07(G)(1), and 3745-21-07(G)(2).
wash slusher and core wash dip tank	OAC rule 3745-21-07(G)(2)	This portion of the emissions unit does not employ, apply, evaporate or dry any photochemically reactive material (PRM), or any substance containing such PRM. Therefore, there are no applicable emission limitations from this rule. See section A.I.2..i.
sand pumps, sand heaters/coolers, core sand mixers, and sand handling (pneumatically and by conveyor), controlled by wet scrubber no. 4; sand storage hopper and shot	OAC rule 3745-17-11(B)(1)	less than 10 lbs of particulate emissions (PE)/hr, uncontrolled (See section A.I.2.d.)

definner, controlled by baghouse no. 12 [also known as #5 CL baghouse (definner)]; isocure cold cure) core machines controlled by catalyst scrubber no. 10 (also known as #5 acid scrubber)	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-21-07(G)(9)(h)	The catalyst gas emissions shall be vented to a catalyst scrubber that is designed and operated to remove at least 98 percent, by weight, of the catalyst gas emissions at maximum inlet conditions. See section A.I.2.c.
two (2) indirect heat, natural gas-fired core wash dry ovens	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input/oven
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-21-07(G)(1)	See section A.I.2.b.
assembly fixture conveyor	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible PE of fugitive dust. See section A.I.2.a.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
core sand mixers	OAC rule 3745-21-07(G)(2)	Exempt pursuant to OAC rule 3745-21-07(G)(9)(g). See section A.I.2.c.

2. Additional Terms and Conditions

2.a The collection efficiency of the capture hood(s) employed in this emissions unit shall be sufficient to minimize or eliminate visible PE of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2.b OC emissions from each oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

2.c Although OAC rule 3745-21-07(G)(9)(h) specifies an exemption from the requirements of OAC rule 3745-21-07 for the use of a phenolic urethane resin binder system in foundry core-making and mold-making operations, the exemption is not yet part of the federally approved SIP. This new exemption was promulgated by Ohio EPA and became effective on June 15, 1999. Ohio EPA has received confirmation from USEPA concerning the acceptability of this exemption, and the permittee has agreed to consider the exemption as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the exemption as a revision to the Ohio SIP for ozone.

2.d The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the PE limitation is greater than 10 pounds of PE per hour. However, to ensure that Figure II will not be applicable, the uncontrolled PE from this emissions unit shall be less than 10 pounds per hour.

2.e All PE generated by the two sand pumps, two sand heaters/coolers, core sand mixers, and sand handling shall be captured and vented to scrubber no. 4.

2.f All PE generated by the shot definner shall be captured and vented to baghouse no. 12.

2.g PE from baghouse no. 12 and scrubber no. 4 shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.

2.h This emissions unit has sixteen (16) cold box cold cure machines utilizing acid gas as a catalyst. Excess TEA is purged with air. Emissions from these cold box, cold cure machines shall be adequately captured by hooding and ducted to and controlled by catalyst scrubber no. 10. Emissions of TEA leaving the gas exit from this tower shall be less than 0.1 lb/hr.

2.i The permittee shall not employ any wash material in the core wash portion of this emissions unit that is a PRM, as defined in OAC rule 3745-21-01(C)(5).

II Operational Restrictions

1. The permittee shall maintain the pH of the acid solution in scrubber no. 10 at or below a pH value of 4.0 at all times while the emissions unit is in operation.

2. The pressure drop across TEA scrubber no. 10 shall be continuously maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. All purged catalyst emissions from the core machines shall be vented to catalyst scrubber no. 10.

4. The pressure drop across scrubber no. 4 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

5. The scrubber water pump motor amperage for scrubber no. 4 shall be maintained at or above 20 amps, at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

6. The pressure drop across the baghouse shall be maintained within a range of 2 to 4 inches of water column while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the pH of the scrubber liquor for catalyst scrubber no. 10 while the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s).

   The permittee shall collect and record the pH of the acid solution in scrubber no. 10, once for each day the emissions unit is in operation.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across TEA scrubber no. 10 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 10 once per shift for each day the emissions unit is in operation: the pressure drop across the scrubber, in inches of water column.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations

log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

4. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 4 and the scrubber no. 4 water pump motor amperage while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for scrubber no. 4 once for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water flow rate, in gallons per minute.

Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

5. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once for each day the emissions unit is in operation.

6. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control devices, and monitoring equipment for each day the emissions unit was in operation.

7. The permittee shall maintain documentation on whether or not each core wash material employed is a PRM.

8. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse and scrubber no. 4 serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pH deviation (excursion) reports that identify all periods of time during which the liquor pH for catalyst scrubber no. 10 did not comply with the pH restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across TEA scrubber no. 10 was not maintained within the required range, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly written reports that (a) identify all days during which any visible fugitive PE escaping from the building containing this emissions unit were observed and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range for scrubber no. 4, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

5. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the range specified above, as well as the corrective actions that were taken to achieve compliance.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

7. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing identifying each day during which any wash material that contained a PRM was employed in the core wash portion of this emissions unit. This report shall be submitted within 30 days following the date of noncompliance, and shall identify the cause for the use of the PRM(s) and the estimated total quantity of material(s) emitted each such day.

8. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:

Visible PE of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

1c. Emission Limitation:
less than 10 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation:
0.020 lb of PE/mm Btu of actual heat input/oven

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hr) by the emission factor for natural gas from AP-42, Chapter 1.4 "Natural Gas Combustion," Table 1.4-2, Fifth Edition, 7/98 (1.9 lbs of PE/mm cu. ft.), and dividing by the maximum hourly heat input capacity of the emissions unit (12 mm Btu/hr), or, if required, by testing conducted using the method specified in OAC rule 3745-17-03(B)(9).

1e. Emission and Control Efficiency Limitations:
0.1 lb of TEA/hr, 98 percent control efficiency for TEA, by weight

Applicable Compliance Method:
Compliance with the above TEA emission limitation shall be determined by testing using standard methods. Compliance with the control efficiency shall be determined using the results of TEA emission testing performed on the inlet and outlet of the control equipment using standard methods and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %.

1f. Emission Limitation:
0.01 gr of PE/dscf of total exhaust gases

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

1g. Emission or Overall Control Efficiency Limitation -

OC emissions from each oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

Applicable Compliance Method:
Compliance with the above emission limitations shall be determined using Methods 25 or 25A of 40 CFR, Part 60, Appendix A. Compliance with the above reduction requirement shall be determined by multiplying the fractional capture efficiency by the fractional control efficiency and multiplying by 100 percent. The capture efficiency shall be determined using Method 204 of 40 CFR, Part 51, Appendix M. The control efficiency shall be determined using the results of testing performed on the inlet and outlet of the control equipment using Methods 25 or 25A and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable OC emission rates (3 lbs of OC/hour and 15 lbs of OC/day) or the 85 percent overall OC emission reduction requirement, whichever is applicable. The emission testing shall also be conducted to determine compliance with the PE limitation for baghouse no. 12, controlling the sand storage hopper and shot definner; scrubber no. 4, controlling the sand pumps, sand heaters/coolers, core sand mixers, and sand handling; and scrubber no. 10 controlling the isocure core machines (less than 10 lbs of PE/hr, uncontrolled), the emission and control efficiency limitations for catalyst scrubber no. 10, controlling the 16 isocure (cold cure) core machines (0.1 lb of TEA/hr, 98 percent control efficiency for TEA emissions), and the PE limitation for each of baghouse no. 12, controlling the sand storage hopper and shot definner, and scrubber no. 4, controlling the sand pumps, sand heaters/coolers, core sand mixers, and sand handling (0.01 grain/dry standard cubic foot of total exhaust gases).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

The following test methods shall be employed to determine compliance with the appropriate allowable OC emission rate or reduction efficiency and with the PE limitations: Method 25 or 25A of 40 CFR, Part 60, Appendix A for OC emissions and Method 5 of 40 CFR, Part 60, Appendix A for PE. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency. Standard methods shall be employed to determine compliance with the TEA emission and control efficiency limitations.

The tests shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. Any tests of the inlet and outlet of control equipment shall be conducted simultaneously.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 10 (P064)
Activity Description: Core Line 10

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
core line no. 10 (The line includes 17 hot box core machines, core sand mixers, core conveyors, core grinder, core definner, core wash slusher, drill station/blow-off, and core paste application. 17 hot box core machines	OAC rule 3745-31-05(A)(3) (PTI 13-536)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A)(1), 3745-17-11(B)(1), 3745-21-07(G)(1), and 3745-21-07(G)(2).
	OAC rule 3745-17-12(I)(8)(h)	Particulate emissions (PE) from each of the hot box core machines shall not exceed 0.0082 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core sand mixers, core grinder, core definner, and drill station/blow-off, controlled by wet scrubber no. 6; and core conveyors	OAC rule 3745-17-11(B)(1)	less than 10 lbs of PE/hr, uncontrolled (See section A.I.2.a.)

	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core wash slusher and core sand mixers	OAC rule 3745-21-07(G)(2)	This portion of the emissions unit does not employ, apply, evaporate or dry any photochemically reactive material (PRM), or any substance containing such PRM. Therefore, there are no applicable emission limitations from this rule.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the PE limitation is greater than 10 pounds of PE per hour. However, to ensure that Figure II will not be applicable, the uncontrolled PE from this emissions unit shall be less than 10 pounds per hour.

2.b OC emissions shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

II Operational Restrictions

1. The pressure drop across scrubber no. 6 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for scrubber no. 6 shall be maintained, at or above 20 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

3. Pursuant to OAC rule 3745-17-12(I)(47)(b)*, the total combined operating hours for emissions units P064, P066, and P107 shall not exceed the following during any calendar day:

   a. a total of 597.4 hours; or

b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 653.4 hours.

(The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P064, P066, and P107 shall not exceed a total of 653.4 hours in any calendar day.)

* This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

4. The permittee shall not employ any core wash material in the core wash slusher and any resin in the core wash sand mixers of this emissions unit that is a PRM, as defined in OAC rule 3745-21-01(C)(5).

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 6 and the scrubber water pump motor amperage for scrubber no. 6 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for scrubber no. 6 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water flow rate, in gallons per minute.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

2. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P064, P066, and P107 (and the total combined operating hours

of such units) to document compliance with the daily operating hours restriction specified in section A.II.3. of the terms and conditions of this permit.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from all the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

5. The permittee shall maintain documentation on whether or not each core wash material employed and resin used in the core sand mixers is a PRM.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for scrubber no. 6, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

4. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from the stacks serving this emissions unit were observed and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

5. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing identifying each day during which any core wash material or resin used in the core sand mixers

that contained a PRM was employed in this emissions unit. This report shall be submitted within 30 days following the date of noncompliance, and shall identify the cause for the use of the PRM(s) and the estimated total quantity of material(s) emitted each such day.

6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
less than 10 lbs of PE/hr, uncontrolled

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation -
PE from each of the hot box core machines shall not exceed 0.0082 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation -
OC emissions from the oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using Methods 25 or 25A of 40 CFR, Part 60, Appendix A. Compliance with the above reduction requirement shall be determined by multiplying the fractional capture efficiency by the fractional control efficiency and multiplying by 100 percent. The capture efficiency shall be determined using Method 204 of 40 CFR, Part 51, Appendix M. The control efficiency shall be determined using the results of testing performed on the inlet and outlet of the control equipment using Methods 25 or 25A and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of the permit.

The emission testing shall be conducted to determine compliance with the PE limitation (less than 10 lbs/hr, uncontrolled) for the core sand mixers, core grinder, core definner, and drill station/blow-off; the PE limitation (i.e., 0.0082 grain/actual cubic foot of total exhaust gases) for the 17 hot box core machines; and the OC limitations (i.e., 3 lbs/hr and 15 lbs/day or 85 percent OC emission reduction) for the core wash dry oven.

The following test methods shall be employed to determine compliance with the PE and VOC limitations: Method 5 of 40 CFR, Part 60, Appendix A and Methods 25 or 25 A of 40 CFR, Part 60, Appendix A, respectively. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. At least 3 of the hot box core machines shall be tested. If compliance with the PE limitation is demonstrated for these 3 hot box core machines, it shall be assumed that the untested hot box core machines are also in compliance with such limitation. The 3 hot box core machines to be tested shall be identified to the appropriate Ohio EPA District Offfice or local air agency prior to the tests.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to

ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 11 (P066)
Activity Description: Core Line 11

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
core line no. 11 (The line includes 7 hot box core machines and associated equipment, including core sand mixers, core conveyors, core racks, core scrap belts/boxes, and assembly belts.)		
7 hot box core machines	OAC rule 3745-17-12(I)(8)(h)	Particulate emissions (PE) from each of the hot box core machines shall not exceed 0.0082 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core sand mixers, controlled by wet scrubber no. 6, core conveyors, core racks, and core scrap belts/boxes	OAC rule 3745-17-11(B)(1)	less than 10 lbs of PE/hr, uncontrolled (See section A.I.2.b.)

	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core sand mixers	OAC rule 3745-21-07(G)(2)	This portion of the emissions unit does not employ, apply, evaporate or dry any photochemically reactive material (PRM), or any substance containing such PRM. Therefore, there are no applicable emission limitations from this rule.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the PE limitation is greater than 10 pounds of PE per hour. However, to ensure that Figure II will not be applicable, the uncontrolled PE from this emissions unit shall be less than 10 pounds per hour.

2.b The permittee shall not employ any resin in the core sand mixers of this emissions unit that is a PRM, as defined in OAC rule 3745-21-01(C)(5).

II Operational Restrictions

1. The pressure drop across scrubber no. 6 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for scrubber no. 6 shall be maintained at or above 20 amps, at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

3. Pursuant to OAC rule 3745-17-12(I)(47)(b)*, the total combined operating hours for emissions units P064, P066, and P107 shall not exceed the following during any calendar day:

   a. a total of 597.4 hours; or

b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 653.4 hours.

(The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P064, P066, and P107 shall not exceed a total of 653.4 hours in any calendar day.)

* This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

III Monitoring and/or Recordkeeping

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any abnormal visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 6 and the scrubber water pump motor amperage for scrubber no. 6 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 6 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void. .

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P064, P066, and P107 (and the total combined operating hours of such units) to document compliance with the daily operating hours restriction specified in section A.II.3. of the terms and conditions of this permit.

5. The permittee shall maintain documentation on whether or not each resin employed in the core sand mixers is a PRM.

IV Reporting Requirements

1. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from the stacks serving this emission unit were observed and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range for scrubber no. 6, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

5. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing identifying each day during which any resin containing a PRM was employed in the core sand

mixers of this emissions unit. This report shall be submitted within 30 days following the date of noncompliance, and shall identify the cause for the use of the PRM(s) and the estimated total quantity of material(s) emitted each such day.

6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
less than 10 lbs of PE/hr uncontrolled

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation -
PE from each of the hot box core machines shall not exceed 0.0082 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the PE limitation (i.e., less than 10 lbs/hr, uncontrolled) for the core conveyors, core sand mixers, core racks, and core scrap belts/boxes, and the PE limitation (i.e., 0.0082 grain/actual cubic foot of total exhaust gases) for the 7 hot box core machines.

The following test method shall be employed to determine compliance with the PE limitations: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. At least 3 of the hot box core machines shall be tested. If compliance with the PE limitation is demonstrated for these 3 hot box core machines, it shall be assumed that the untested hot box core machines are also in compliance with such limitation. The 3 hot box core machines to be tested shall be identified to the appropriate Ohio EPA District Offfice or local air agency prior to the tests.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cleaning Room No.2 Cooler (P091)
Activity Description: Cleaning Room No.2 Cooler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 cooler line shakeout and knockoff station, controlled by wet scrubbers nos. 102 and 111 (also known as # 2 KOH and #5 KOH, respectively)	OAC rule 3745-17-12(I)(4)	See section A.I.2.b.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 102 and 111.

2.b PE from each of wet scrubbers nos. 102 and 111 serving all or a portion of emissions units F024, P091, and P092 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

II Operational Restrictions

1. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber pump motor amperage for each scrubber shall be maintained at or above 35 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water flow rate for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

2. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water pump motor amperage for any of the scrubbers did not comply with allowable ranges specified in section A.II.2. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the scrubbers did not comply with allowable ranges specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitations:
PE from each of wet scrubbers nos. 102 and 111 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Operational Restriction:
The pressure drop across each scrubber shall be continuously maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirements in section A.III.1. of these terms and conditions.

1d. Operational Restriction:
The scrubber water flow rate for each scrubber shall be continuously maintained, at all times while the emissions unit is in operation, within a range that is established during the most recent emission test that demonstrated that the emissions unit was in compliance. If no range has been established during testing, the manufacturer's written recommendation shall be used until a range is established during the next test that demonstrates that the emissions unit is in compliance.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirements in section A.III.1. of these terms and conditions.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F024, P091, and P092 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to permit expiration.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cleaning Room No.3 Cooler (P092)
Activity Description: Cleaning Room No.3 Cooler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 cooler line shakeout and knockoff station, controlled by wet scrubbers nos. 103 and 111 (also known as # 3 KOH and #5 KOH, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-213)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(4)	See section A.I.2.b.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 103 and 111.

2.b PE from each of wet scrubbers nos. 103 and 111 serving all or a portion of emissions units F024, P091, and P092 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

II Operational Restrictions

1. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water flow rate for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

2. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water pump motor amperage for any of the scrubbers did not comply with allowable range specified in section A.II.2. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across any of the scrubbers did not comply with allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitations:

PE from each of wet scrubbers nos. 103 and 111 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Operational Restriction:
The pressure drop across each scrubber shall be continuously maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirements in section A.III.1. of these terms and conditions.

1d. Operational Restriction:
The scrubber water flow rate for each scrubber shall be continuously maintained, at all times while the emissions unit is in operation, within a range that is established during the most recent emission test that demonstrated that the emissions unit was in compliance. If no range has been established during testing, the manufacturer's written recommendation shall be used until a range is established during the next test that demonstrates that the emissions unit is in compliance.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirements in section A.III.1. of these terms and conditions.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F024, P091, and P092 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to permit expiration.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 1 Holding Furnace (P099)
Activity Description: Cupola 1 50 Ton Electric Induction Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
50 ton electric induction holding furnace, controlled by baghouse no. 79 (also known as AAF unit) (This emissions unit has been changed from an electric arc furnace to an electric induction furnace.)	OAC rule 3745-31-05(A)(3) (PTI 13-602)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(10)	Particulate emissions (PE) from baghouse no. 79 serving this emissions unit shall not exceed 0.0050 grain per actual cubic foot of total exhaust gases.* * Baghouse no. 79 also served emissions unit P410 until emissions unit P410 was permanently shut down in 1992.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 79.

II Operational Restrictions

1. The pressure drop across baghouse no. 79 shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain monitoring equipment to monitor the pressure drop across baghouse no. 79 when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across baghouse no. 79 once for each day this emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 79 did not comply with the allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 79 serving this emissions unit shall not exceed 0.0050 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions unit is operating at or near its maximum capacity and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 9 (P101)
Activity Description: Core Line 9

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
core line no. 9 (The line includes core conveyors, core grinder, core definner, core assembly belts, core wash dip tank, core wash dry oven, drill station, core paste application, and microwave paste oven.)	OAC rule 3745-31-05(A)(3) (PTI 13-1465)	Particulate emissions (PE) from this emissions unit shall not exceed 0.005 grain per dry standard cubic foot of total exhaust gases. Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average. Emissions of organic compounds (OC) from this emissions unit shall not exceed 3.1 lbs of OC/ton of cores produced. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-08(B), 3745-17-10(B)(1), 3745-21-07(G)(1) and 3745-21-07(G)(2).
	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than that

core grinder, core definner, and drill station, controlled by wet scrubber no. 6		established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
core conveyors and core assembly belts	OAC rule 3745-17-08(B)	The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible PE of fugitive dust.
	OAC rule 3745-17-07(B)(1)	Visible PE of fugitive dust from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
indirect heat, natural gas-fired core wash dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(1)	See section A.I.2.a.
core wash dip tank	OAC rule 3745-21-07(G)(2)	This portion of the emissions unit does not employ, apply, evaporate, or dry any photochemically reactive material (PRM), or any substance containing such PRM. Therefore, there are no applicable emission limitations from this rule. See section A.I.2.b.
	none	none
core paste application and microwave paste oven		

2. Additional Terms and Conditions

2.a OC emissions from the oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

2.b The permittee shall not employ any wash material in the core wash dip tank of this emissions unit that is a PRM, as defined in OAC rule 3745-21-01(C)(5).

II Operational Restrictions

1. The pressure drop across scrubber no. 6 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for scrubber no. 6 shall be maintained at or above 20 amps, at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

3. The permittee shall produce no more than 25,160 tons of cores in this emissions unit over any twelve-month period.

III Monitoring and/or Recordkeeping

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving this emissions unit and for any visible fugitive PE escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 6 and the scrubber water pump motor amperage for scrubber no. 6 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information for scrubber no. 6 once for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall maintain records of the number of tons of cores produced each month in this emissions unit and the rolling, 12-month summation of the number of tons of cores produced in this emissions unit.

5. The permittee shall maintain documentation on whether or not each core wash material employed is a PRM.

IV Reporting Requirements

1. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from the stacks serving this emissions unit or any visible fugitive PE escaping from the building containing this emissions unit were observed and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range for scrubber no. 6, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit quarterly reports that provide the amount of the core production, in tons of cores produced, for each month and quarter, and for each twelve-month period ending on the last day of each month that occurred during the reporting quarter. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

5. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing identifying each day during which any core wash material that contained a PRM was employed in the core wash dip tank of this emissions unit. This report shall be submitted within 30 days following the date of noncompliance, and shall identify the cause for the use of the PRM(s) and the estimated total quantity of material(s) emitted each such day.

6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
Visible PE of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

1c. Compliance with OAC rule 3745-17-08(B) shall be determined by the methods specified in OAC rule 3745-17-08(C).

1d. Emission Limitation -

PE from this emissions unit shall not exceed 0.005 grain per dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in Method 5 of 40 CFR, Part 60, Appendix A.

1e. Emission Limitation -
Emissions of OC from this emissions unit shall not exceed 3.1 lbs of OC/ton of cores produced.

Applicable Compliance Method:
Compliance with the above OC emission limitation shall be determined using Method 25 or 25A of 40 CFR, Part 60, Appendix A.

1f. Emission Limitation -
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hr) by the emission factor for natural gas from AP-42, Chapter 1.4 "Natural Gas Combustion, "Table 1.4-2, Fifth Edition, 7/98 (1.9 lbs of PE/mm cu. ft.), and dividing by the maximum houlry heat input capacity of the emission unit (12 mmBtu/hr), or, if required, by testing conducted using the method specified in OAC rule 3745-17-03(B)(9).

1g. Emission Limitation -
OC emissions from the oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

Applicable Compliance Method:
Compliance with the above emission limitations shall be determined using Method 25 or 25A of 40 CFR, Part 60, Appendix A. If required, compliance with the above reduction requirement shall be determined by multiplying the fractional capture efficiency by the fractional control efficiency and multiplying by 100 percent. The capture efficiency shall be determined using Method 204 of 40 CFR, Part 51, Appendix M. The control efficiency shall be determined using the results of testing performed on the inlet and outlet of the control equipment using Method 25 or 25A and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 Cooler V-6 Unhook Station (P102)
Activity Description: No. 3 Cooler V-6 Unhook Station

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 cooler V-6 unhook station and associated equipment, controlled by baghouse no. 93 (also known as B unit)	OAC rule 3745-31-05(A)(3) (PTI 13-1501)	The particulate emissions (PE) limitation established by this rule is less stringent than that in OAC rule 3745-17-12(I)(7)(b). The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(7)(b)	PE from baghouse no. 93 serving emissions units P027 through P029 and P102 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 93.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 93 serving emissions units P027 through P029 and P102 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P029 and P102 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse

using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.
Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 7 (P106)
Activity Description: Core Line 7

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
core line no. 7 (The line includes 6 isocure (cold cure) core machines, core sand mixers, bowl cleaning oven, conveyors, core definner, (non-photochemically reactive) core wash slusher, core wash dry oven, and preheat (redry) oven.)	OAC rule 3745-31-05(A)(3) (PTI 13-2663)	0.1 lb of TEA per ton of sand processed 1.14 lb of TEA/hr The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), 3745-17-10(B)(1), 3745-17-11(B)(1), 3745-21-07(G)(1), and 3745-21-07(G)(2).
isocure (cold cure) core machines (6 units), controlled by catalyst scrubber no. 10A (also known as # 7 acid scrubber)	OAC rule 3745-17-12(I)(49)	Particulate emissions (PE) from this portion of the emissions unit shall not exceed 0.00 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

	OAC rule 3745-21-07(G)(9)(h)	The catalyst gas emissions shall be vented to a catalyst scrubber that is designed and operated to remove at least 98 percent, by weight, of the catalyst gas emissions. See section A.I.2.c.
core wash slusher	OAC rule 3745-21-07(G)(2)	This portion of the emissions unit does not apply, evaporate, or dry any photochemically reactive material (PRM), or any substance containing such PRM. Therefore, there are no applicable emission limitations from this rule.
indirect heat, natural gas-fired core wash and bowl cleaning ovens	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input/oven
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions from this portion of the emissions unit shall not exceed 3 lbs/hr or 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.
core definner, controlled by baghouse no. 14 (also known as #7 core line definner baghouse); core sand mixers and sand storage hopper, controlled by wet scrubbers nos. 4 and 6; and core conveyors	OAC rule 3745-17-11(B)(1)	less than 10 lbs of PE/hr, uncontrolled (See section A.I.2.b.)
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core assembly fixture conveyor	OAC rule 3745-17-07(B)(1)	

	OAC rule 3745-17-08(B)	Visible PE of fugitive dust from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule. The permittee shall employ reasonably available control measures consisting of normal operation and maintenance to minimize or eliminate visible PE of fugitive dust.
core sand mixers	OAC rule 3745-21-07(G)(2)	Exempt pursuant to OAC rule 3745-21-07(G)(9)(h). See section A.I.2.a.

2. Additional Terms and Conditions

2.a Although OAC rule 3745-21-07(G)(9)(h) specifies an exemption for the use of a phenolic urethane no-bake resin binder system in foundry core-making and mold-making operations, the exemption is not yet part of the federally approved SIP. This new exemption was promulgated by Ohio EPA and became effective on June 15, 1999. Ohio EPA has received confirmation from USEPA concerning the acceptability of this exemption, and the permittee has agreed to consider the exemption as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the exemption as a revision to the Ohio SIP for ozone.

2.b The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds of PE per hour. However, to ensure that Figure II will not be applicable, the uncontrolled PE from this emissions unit shall be less than 10 pounds per hour.

2.c The permittee shall not employ any wash material in the core wash slusher of this emissions unit that is a PRM, as defined in OAC rule 3745-21-01(C)(5).

II Operational Restrictions

1. The permittee shall maintain the pH of the acid solution in scrubber no. 10A at a pH of no greater than 4.0.

2. The pressure drop across TEA scrubber no. 10A shall be continuously maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. Purged catalyst emissions from the core machines shall be vented to catalyst scrubber no. 10A.

4. The pressure drop across scrubbers nos. 4 and 6 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

5. The scrubber water pump motor amperage for scrubber nos. 4 and 6 shall be maintained at or above 20 amps, at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

6. The pressure drop across baghouse no. 14 shall be maintained within a range of 2 to 4 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall operate and maintain equipment to monitor the pH of the scrubber liquor for scrubber no. 10A when the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pH, of the acid solution in scrubber no. 10A once for each day the emissions unit is in operation.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across TEA scrubber no. 10A while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for TEA scrubber no. 10A once per shift for each day the emissions unit is in operation, the pressure drop across the scrubber, in inches of water column.

3. The permittee shall maintain documentation on whether or not each core wash material employed is a PRM.

4. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations

log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

6. The permittee shall properly operate and maintain equipment to monitor the static pressure drop across scrubbers nos. 4 and 6 and the scrubber water pump motor amperages for scrubbers nos. 4 and 6 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for scrubbers nos. 4 and 6 once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

7. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 14, when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop once per shift for each day the emissions unit is in operation.

8. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

9. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.7. are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2663, issued on July 8, 1993. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pH of the acid solution in scrubber no. 10A was not maintained within the required range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across TEA scrubber no. 10A was not maintained within the required range, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE escaping from the building containing this emissions unit were observed and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These

reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for scrubbers nos. 4 and 6, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

6. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 14 did not comply with the range specified above, as well as the corrective actions that were taken to achieve compliance.

7. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

8. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing identifying each day during which any wash material that contained a PRM was employed in the core wash slusher of this emissions unit. This report shall be submitted within 30 days following the date of noncompliance, and shall identify the cause for the use of the PRM(s) and the estimated total quantity of material(s) emitted each such day.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
Visible PE of fugitive dust from this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

1c. Emission Limitation -
less than 10 lbs of PE/hr, uncontrolled

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation -
0.020 lb of PE/mmBtu of actual heat input/oven

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by multiplying the maximum hourly gas burning capacity of the emissions unit (mm cu. ft./hr) by the emission factor for natural gas from AP 42, Chapter 1.4 "Natural Gas Combustion," Table 1.4.2, Fifth Edition, 7/98 (1.9 lbs of PE/mm cu. ft.), and dividing by the maximum hourly heat input capacity of the emissions unit (12 mmBtu/hr), or, if required, by testing conducted using the method specified in OAC rule 3745-17-03(B)(9).

1e. Emission and Control Efficiency Limitations:
0.1 lb of TEA per ton of material processed, 1.14 lb of TEA/hr, and 98 percent control efficiency for TEA, by weight

Applicable Compliance Method:
Compliance with the above TEA emission limitations shall be determined by testing using standard methods. Compliance with the control efficiency limitation shall be determined using the results of TEA emission testing performed on the inlet and outlet of the control equipment using standard methods and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %.

1f. Emission Limitation -
0.010 grain of PE per actual cubic foot of total exhaust gases

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1g. Emission Limitation -
OC emissions from this portion of the emissions unit shall not exceed 3 lbs/hr or 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

Applicable Compliance Method:
Compliance with the above emission limitations shall be determined using Methods 25 or 25A of 40 CFR, Part 60, Appendix A. Compliance with the above reduction requirement shall be determined by multiplying the fractional capture efficiency by the fractional control efficiency and multiplying by 100 percent. The capture efficiency shall be determined using Method 204 of 40 CFR, Part 63, Appendix A. The control efficiency shall be determined using the results of testing performed on the inlet and outlet of the control equipment using Methods 25 or 25A and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit and emissions unit P416 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable OC emission rates (i.e., 3 lbs of OC/hour and 15 lbs of OC/day) or the 85 percent overall reduction requirement, whichever is applicable. The emission testing shall also be conducted to determine compliance with the PE limitation (i.e., less than 10 lbs/hr, uncontrolled) for the definner, core conveyors, core sand mixers, and sand storage hopper; the TEA emission and control efficiency limitations (i.e., 1.14 lb of TEA/hr, 0.1 lb of TEA per ton of material processed, and 98 percent control efficiency for TEA, by weight) for TEA scrubber no. 10A, controlling the 6 isocure core machines and a portion of P416; and the PE limitation (i.e., 0.00 grain/actual cubic foot of total exhaust gases) for the 6 isocure core machines.

The following test methods shall be employed to determine compliance with the appropriate allowable OC emission rate or reduction efficiency and with the PE limitations: Method 25 or 25A of 40 CFR, Part 60, Appendix A for OC emissions and Method 5 of 40 CFR, Part 60, Appendix A for PE. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency. Standard methods shall be employed to determine compliance with the TEA emission limitations.

The tests shall be conducted simultaneously while this emissions unit and emissions unit P416 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the

emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 8 (P107)
Activity Description: Core Line 8 (Permanently Shut Down 01/01)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
core line no. 8 (The line includes 12 hot box core machines, core sand mixers, core conveyors, core definner, core paste application, microwave core paste dry oven, core wash slusher, core wash dry oven, blow off station, and scrap core bin.)		
12 hot box core machines	OAC rule 3745-17-12(I)(8)(g)	Particulate emissions (PE) from each of the hot box core machines shall not exceed 0.0082 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core sand mixers, core definner, and core blowoff station, controlled by wet scrubber no. 6 (also known as #	OAC rule 3745-17-11(B)(1)	less than 10 lbs of PE/hr, uncontrolled (See section A.I.2.a.)

6 core room wet collector), core conveyors and scrap core bin		
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core wash slusher and core sand mixers	OAC rule 3745-21-07(G)(2)	This portion of the emissions unit does not employ, apply, evaporate or dry any photochemically reactive material (PRM), or any substance containing such PRM. Therefore, there are no applicable emission limitations from this rule.
indirect heat, natural gas-fired core wash dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-21-07(G)(1)	See section A.I.2.b.
indirect heat, natural gas-fired core paste dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core paste application	none	none

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule

3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the PE limitation is greater than 10 pounds of PE per hour. However, to ensure that Figure II will not be applicable, the uncontrolled PE from this emissions unit shall be less than 10 pounds per hour.

2.b OC emissions from the oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

II Operational Restrictions

1. The pressure drop across scrubber no. 6 shall be continuously maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water flow rate for scrubber no. 6 shall be continuously maintained, at all times while the emissions unit is in operation, within a range that is established during the most recent emission test that demonstrated that the emissions unit was in compliance. If no range has been established during testing, the manufacturer's written recommendation shall be used until a range is established during the next test that demonstrates that the emissions unit is in compliance.

3. Pursuant to OAC rule 3745-17-12(I)(47)(b)*, the total combined operating hours for emissions units P064, P066, and P107 shall not exceed the following during any calendar day:

   a. a total of 597.4 hours; or

   b. if the PE from emissions unit P045 are vented to baghouse no. 92 or emissions unit P045 is permanently shut down, a total of 653.4 hours.

   (The permittee has permanently shut down emissions unit P045; therefore, the total combined operating hours for emissions units P064, P066, and P107 shall not exceed a total of 653.4 hours in any calendar day.)

   * This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

4. The permittee shall not employ any core wash material in the core wash slusher and any resin in the core sand mixers of this emissions unit that is a PRM, as defined in OAC rule 3745-21-01(C)(5).

III Monitoring and/or Recordkeeping

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 6 and the scrubber water flow rate for scrubber no. 6 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 6 once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water flow rate, in gallons per minute.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P064, P066, and P107 (and for the total combined operating

hours of such units) to document compliance with the daily operating hours restriction specified in section A.II.3. of the terms and conditions of this permit.

5. The permittee shall maintain documentation on whether or not each core wash material used in the core wash slusher and each resin used in the core sand mixers is a PRM.

IV Reporting Requirements

1. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from any stack serving this emission unit were observed and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for scrubber no. 6, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

3. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

4. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

5. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

6. The permittee shall notify the appropriate Ohio EPA District Office or local air agency in writing identifying each day during which any core wash material that contained a PRM was employed in the core wash slusher and/or any resin that contained a PRM was employed in the core sand mixers of this emissions unit. This report shall be submitted within 30 days following the date of noncompliance, and shall identify the cause for the use of the PRM(s) and the estimated total quantity of material(s) emitted each such day.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(9).

1c. Emission Limitation -
less than 10 lbs of PE/hr, uncontrolled

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation -
OC emissions from the oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

Applicable Compliance Method:
Compliance with the above OC emission limitations shall be determined using Methods 25 or 25A of 40 CFR, Part 60, Appendix A. Compliance with the above reduction requirement shall be determined by multiplying the fractional capture efficiency by the fractional control efficiency and multiplying by 100 percent. The capture efficiency shall be determined using Method 204 of 40 CFR, Part 51, Appendix M. The control efficiency shall be determined using the results of testing performed on the inlet and outlet of the control equipment using Methods 25 or 25A and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %

1e. Emission Limitation -
PE from each of the hot box core machines shall not exceed 0.0082 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1f. Operational Restriction:
The pressure drop across scrubber no. 6 shall be continuously maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirement specified in section A.III.2.

1g. Operational Restriction:
The scrubber water flow rate for scrubber no. 6 shall be continuously maintained, at all times while the emissions unit is in operation, within a range that is established during the most recent emission test that demonstrated that the emissions unit was in compliance. If no range has been established during testing, the manufacturer's written recommendation shall be used until a range is established during the next test that demonstrates that the emissions unit is in compliance.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirement specified in section A.III.2.

1h. Operational Restriction:
The permittee shall not employ any core wash material in the core wash slusher or any resin in the core sand mixers of this emissions unit that is a PRM.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirement specified in section A.III.5.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the PE limitation (i.e., less than 10 lbs/hr, uncontrolled) for the core definners, core blowoff station, core conveyors, core sand mixers, and scrap core bin; the PE limitation (i.e., 0.0082 grain/actual cubic foot of total exhaust gases) for the 12 hot box core machines; and the OC emission limitations (3 lbs/hr and 15 lbs/day or the 85 percent OC emission reduction) for the core wash dry oven.

The following test methods shall be employed to determine compliance with the PE and OC emission limitations: Method 5 of 40 CFR, Part 60, Appendix A for PE and Methods 25 or 25A

of 40 CFR, Part 60, Appendix A for OC. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency. At least 3 of the hot box core machines shall be tested. If compliance with the PE limitation is demonstrated for these 3 hot box core machines, it shall be assumed that the untested hot box core machines are also in compliance with such limitation. The 3 hot box core machines to be tested shall be identified to the appropriate Ohio EPA District Offfice or local air agency.

Compliance with the PE limitation (i.e., less than 10 lbs/hr, uncontrolled) for the core definners, core blow off station, core sand mixers, core conveyors, and scrap core bin shall be determined by the sum of the emissions test results, in lbs of PE/hr, for the inlet to wet scrubber no. 6 and for the exhausts from the core conveyors and scrap core bin.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
core line no. 8 (The line includes 12 hot box core machines, core sand mixers, core conveyors, core definner, core paste application, microwave core paste dry oven, core wash slusher, core wash dry oven, blow off station, and scrap core bin.)	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Holding Furnaces (P110)
Activity Description: No. 1 ML Holding Furnaces

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
two no. 1 mold line electric induction holding furnaces, partially controlled by baghouse no. 79 (also known as AAF unit) (Formerly, this emissions unit was vented to stacks J-29, J-42, J-43, and J-52; now it is vented to stacks J-42, J-43, J-52, and baghouse no. 79.)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(11). 6.9 TPY of particulate emissions (PE) Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.
	OAC rule 3745-17-12(I)(11)	1.3 lbs of PE/hr
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to stacks J-42, J-43, and J-52 and baghouse no. 79.

II Operational Restrictions

1. The pressure drop across baghouse no. 79 shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operation, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain monitoring equipment to monitor the pressure drop across baghouse no. 79 when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across baghouse no. 79 once for each day this emissions unit is in operation.

3. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarters.

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 79 did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in

operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using USEPA Reference Method 9 in 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation:
1.3 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation:
6.9 TPY of PE

Applicable Compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate of 1.3 lbs/hr.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Iron Pouring (P111)
Activity Description: No. 1 ML Iron Pouring

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line automatic iron pourer, with no controls	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(12). 6.9 TPY of particulate emissions (PE) Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.
	OAC rule 3745-17-12(I)(12)	0.80 lb of PE/hr
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack J-27.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using USEPA Reference Method 9 in 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation -
0.80 lb of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation -
6.9 TPY of PE

Applicable Compliance Method:
Compliance with the above annual PE limitation shall be determined by multipying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to permit expiration.

The emission testing shall be conducted to determine compliance with the allowable PE rate of 0.80 lb/hr.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Mold Conveyor (P112)
Activity Description: No. 1 ML Mold Conveyor With Cope

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line conveyor with cope, including cope and drag mold machines, with no controls	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly, particulate mass emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 12.1 TPY of PE Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.
	OAC rule 3745-17-12(I)(13)	The total combined PE from emissions units P112 and P114 shall not exceed 10.5 lbs of PE/hr.
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to stacks J-19, J-20, J-21, J-26, J-28, J-53, and J-54.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1. and A.I.2. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using USEPA Reference Method 9 in 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation -
12.1 TPY of PE

Applicable Compliance Method:
Except as otherwise provided in the following, compliance with the above annual PE limitation shall be determined by multipying the stack testing results for emissions unit P112 (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from emissions unit P112 for testing is not feasible, then compliance with this PE limitation shall be assumed if the tested combined PE from emissions units P112 and P114 multiplied by the number of hours of operation per year and divided by 2,000, does not exceed the sum of the annual limits for emissions units P112 and P114 from PTI 13-1639.

1c. Emission Limitation -
10.5 lbs/hr of total combined PE for both P112 and P114

Applicable Compliance Method:
Compliance with the above combined hourly PE limitation shall be assumed as long as compliance with the sum of the hourly PE limitations for emissions units P112 and P114 from PTI 13-1639 is maintained.

2. The permittee shall conduct, or have conducted, emission testing for emissions units P112 and P114 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to permit expiration.

The emission testing shall be conducted to determine compliance with the sum of the allowable PE rates for emissions units P112 and P114 from PTI 13-1639 (6.2 lbs/hr and 2.5 lbs/hr, respectively).

The following test method shall be employed to determine compliance with the sum of the allowable PE rates: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Casting Shakeout (P113)
Activity Description: No. 1 ML Casting Shakeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no.1 mold line casting shakeout, controlled by baghouse no. 56 (also known as F unit)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate mass emission limitations established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 1.8 lbs of particulate emissions (PE)/hr 3.5 TPY of PE The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(3)(a)	PE from baghouse no. 56 serving emissions units F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of total exhaust gases.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 56.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse no. 56 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in the accordance with the following methods:

1a.. Emission Limitation -
3.5 TPY of PE

Applicable Compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE limitation for baghouse no. 56 from OAC rule 3745-17-12(I)(3)(a) is maintained for emissions units F023, P113, P148, and P186.

1b. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1c. Emission Limitation -
PE from baghouse no. 56 serving emissions units F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of the total exhaust gases.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F023, P113, P148, and P186 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the combined allowable concentration for PE from baghouse no. 56 (0.0063 gr/acf) and, if possible, the allowable rate of 1.8 lbs/hr for this emissions unit.

The following test method shall be employed to determine compliance with the appropriate allowable PE concentration and/or rate: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Cope & Drag Punch-up (P114)
Activity Description: No. 1 ML Cope & Drag Punch-up

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line cope & drag punch-up, with no controls	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate mass emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 4.9 TPY of PE Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.
	OAC rule 3745-17-12(I)(13)	The total combined PE from emissions units P112 and P114 shall not exceed 10.5 lbs/hr.
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack J-19.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible PE were observed from the stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance, in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

   The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 10 % opacity at any time.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using USEPA Reference Method 9 in 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation:
The total combined PE from emissions units P112 and P114 shall not exceed 10.5 lbs/hr.

Applicable Compliance Method:
Compliance with the above combined hourly emission limitation shall be assumed as long as compliance with the sum of the hourly PE limitations for emissions units P112 and P114 from PTI 13-1639 is maintained.

1c. Emission Limitation -
4.9 TPY of PE

Applicable Compliance Method:
Except as otherwise provided in the following, compliance with the above annual PE limitation shall be determined by multipying the stack testing results for emissions unit P114 (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from emissions unit P114 for testing is not feasible, then compliance with this PE limitation shall be assumed if the tested combined PE from emissions units P112 and P114 multiplied by the number of hours of operation per year and divided by 2,000, does not exceed the sum of the annual limits for emissions units P112 and P114 from PTI 13-1639.

2. The permittee shall conduct, or have conducted, emission testing for emissions units P112 and P114 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to permit expiration.

The emission testing shall be conducted to determine compliance with the sum of the allowable PE rates for emissions units P112 and P114 from PTI 13-1639 (6.2 lbs/hr and 2.5 lbs/hr, respectively).

The following test method shall be employed to determine compliance with the sum of the allowable PE rates: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Castings Hook-ups (P115)
Activity Description: No. 1 ML Castings Hook-ups

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line castings hook-up, controlled by wet scrubbers nos. 31, 32, 33, and 34 (also known as 4-1, 4-2, 4-3, and 5-1, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 11.2 TPY of PE The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(14)	The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 31, 32, 33, and 34.

II Operational Restrictions

1. The pressure drop across each scrubber serving this emissions unit shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for scrubber no. 34 shall be maintained at or above 15 amps while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each of scrubbers nos. 31, 32, and 33 shall be maintained, at or above 30 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

4. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range specified in sections A.II.1. and A.II.2. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in the accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation
11.2 TPY of PE

Applicable compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the sum of the annual PE limitations for emissions units P115 through P120 from PTI 13-1639 is maintained.

1c. Emission Limitation -
The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P115 through P120 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the combined allowable PE rate of 9.6 lbs/hr for emissions units P115 through P120.

The following test method shall be employed to determine compliance with the allowable PE rate(s): Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Sand Reclaim (P116)
Activity Description: No. 1 ML Return Sand System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line return sand system, controlled by wet scrubbers nos. 21, 22, 23, 31, 32, 33, and 34 (also known as 1-1, 1-2, 1-3, 4-1, 4-2, 4-3, and 5-1, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 3.1 TPY of PE The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(14)	The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 21, 22, 23, 31, 32, 33, and 34.

II Operational Restrictions

1. The pressure drop across each scrubber serving this emissions unit shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for each of scrubbers nos. 31, 32, and 33 shall be maintained at or above 30 amps while the emissions unit is in operation.

3. The scrubber water pump motor amperage for scrubber no. 34 shall be maintained at or above 15 amps while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each of scrubbers nos. 21, 22, and 23 shall be maintained, at or above 30 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

4. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range specified in sections A.II.1. and A.II.2. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in the accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation
3.1 TPY of PE

Applicable compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the sum of the annual PE limitations for emissions units P115 through P120 from PTI 13-1639 is maintained.

1c. Emission Limitation -
The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P115 through P120 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the combined allowable PE rate of 9.6 lbs/hr for emissions units P115 through P120.

The following test method shall be employed to determine compliance with the allowable PE rate(s): Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Mag Belt (P117)
Activity Description: No. 1 ML Mag Belt

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line magnetic pulley belt conveyor, controlled by wet scrubbers nos. 21, 22, and 23 (also known as 1-1, 1-2, and 1-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 5.6 TPY of PE The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(14)	The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 21, 22, and 23.

II Operational Restrictions

1. The pressure drop across each scrubber serving this emissions unit shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

3. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calender day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range specified in sections A.II.1. and A.II.2. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in the accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation
5.6 TPY of PE

Applicable compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the sum of the annual PE limitations for emissions units P115 through P120 from PTI 13-1639 is maintained.

1c. Emission Limitation -
The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P115 through P120 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the combined allowable PE rate of 9.6 lbs/hr for emissions units P115 through P120.

The following test method shall be employed to determine compliance with the allowable PE rate(s): Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML New Sand Transfer (P118)
Activity Description: No. 1 ML Sand Chute

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line new sand transfer, controlled by wet scrubbers nos. 21, 22, and 23 and baghouses nos. 126 and 127 (also known as 1-1, 1-2, 1-3, 1 ML sand bin baghouse, and 1 ML baghouse, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 2.9 TPY of PE The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(14)	The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 21, 22, and 23 and baghouses nos. 126 and 127.

II Operational Restrictions

1. The pressure drop across each scrubber serving this emissions unit shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

3. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amerage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

2. The permittee shall operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The permittee shall collect and record the pressure drop across each baghouse once per shift for each day that the emissions unit is in operation.

3. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.4. of these terms and conditions.

4. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range specified in sections A.II.1. and A.II.2. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across either baghouse did not comply with the allowable range specified in section A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.4. of these terms and conditions.

4. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in the accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation
2.9 TPY of PE

Applicable compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the sum of the annual PE limitations for emissions units P115 through P120 from PTI 13-1639 is maintained.

1c. Emission Limitation -
The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P115 through P120 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the combined allowable PE rate of 9.6 lbs/hr for emissions units P115 through P120.

The following test method shall be employed to determine compliance with the allowable PE rate(s): Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Return Sand Storage (P119)
Activity Description: No. 1 ML Sand Bins

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line return sand storage, controlled by wet scrubbers nos. 21, 22, 23, and 33A (also known as 1-1, 1-2, 1-3, and 4-4, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 4.1 TPY of PE The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(14)	The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 21, 22, 23, and 33A.

II Operational Restrictions

1. The pressure drop across each scrubber serving this emissions unit shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for scrubber no. 33A shall be maintained at or above 8 amps while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each of scrubbers nos. 21, 22, and 23 shall be maintained, at or above 35 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

4. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in sections A.II.3. of these terms and conditions.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range specified in sections A.II.1. and A.II.2. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.3. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in the accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation
4.1 TPY of PE

Applicable compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the sum of the annual PE limitations for emissions units P115 through P120 from PTI 13-1639 is maintained.

1c. Emission Limitation -
The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to

Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 1 ML Sand Cooling (P120)
Activity Description: No. 1 ML Sand Coolers

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 1 mold line sand cooling, controlled by wet scrubbers nos. 21, 22, and 23 and cyclones nos. 22A and 23A (also known as 1-1, 1-2, 1-3, 1-2 ML, and 1-3 ML, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1639)	The hourly particulate emission limitation established pursuant to this rule is less stringent than the limitation in OAC rule 3745-17-12(I)(13). 6.1 TPY of PE The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(14)	The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 21, 22, and 23 and cyclones nos. 22A and 23A.

II Operational Restrictions

1. The pressure drop across each scrubber serving this emissions unit shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for each scrubber shall be maintained, at or above 35 amps at all times while the emissions unit is in operation. Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

4. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void..

2. The permittee shall operate and maintain equipment to monitor the pressure drop across each cyclone while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manuals. The permittee shall record the pressure drop, in inches of water column, across each cyclone once each day that the emissions unit is in operation.

3. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.4. of these terms and conditions.

4. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required range specified in sections A.II.1. and A.II.2. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across either cyclone did not comply with the allowable range specified in section A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.4. of these terms and conditions.

4. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in the accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation
6.1 TPY of PE

Applicable compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack testing results (lbs/hr) by the number of hours of operation per year and dividing by 2,000. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the sum of the annual PE limitations for emissions units P115 through P120 from PTI 13-1639 is maintained.

1c. Emission Limitation -
The total combined PE from emissions units P115 through P120 shall not exceed 9.6 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Operational Restriction:
The pressure drop across each cyclone shall be maintained within the range of 3 to 6 inches of water column at all times while the emissions unit is in operation.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirements in section A.III.2. of these terms and conditions.

2. The permittee shall conduct, or have conducted, emission testing for emissions units P115 through P120 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the combined allowable PE rate of 9.6 lbs/hr for emissions units P115 through P120.

The following test method shall be employed to determine compliance with the allowable PE rate(s): Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Iron Pouring (P141)
Activity Description: No. 2 ML Iron Pouring

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line automatic iron pourer, with no controls	OAC rule 3745-17-12(I)(16)	The total combined particulate emissions (PE) from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(48)	The height of stack G-36 serving emissions units P141, P145, P171, P172, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not be less than one hundred thirty feet above ground level.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stacks G-36 and H-52.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from any stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1.of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Cope Mold Machine (P142)
Activity Description: No. 2 ML Cope Mold Machine

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line cope mold machine, with no controls	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(17)	PE shall not exceed 1.8 lbs/hr.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack H-56.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -

1.8 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Mold Conveyor (P145)
Activity Description: No. 2 ML Mold Conveyor With Cope

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line mold conveyor with cope, with no controls	OAC rule 3745-17-12(I)(16)	The total combined particulate emissions (PE) from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(48)	The height of stack G-36 serving emissions units P141, P145, P171, P172, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not be less than one hundred thirty feet above ground level.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stacks G-32 and G-36.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from any stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall quarterly submit deviation (excursion) reports that (a) identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1c. Operational Restriction:
The total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

Applicable Compliance Method:
Compliance with the above operational restriction shall be determined by the record keeping requirement in section A.III.1. of these terms and conditions.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Casting Split (P146)
Activity Description: No. 2 ML Casting Split

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line dredgeout casting split, with no controls	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(19)	PE shall not exceed 2.2 lbs/hr.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack H-62.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
2.2 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Rotary Cooling Screen (P147)
Activity Description: No. 2 ML Rotary Cooling Screen

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line rotary cooling screen controlled by wet scrubber no. 27B (also known as 2-4)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(20)	PE shall not exceed 4.4 lbs/hr.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubber no. 27B.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across wet scrubber no. 27B shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for scrubber no. 27B shall be maintained, at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 27B and the scrubber water pump motor amperage for scrubber no. 27B while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals.

   The permittee shall collect and record the following information for scrubber no. 27B once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

   Alternatively, if MACT monitoring requirements differ from these, then Ford will implement the MACT parameter monitoring requirements within the schedule required by MACT. Once MACT is implemented, the obsolete monitoring requirements will be considered void.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for scrubber no. 27B, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
4.4 lbs of PE/hr

Applicable Compliance Method:

Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Conveyor (P148)
Activity Description: No. 2 ML Conveyor Without Cope

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line mold conveyor without cope, including drag mold machine, controlled by baghouse no. 56 (also known as F unit) and wet scrubbers nos. 24, 25, and 26 (also known as 2-1, 2-2, and 2-3, respectively) [Formerly, this emissions unit was vented only to baghouse no. 56.]	OAC rule 3745-17-12(I)(3)(a)	Particulate emissions (PE) from baghouse no. 56 serving emissions units F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of the total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack, except stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 are exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of an equivalent visible particulate emission limitation for stack H-40.
	OAC rule 3745-17-12(I)(21)	PE from scrubbers nos. 24, 25, and 26, combined, shall not exceed 13.2 lbs/hr.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 56 or scrubbers nos. 24, 25, and 26.

2.b Pursuant to the provisions of OAC rule 3745-17-7(C), the permittee is hereby granted the following equivalent visible particulate emission limitation for stack H-40, serving this emissions unit, in lieu of the 20% opacity limitation specified in OAC rule 3745-15-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, any visible particulate emission greater than 32% opacity, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, visible particulate emissions exceeding 32% opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60% opacity, as a six-minute average, at any time.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours of mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

3. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

4. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse no. 56 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop

across the baghouse, in inches of water column, once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.2. of these terms and conditions.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse and scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.2. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. for each scrubber, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control devices, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse and scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in the accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule, or 32% for stack H-40.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -

PE from baghouse no. 56 serving emissions units F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of the total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F023, P113, P148 and P186 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the combined allowable concentration for PE from baghouse no. 56 (0.0063 gr/acf) [Testing performed on February 10, 1999 demonstrated compliance with the combined allowable PE rate for wet scrubbers nos. 24, 25, and 26 (13.2 lbs/hr). Therefore, no additional testing is required by this permit.]

The following test method shall be employed to determine compliance with the allowable PE concentration: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Casting Shakeout (P149)
Activity Description: No. 2 ML Casting Shakeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line casting shakeout, controlled by wet scrubbers nos. 24, 25, and 26 (also known as 2-1, 2-2, and 2-3, respectively)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack, except stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 are exempt, pursuant to OAC rule 3745-17-07(A)(3)(i), due to the establishment of an equivalent visible particulate emission limitation pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitation for stack H-40.
	OAC rule 3745-17-12(I)(21)	The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 24, 25, and 26.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitation for stack H-40, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, any visible particulate emissions greater than 32 % opacity, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, visible particulate emissions exceeding 32 % opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. for each scrubber, as well as the corrective actions that were taken to achieve compliance:

a. the static pressure drop across the scrubber; and

b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from any stack, excluding stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 serving this emissions unit shall not exceed 32 % opacity, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on February 10, 1999 demonstrated compliance with the PE limitation for emissions units P149 through P151 and P156 through P158 (13.2 lbs/hr). Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Drag Punchout (P150)
Activity Description: No. 2 ML Drag Punchout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line drag punchout, controlled by wet scrubbers nos. 24, 25, and 26 (also known as 2-1, 2-2, and 2-3, respectively)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack, except stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 are exempt, pursuant to OAC rule 3745-17-07(A)(3)(i), due to the establishment of an equivalent visible particulate emission limitation pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitation for stack H-40.
	OAC rule 3745-17-12(I)(21)	The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 24, 25, and 26.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitation for stack H-40, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, any visible particulate emissions greater than 32 % opacity, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, visible particulate emissions exceeding 32 % opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. for each scrubber, as well as the corrective actions that were taken to achieve compliance:

a. the static pressure drop across the scrubber; and

b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from any stack, excluding stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 serving this emissions unit shall not exceed 32 % opacity, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on February 10, 1999 demonstrated compliance with the PE limitation for emissions units P149 through P151 and P156 through P158 (13.2 lbs/hr). Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Cope Punchout (P151)
Activity Description: No. 2 ML Cope Punchout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line cope punchout, controlled by wet scrubbers nos. 24, 25, 26, and 27C (also known as 2-1, 2-2, 2-3, and 2-5, respectively)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack, except stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 are exempt, pursuant to OAC rule 3745-17-07(A)(3)(i), due to the establishment of an equivalent visible particulate emission limitation pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitation for stack H-40.
	OAC rule 3745-17-12(I)(21)	The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 24, 25, and 26

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitation for stack H-40, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, any visible particulate emissions greater than 32 % opacity, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, visible particulate emissions exceeding 32 % opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. for each scrubber, as well as the corrective actions that were taken to achieve compliance:

a. the static pressure drop across the scrubber; and

b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control devices, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from any stack, excluding stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 serving this emissions unit shall not exceed 32 % opacity, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on February 10, 1999 demonstrate compliance with the PE limitation for emissions units P149 through P151 and P156 through P158 (13.2 lbs/hr). Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Dredgeout Fractionating System (P152)
Activity Description: No. 2 ML Dredgeout Fractionating System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line dredgeout fractionating system, with no controls	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(22)	1.1 lbs of PE/hr

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack H-37.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15 and August 15 of each year and shall cover the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
1.1 lbs or PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Sprue Removal (P153)
Activity Description: No. 2 ML Sprue Removal

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line sprue removal, controlled by wet scrubbers nos. 40, 41, and 42 (also known as 7-1, 7-2, and 7-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emissions limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks C-18, C-19 and D-32.
	OAC rule 3745-17-12(I)(23)	The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to scrubbers nos. 40, 41, and 42.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks C-18, C-19

and D-32, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, any visible particulate emissions greater than 30, 31 and 38 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, visible particulate emissions exceeding 30, 31 and 38 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each of scrubbers nos. 40, 41, and 42 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required levels for each scrubber:

   (a) the static pressure drop across the scrubber; and

   (b) the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks C-18, C-19 and D-32 serving this emissions unit shall not exceed 30, 31 and 38 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 lbs of PE/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack testing performed on March 10, 1999 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Hook-up (P154)
Activity Description: No. 2 ML Hook-up

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line conveyor castings hook-up, controlled by wet scrubbers nos. 27C, 40, 41, and 42 (also known as 2-5, 7-1, 7-2, and 7-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks C-18, C-19 and D-32.
	OAC rule 3745-17-12(I)(23)	The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to scrubbers nos. 27C, 40, 41, and 42.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks C-18, C-19

and D-32, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, any visible particulate emissions greater than 30, 31 and 38 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, visible particulate emissions exceeding 30, 31 and 38 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each of scrubbers nos. 27C, 40, 41, and 42 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for scrubber no. 27C shall be maintained at or above 8 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required levels for each scrubber:

   (a) the static pressure drop across the scrubber; and

   (b) the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks C-18, C-19 and D-32 serving this emissions unit shall not exceed 30, 31 and 38 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 lbs of PE/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack testing performed on March 10, 1999 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Dredgeout (P155)
Activity Description: No. 2 ML Dredgeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line dredgeout, controlled by wet scrubbers nos. 40, 41, and 42 (also known as 7-1, 7-2, and 7-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks C-18, C-19 and D-32.
	OAC rule 3745-17-12(I)(23)	The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to scrubbers nos. 40, 41, and 42.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks C-18, C-19

and D-32, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, any visible particulate emissions greater than 30, 31 and 38 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, visible particulate emissions exceeding 30, 31 and 38 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each of scrubbers nos. 40, 41, and 42 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required levels for each scrubber:

   (a) the static pressure drop across the scrubber; and

   (b) the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks C-18, C-19 and D-32 serving this emissions unit shall not exceed 30, 31 and 38 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 lbs of PE/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack testing performed on March 10, 1999 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Sand Transfer (P156)
Activity Description: No. 2 ML Sand transfer

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line sand transfer, controlled by wet scrubbers nos. 24, 25, and 26 (also known as 2-1, 2-2, and 2-3, respectively)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack, except stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 are exempt, pursuant to OAC rule 3745-17-07(A)(3)(i), due to the establishment of an equivalent visible particulate emission limitation pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitation for stack H-40.
	OAC rule 3745-17-12(I)(21)	The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 24, 25, and 26.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitation for stack H-40, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, any visible particulate emissions greater than 32 % opacity, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, visible particulate emissions exceeding 32 % opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. for each scrubber, as well as the corrective actions that were taken to achieve compliance:

a. the static pressure drop across the scrubber; and

b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control devices, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from any stack, excluding stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 serving this emissions unit shall not exceed 32 % opacity, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on February 10, 1999 demonstrated compliance with the PE limitation for emissions units P149 through P151 and P156 through P158 (13.2 lbs/hr). Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Sand Mag Belt (P157)
Activity Description: No. 2 ML Sand Mag Belt

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line magnetic pulley belt conveyor, controlled by wet scrubbers nos. 24, 25, 26, and 27C (also known as 2-1, 2-2, 2-3, and 2-5, respectively)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack, except stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 are exempt, pursuant to OAC rule 3745-17-07(A)(3)(i), due to the establishment of an equivalent visible particulate emission limitation pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitation for stack H-40.
	OAC rule 3745-17-12(I)(21)	The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 24, 25, 26, and 27C.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitation for stack H-40, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, any visible particulate emissions greater than 32 percent opacity, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, visible particulate emissions exceeding 32 % opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each of scrubbers nos. 24, 25, and 26 shall be maintained at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. for each scrubber, as well as the corrective actions that were taken to achieve compliance:

a. the static pressure drop across the scrubber; and

b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control devices, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by January 31, April 30, July 31, and October 31 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from any stack, excluding stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 serving this emissions unit shall not exceed 32 % opacity, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on February 10, 1999 demonstrated compliance with the PE limitation for emissions units P149 through P151 and P156 through P158 (13.2 lbs/hr). Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Sand Preparation (P158)
Activity Description: No. 2 ML Sand Preparation

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line sand preparation, controlled by wet scrubbers nos. 24, 25, and 26 (also known as 2-1, 2-2, and 2-3, respectively)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack, except stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 are exempt, pursuant to OAC rule 3745-17-07(A)(3)(i), due to the establishment of an equivalent visible particulate emission limitation pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitation for stack H-40.
	OAC rule 3745-17-12(I)(21)	The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 24, 25, and 26.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitation for stack H-40, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, any visible particulate emissions greater than 32 % opacity, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stack H-40, serving this emissions unit, visible particulate emissions exceeding 32 % opacity, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 35 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. for each scrubber, as well as the corrective actions that were taken to achieve compliance:

a. the static pressure drop across the scrubber; and

b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from any stack, excluding stack H-40, serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule. Visible PE from stack H-40 serving this emissions unit shall not exceed 32 % opacity, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P149 through P151 and P156 through P158 shall not exceed 13.2 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on February 10, 1999 demonstrated compliance with the PE limitation for emissions units P149 through P151 and P156 through P158 (13.2 lbs/hr). Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Casting Cooling (P159)
Activity Description: No. 2 ML Casting Cooling Conveyor

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line casting cooling, controlled by wet scrubbers nos. 40, 41, and 42 (also known as 7-1, 7-2, and 7-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks C-18, C-19 and D-32.
	OAC rule 3745-17-12(I)(23)	The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to scrubbers nos. 40, 41, and 42.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks C-18, C-19

and D-32, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, any visible particulate emissions greater than 30, 31 and 38 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, visible particulate emissions exceeding 30, 31 and 38 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each of scrubbers nos. 40, 41, and 42 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall quarterly submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   (a) the static pressure drop across the scrubber; and

   (b) the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks C-18, C-19 and D-32 serving this emissions unit shall not exceed 30, 31 and 38 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 lbs of PE/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack testing performed on March 10, 1999 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Holding Furnace (P160)
Activity Description: No. 2 ML Holding Furnace (replaces P140)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line holding furnace (replaces P140), controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-2078)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 5 % opacity. PE from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1). See section A.I.2.b.
	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

2.b The permittee shall employ procedures for unloading and disposal of the dust collected by the baghouse that prevent the dust from becoming airborne or accumulating underneath the baghouse.

II Operational Restrictions

1. The pressure drop across baghouse no. 78 shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals. The permittee shall collect and record the pressure drop across baghouse no. 78 once for each day this emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation:
PE from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while the emissions units are operating at or near their maximum capacities and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Iron Transfer (P161)
Activity Description: No. 2 ML Iron Transfer (replaces P140)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line transfer station (replaces P140), controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-2078)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 5 % opacity. PE from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(B)(1) and 3745-17-08(B). See section A.I.2.b.
	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78, except for any fugitive dust emissions from the unloading and disposal of dust collected by the baghouse.

2.b The permittee shall employ procedures for unloading and disposal of the dust collected by the baghouse that prevent the dust from becoming airborne or accumulating underneath the baghouse.

II Operational Restrictions

1. The pressure drop across baghouse no. 78 shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals. The permittee shall collect and record the pressure drop across baghouse no. 78 once for each day this emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks of the dust collected by the baghouse while it is being unloaded, for any visible fugitive PE from the unloading area. The presence or absence of any visible fugitive PE shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. the total duration of any visible emission incident; and
   c. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations

log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall quarterly submit pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive PE were observed from the area where baghouse dust is unloaded and (b) describe any corrective actions taken to eliminate the visible fugitive PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, and August 15 of each year and shall cover the previous calendar quarter.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation:
PE from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while the emissions units are operating at or near their maximum capacities and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid

characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 2 ML Slag Station (P162)
Activity Description: No. 2 ML Slag Station (replaces P140)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 2 mold line slag station (replaces P140), controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-2078)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 5 % opacity. PE from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases. The requirements of this rule include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1). See section A.I.2.b.
	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

2.b The permittee shall employ procedures for unloading and disposal of the dust collected by the baghouse that prevent the dust from becoming airborne or accumulating underneath the baghouse.

II Operational Restrictions

1. The pressure drop across baghouse no. 78 shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manuals. The permittee shall collect and record the pressure drop across baghouse no. 78 once for each day this emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit semiannual quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, and August 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation:
PE from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while the emissions units are operating at or near their maximum capacities and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Iron Pouring (P171)
Activity Description: No. 3 ML Iron Pouring

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line automatic iron pourer, with no controls	OAC rule 3745-17-12(I)(16)	The total combined particulate emissions (PE) from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(48)	The height of stack G-36 serving emissions units P141, P145, P171, P172, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not be less than one hundred thirty feet above ground level.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack G-36.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Cope Mold Machine (P172)
Activity Description: No. 3 ML Cope Mold Machine

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line mold cope machine, with no controls	OAC rule 3745-17-12(I)(16)	The total combined particulate emissions (PE) from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(48)	The height of stack G-36 serving emissions units P141, P145, P171, P172, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not be less than one hundred thirty feet above ground level.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack G-36.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from any stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Drag Mold Machine (P173)
Activity Description: No. 3 ML Drag Mold Machine

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line drag mold machine, with no controls	OAC rule 3745-17-12(I)(16)	The total combined particulate emissions (PE) from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack G-32.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from any stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Core Handling (P174)
Activity Description: No. 3 ML Core Handling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line core handling, with no controls	OAC rule 3745-17-12(I)(16)	The total combined particulate emissions (PE) from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack G-32.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from any stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Mold Conveyor (P177)
Activity Description: No. 3 ML Mold Conveyor With Cope

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line mold conveyor, with no controls	OAC rule 3745-17-12(I)(16)	The total combined particulate emissions (PE) from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(48)	The height of stack G-36 serving emissions units P141, P145, P171, P172, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not be less than one hundred thirty feet above ground level.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stacks G-32 and G-36.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit semiannual reports that (a) identify all days during which any visible PE were observed from any stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restriction in section A.II.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Mold Conveyor (P178)
Activity Description: No. 3 ML Mold Conveyor Without Cope

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line mold conveyor with cope, controlled partially by wet scrubber no. 27C (also known as wet scrubber 2-5) (Formerly, this emissions unit was vented to stacks G-37 and G-38; now it is vented to stack G-37 and wet scrubber no. 27C.)	OAC rule 3745-17-12(I)(24)	4.4 lbs of particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to stack G-37 and wet scrubber no. 27C.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across scrubber no. 27C shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for scrubber no. 27C shall be maintained at or above 8 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

3. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water pump motor amperage while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for the scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges:

   (a) the static pressure drop across the scrubber; and

   (b) the scrubber water pump motor amperage.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
4.4 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE emission limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Drag Punchout (P179)
Activity Description: No. 3 ML Drag Punchout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line drag punchout controlled by baghouse no. 55 (also known as E unit)	OAC rule 3745-17-12(I)(25)	Combined particulate emissions (PE) from baghouse no. 55 serving emissions units P179 and P180 shall not exceed 0.0066 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 55.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the pressure drop across the baghouse, in inches of water column, once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall collect and record the downtime of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
Combined PE from baghouse no. 55 serving emissions units P179 and P180 shall not exceed 0.0066 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Cope Punchout (P180)
Activity Description: No. 3 ML Cope Punchout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line cope punchout controlled by baghouse no. 55 (also known as E unit)	OAC rule 3745-17-12(I)(25)	Combined particulate emissions (PE) from baghouse no. 55 serving emissions units P179 and P180 shall not exceed 0.0066 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 55.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall collect and record the downtime of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports containing the daily downtime for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in

operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
Combined PE from baghouse no. 55 serving emissions units P179 and P180 shall not exceed 0.0066 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
If required, compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Sand Transfer (P181)
Activity Description: No. 3 ML Sand Transfer

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line sand transfer, controlled by wet scrubbers nos. 28, 29, and 30 (also known as 3-1, 3-2, and 3-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31.
	OAC rule 3745-17-12(I)(26)	The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 28, 29, and 30.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks G-29, G-30

and G-31, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, any visible particulate emissions greater than 47, 41 and 48 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, visible particulate emissions exceeding 47, 41 and 48 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 30 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks G-29, G-30 and G-31 serving this emissions unit shall not exceed 46, 41 and 48 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). Stack test results from testing performed on December 8, 1998 demonstrate compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible emission limitation in section A.I.1. of these terms and conditions.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML New (Make-up) Sand (P182)
Activity Description: No. 3 ML New Sand System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line new (make-up) sand, controlled by wet scrubbers nos. 28, 29, and 30 (also known as 3-1, 3-2, and 3-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31.
	OAC rule 3745-17-12(I)(26)	The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 28, 29, and 30.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks G-29, G-30

and G-31, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, any visible particulate emissions greater than 47, 41 and 48 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, visible particulate emissions exceeding 47, 41 and 48 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 30 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks G-29, G-30 and G-31 serving this emissions unit shall not exceed 46, 41 and 48 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on December 8, 1998 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Sand Cooling Rotary Screen (P183)
Activity Description: No. 3 ML Sand Cooling Rotary Screen

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line sand cooling rotary screen, controlled by wet scrubbers nos. 28, 29, and 30 (also known as 3-1, 3-2, and 3-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31.
	OAC rule 3745-17-12(I)(26)	The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 28, 29, and 30.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks G-29, G-30

and G-31, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, any visible particulate emissions greater than 47, 41 and 48 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, visible particulate emissions exceeding 47, 41 and 48 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 30 amps, at all times while the emissions unit is in operation

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks G-29, G-30 and G-31 serving this emissions unit shall not exceed 46, 41 and 48 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on December 8, 1998 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Sand Preparation Mullors (P184)
Activity Description: No. 3 ML Sand Preparation Mullors

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line sand preparation mullors, controlled by wet scrubbers nos. 28, 29, and 30 (also known as 3-1, 3-2, and 3-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31.
	OAC rule 3745-17-12(I)(26)	The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 28, 29, and 30.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks G-29, G-30

and G-31, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, any visible particulate emissions greater than 47, 41 and 48 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, visible particulate emissions exceeding 47, 41 and 48 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 30 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions,.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks G-29, G-30 and G-31 serving this emissions unit shall not exceed 46, 41 and 48 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on December 8, 1998 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Casting Shakeout (P185)
Activity Description: No. 3 ML Casting Shakeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line casting shakeout, controlled by wet scrubbers nos. 28, 29, 30, 35 and 36 (also known as 3-1, 3-2, 3-3, 5-2, and 5-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31. See section A.I.2.c for the equivalent visible particulate emission limitations for stacks E-21 and E-22.
	OAC rule 3745-17-12(I)(26)	The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 28, 29, 30, 35, and 36.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, any visible particulate emissions greater than 47, 41 and 48 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, visible particulate emissions exceeding 47, 41 and 48 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

2c. Pursuant to the provisions of OAC rule 3745-17-07(c), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks E-21 and E-22, serving this emissions unit, in lieu of the 20% and 60% opacity limitations as specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks E-21 and E-22, serving this emissions unit, any visible particulate emissions greater than 57% and 25% opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks E-21 and E-22, serving this emissions unit, visible particulate emissions exceeding 57% opacity, as a six-minute average for stacks E-21, and 25% opacity, as a six-minute average for stack E-22, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 63 % opacity, as a six-minute average, for stack E-21, and 60% opacity, as a six-minute average, for stack E-22, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each of scrubbers nos. 35 and 36 shall be maintained at or above 15 amps, while the emissions unit is in operation.

4. The scrubber water pump motor amperage for each of scrubbers nos. 28, 29 and 30 shall be maintained at or above 30 amps at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the breakdowns of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks G-29, G-30 and G-31 serving this emissions unit shall not exceed 46, 41 and 48 % opacity, respectively, as a six-minute average, except as specified by permit or rule. Stacks E-21 (57% opacity EVEL) and E-22 (25% opacity EVEL) serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on December 8, 1998 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Dredgeout/ Fractionating System (P186)
Activity Description: No. 3 ML Dredgeout/Fractionating System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line dredgeout/fractionating system, cooling conveyor, and associated equipment, controlled by baghouse no. 56 (also known as F unit)	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(3)(a)	PE from baghouse no. 56 serving emissions units F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of total exhaust gases.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 56.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse, in inches of water column, once for each day the emissions unit is in operation.

2. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in

operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 56 serving F023, P113, P148, and P186 shall not exceed 0.0063 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F023, P113, P148, and P186 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE concentration for baghouse no. 56 (0.0063 gr/acf).

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable PE concentration: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Casting Splitter (P187)
Activity Description: No. 3 ML Casting Splitter

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line casting splitter, controlled by wet scrubbers nos. 40, 41, and 42 (also known as 7-1, 7-2, and 7-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks C-18, C-19 and D-32.
	OAC rule 3745-17-12(I)(23)	The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to scrubbers nos. 40, 41, and 42.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks C-18, C-19

and D-32, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, any visible particulate emissions greater than 30, 31 and 38 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, visible particulate emissions exceeding 30, 31 and 38 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each of scrubbers nos. 40, 41, and 42 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   (a) the static pressure drop across the scrubber; and

   (b) the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks C-18, C-19 and D-32 serving this emissions unit shall not exceed 30, 31 and 38 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 lbs of PE/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack testing performed on March 10, 1999 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Sprue Removal (P188)
Activity Description: No. 3 ML Sprue Removal

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line sprue removal, controlled by wet scrubbers nos. 28, 29, and 30 (also known as 3-1, 3-2, and 3-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31.
	OAC rule 3745-17-12(I)(26)	The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 28, 29, and 30.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks G-29, G-30

and G-31, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, any visible particulate emissions greater than 47, 41 and 48 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, visible particulate emissions exceeding 47, 41 and 48 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 30 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours fro such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubbers serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks G-29, G-30 and G-31 serving this emissions unit shall not exceed 46, 41 and 48 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on December 8, 1998 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Casting Hook-up Station (P189)
Activity Description: No. 3 ML Casting Hook-up Station

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line conveyor castings hook-up, controlled by wet scrubbers nos. 40, 41, and 42 (also known as 7-1, 7-2, and 7-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks C-18, C-19 and D-32.
	OAC rule 3745-17-12(I)(23)	The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to scrubbers nos. 40, 41, and 42.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks C-18, C-19

and D-32, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, any visible particulate emissions greater than 30, 31 and 38 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, visible particulate emissions exceeding 30, 31 and 38 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each of scrubbers nos. 40, 41, and 42 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   (a) the static pressure drop across the scrubber; and

   (b) the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks C-18, C-19 and D-32 serving this emissions unit shall not exceed 30, 31 and 38 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 lbs of PE/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack testing performed on March 10, 1999 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Dredgeout (P190)
Activity Description: No. 3 ML Dredgeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line dredgeout, controlled by wet scrubbers nos. 40, 41, and 42 (also known as 7-1, 7-2, and 7-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks C-18, C-19 and D-32.
	OAC rule 3745-17-12(I)(23)	The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to scrubbers nos. 40, 41, and 42.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks C-18, C-19

and D-32, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, any visible particulate emissions greater than 30, 31 and 38 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks C-18, C-19 and D-32, serving this emissions unit, visible particulate emissions exceeding 30, 31 and 38 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each of scrubbers nos. 40, 41, and 42 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day this emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

(a) the static pressure drop across the scrubber; and

(b) the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the sscrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These

reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks C-18, C-19 and D-32 serving this emissions unit shall not exceed 30, 31 and 38 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P153 through P155, P159, P187, P189, and P190 shall not exceed 6.1 lbs of PE/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack testing performed on March 10, 1999 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Mag Belt (P191)
Activity Description: No. 3 ML Mag Belt

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
magnetic pulley belt conveyor, controlled by wet scrubbers nos. 28, 29, and 30 (also known as 3-1, 3-2, and 3-3, respectively)	OAC rule 3745-17-07(A)(1)	Exempt pursuant to OAC rule 3745-17-07(A)(3)(i) due to establishment of equivalent visible particulate emission limitations pursuant to OAC rule 3745-17-07(C). See section A.I.2.b. for the equivalent visible particulate emission limitations for stacks G-29, G-30 and G-31.
	OAC rule 3745-17-12(I)(26)	The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 28, 29, and 30.

2.b Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks G-29, G-30

and G-31, serving this emissions unit, in lieu of the 20 % opacity limitation specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, any visible particulate emissions greater than 47, 41 and 48 % opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks G-29, G-30 and G-31, serving this emissions unit, visible particulate emissions exceeding 47, 41 and 48 % opacity, respectively, as a six-minute average, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 60 % opacity, as a six-minute average, at any time.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 30 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of the terms and conditions of this permit.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations specified in section A.I.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

1a. Emission Limitations:
Visible PE from stacks G-29, G-30 and G-31 serving this emissions unit shall not exceed 46, 41 and 48 % opacity, respectively, as a six-minute average, except as specified by permit or rule.

Applicable Compliance Method:
Compliance with the above visible PE limitations shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P181 through P185, P188 and P191 shall not exceed 4.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). [Stack test results from testing performed on December 8, 1998 demonstrated compliance with the above PE limitation. Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Iron Transfer Station (P192)
Activity Description: No. 3 ML Iron Transfer Station (replaces P170)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line iron transfer station, controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-2658)	Particulate emissions (PE) from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases. Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average. There shall be no visible fugitive emissions at any time. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1). See sections A.III.2. and A.III.3.

OAC rule 3745-17-11(B)(1)	The PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals. The permittee shall collect and record the pressure drop across baghouse no. 78, in inches of water column, once for each day that the emissions unit is in operation.

2. The permittee shall, once per week, manually sound and check the operation of the sonic horn of baghouse no. 78 and maintain weekly records of the inspection results.

3. The permittee shall, once per month, open each compartment access door of baghouse no. 78 and check for excessive build-up of debris. The permittee shall maintain monthly records of the inspection results.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse and fugitive emissions serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2658, issued on March 24, 1993 and modified on November 22, 1995: sections A.III.1 and A.III.5. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitation in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
PE shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

1c. Emission Limitation -
There shall be no visible fugitive emissions at any time.

Applicable Compliance Method:
Compliance with the above visible emission limitation shall be determined using Method 22 of 40 CFR, Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while these emissions units are operating at or near their maximum capacities and shall include include charging and tapping operations for any furnaces, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who

will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Slag Station (P193)
Activity Description: No. 3 ML Slag Station (replaces P170)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line slag station, controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-2658)	Particulate emissions (PE) from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases. Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average. There shall be no visible fugitive emissions at any time. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1). See sections A.III.2. and A.III.3.

OAC rule 3745-17-11(B)(1)	The PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals. The permittee shall collect and record the pressure drop across baghouse no. 78, in inches of water column, once for each day that the emissions unit is in operation.

2. The permittee shall, once per week, manually sound and check the operation of the sonic horn of baghouse no. 78 and maintain weekly records of the inspection results.

3. The permittee shall, once per month, open each compartment access door of baghouse no. 78 and check for excessive build-up of debris. The permittee shall maintain monthly records of the inspection results.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse and fugitive emissions serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2658, issued on March 24, 1993 and modified on November 22, 1995: sections A.III.1 and A.III.5. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
PE shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

1c. Emission Limitation -
There shall be no visible fugitive emissions at any time.

Applicable Compliance Method:
Compliance with the above visible emission limitation shall be determined using Method 22 of 40 CFR, Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while these emissions units are operating at or near their maximum capacities and shall include include charging and tapping operations for any furnaces, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who

will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 3 ML Holding Furnace (P194)
Activity Description: No. 3 ML Molten Iron Holding Furnace (replaces P170)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 3 mold line molten iron holding furnace, controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-2658)	Particulate emissions (PE) from baghouse no. 78 serving emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases. Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average. There shall be no visible fugitive emissions at any time. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1). See sections A.III.2. and A.III.3.

OAC rule 3745-17-11(B)(1)	The PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals. The permittee shall collect and record the pressure drop across baghouse no. 78, in inches of water column, once for each day that the emissions unit is in operation.

2. The permittee shall, once per week, manually sound and check the operation of the sonic horn of baghouse no. 78 and maintain weekly records of the inspection results.

3. The permittee shall, once per month, open each compartment access door of baghouse no. 78 and check for excessive build-up of debris. The permittee shall maintain monthly records of the inspection results.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse and fugitive emissions serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2658, issued on March 24, 1993 and modified on November 22, 1995: sections A.III.1 and A.III.5. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with allowable range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitation in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
PE shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

1c. Emission Limitation -
There shall be no visible fugitive emissions at any time.

Applicable Compliance Method:
Compliance with the above visible emission limitation shall be determined using Method 22 of 40 CFR, Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P160 through P162, P192 through P194, P290, P291, and P907 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years of issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while these emissions units are operating at or near their maximum capacities and shall include include charging and tapping operations for any furnaces, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who

will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Electric Induction Holding Furnace (P290)
Activity Description: No. 7 ML Electric Induction Holding Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line electric induction holding furnace, iron transfer and slagging equipment, partially controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-1518)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-12(I)(5)	See sections A.I.2.a and A.I.2.b.
	OAC rule 3745-17-12(I)(27)	See section A.I.2.c.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. **Additional Terms and Conditions**

2.a PE from baghouse no. 78 serving emissions units F025, P290 (only those emissions that were vented to stack D-35 prior to June 14, 1991), and P291 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

2.b This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised

rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

2.c All PE generated by this emissions unit which are not vented to baghouse no. 78 (i.e., emissions from iron transfer and slagging operations) shall be vented to stacks D-33 and E-19, and the total combined PE from stacks D-33 and E-19 shall not exceed 3.0 pounds per hour.

2.d All PE generated by this emissions unit, excluding those from iron transfer and slagging operations, shall be captured and vented to baghouse no. 78.

II Operational Restrictions

1. The pressure drop across baghouse no. 78 shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain monitoring equipment to monitor the pressure drop across baghouse no. 78 when the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across baghouse no. 78, in inches of water column, once for each day this emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit is in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse and stacks D-33 and E-19 serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with the allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1. and A.I.2. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from baghouse no. 78 serving emissions units F025, P290 (only those emissions that were vented to stack D-35 prior to June 14, 1991), and P291 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation:
All PE that are not vented to baghouse no. 78 shall be vented to stacks D-33 and E-19 and the total combined PE from stacks D-33 and E-19 shall not exceed 3.0 pounds per hour.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P290 (only those emissions which are vented to baghouse no. 78), and P291 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of the permit.

The emission testing shall be conducted to determine compliance with the allowable concentration and rate for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration and rate for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The emission testing shall be conducted while the emissions units are operating at or near their maximum capacities and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Iron Pouring (P291)
Activity Description: No. 7 ML Iron Pouring

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line automatic iron pourer, controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-31-05(A)(3) (PTI 13-1518)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(5)	See sections A.I.2.a and A.I.2.b.

2. Additional Terms and Conditions

2.a PE from baghouse no. 78 serving emissions units F025, P290 (only those emissions that were vented to stack D-35 prior to June 14, 1991), and P291 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

2.b This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the

time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

2.c All PE generated by this emissions unit shall be captured and vented to baghouse no. 78.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across baghouse no. 78 shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across baghouse no. 78, in inches of water column, once for each day this emissions unit is in operation.

3. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse and stacks D-33 and E-19 serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with the allowable range specified in section A.II.2. of these terms and conditions.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in sections A.I.1. and A.I.2. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 78 serving emissions units F025, P290 (only those emissions that were vented to stack D-35 prior to June 14, 1991), and P291 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units F025, P290 (only those emissions which are vented to baghouse no. 78), and P291 in accordance with the following requirements:

   The emission testing shall be conducted within 2.5 years after issuance of this permit.

   The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

   The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

   The tests shall be conducted while the emissions units are operating at or near their maximum capacities and shall include charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

   Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		None

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Primary And Secondary Shakeouts (P293)
Activity Description: No. 7 ML Primary And Secondary Shakeouts

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line primary and secondary shakeouts, controlled by wet scrubbers nos. 37, 38, and 39 (also known as 6-1, 6-2, and 6-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1518)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(29)	The total PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 37, 38, and 39.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber pump motor amperage rate for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber pump motor amperage rate for each scrubber while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in sections A.II.2. and A.II.3. of these terms and conditions for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P293 through P296 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while emissions units P293 through P296 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Automatic Castings Extractor (P294)
Activity Description: No. 7 ML Automatic Castings Extractor

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line dredgeout, controlled by wet scrubbers nos. 37, 38, and 39 (also known as 6-1, 6-2, and 6-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1518)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(29)	The total combined PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 37, 38, and 39.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in sections A.II.2. and A.II.3. of these terms and conditions for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P293 through P296 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while emissions units P293 through P296 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Return Sand System (P295)
Activity Description: No. 7 ML Return Sand System Including Existing (Pre-1994) Mullor

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line return sand system belt conveyors and existing (pre-1994) mullor, controlled by wet scrubbers nos. 37, 38, 39, 43, 44, and 45 (also known as 6-1, 6-2, 6-3, 8-1, 8-2, and 8-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1518)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(29)	The total PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 37, 38, 39, 43, 44, and 45.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in sections A.II.2. and A.II.3. of these terms and conditions for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P293 through P296 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while emissions units P293 through P296 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Fluid Bed Sand Cooler (P296)
Activity Description: No. 7 ML Fluid Bed Sand Cooler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line fluidized bed sand cooler, controlled by wet scrubbers nos. 37, 38, and 39 (also known as 6-1, 6-2, 6-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-1518)	The requirements of this rule are equivalent to the requirements of OAC rule 3745-17-07(A)(1).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-17-12(I)(29)	The total PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 37, 38, and 39.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

4. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in sections A.II.2. and A.II.3. of these terms and conditions for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

4. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
The total combined PE from emissions units P293 through P296 shall not exceed 7.7 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P293 through P296 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable PE rate: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while emissions units P293 through P296 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid

characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Mold Conveyor (P297)
Activity Description: No. 7 ML Mold Conveyor

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line mold conveyor, including cope/drag mold machine, controlled by wet scrubber no. 46 (also known as wet scrubber no. 9-1) - Formerly, this emissions unit was vented to stacks D-26, D-34, D-58, and D-59; now it is vented to wet scrubber no. 46.	OAC rule 3745-31-05(A)(3) (PTI 13-2790)	Emissions of particulate matter less than or equal to 10 microns in diameter (PM-10) shall not exceed 2.7 lbs/hr. Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 5 % opacity, at any time. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-12(I)(28). See section A.I.2.a.
	OAC rule 3745-17-12(I)(28)	PE from this emissions unit shall not exceed 3.2 lbs/hr. See section A.I.2.b.
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the

limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubber no. 46.

2.b This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The total operating hours in any year for mold line number 7 shall not exceed 3,840 hours based on a rolling, 365-day summation.

3. The pressure drop across the scrubber serving this emissions unit shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

4. The scrubber water pump motor amperage shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions (and for the total combined operating hours for such lines).

2. The permittee shall maintain daily records of the operating hours for mold line number 7 and the updated 365-day, rolling summation of hours of operation for mold line number 7.

3. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water pump motor amperage while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated,

operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

The permittee shall collect and record the following information for the scrubber once for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water pump motor amperage.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubber serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.5. are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2790, issued on June 30, 1994. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hours restrictions specified in sections A.II.1. and A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1 and A.IV.2. are as stringent as or more stringent than the reporting requirements contained in PTI 13-2790, issued on June 30, 1994. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, at any time.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation -
PE from this emissions unit shall not exceed 3.2 lbs/hr.

Applicable Compliance Method:

Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). The results of stack testing performed on March 9, 1999 indicate that actual emissions were 1.53 lbs of PE/hr. [No testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible PE limitation in section A.I.1. of these terms and conditions.]

1c. Emission Limitation -
Emissions of PM-10 shall not exceed 2.7 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined using Method 201 of 40 CFR, Part 51, Appendix M. [No testing is specifically required by this permit; however, if

appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than those required by the visible PE limitation in section A.I.1. of these terms and conditions.]

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

.

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Block Casting Shakeout (P298)
Activity Description: No. 7 ML Block Casting Shakeout

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line block casting shakeout, controlled by wet scrubbers nos. 43, 44, and 45 (also known as 8-1, 8-2, and 8-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-2790)	Emissions of particulate matter less than or equal to 10 microns in diameter (PM-10) shall not exceed 1.4 lbs/hr. Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average. 1.7 lbs of PE/hr The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-12(I)(30). See section A.I.2.a.
	OAC rule 3745-17-12(I)(30)	PE from each of wet scrubbers nos. 43, 44, and 45 serving one or more of emissions units P298 through P301 shall not exceed 0.010 grain

	per actual cubic foot of total exhaust gases. See section A.I.2.b.
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 43, 44, and 45.

2.b This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

2.c The exhaust gas flow rate from each of wet scrubbers nos. 43,44, and 45 shall not exceed 42,000 actual cubic feet per minute.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The total operating hours in any year for mold line number 7 shall not exceed 3,840 hours based on a rolling, 365-day summation.

3. The pressure drop across each scrubber serving this emissions unit shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

4. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall maintain daily records of the operating hours for mold line number 7 and the updated 365-day, rolling summation of hours of operation for mold line number 7.

3. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

4. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.5. are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2790, issued on June 30, 1994. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hours restrictions specified in sections A.II.1. and A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1. through A.IV.4. are as stringent as or more stringent than the reporting requirements contained in PTI 13-2790, issued on June 30, 1994. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
1.7 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1c. Emission Limitation -
Emissions of PM-10 shall not exceed 1.4 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined using Method 201 of 40 CFR, Part 51, Appendix M. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1d. Emission Limitation -
PE from each of wet scrubbers nos. 43, 44, and 45, serving one or more of emissions units P298 through P301 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE concentration limitation shall be determined using the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P298 through P301 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE concentration (0.010 gr/dscf from each scrubber serving these emissions units) and, if possible, the hourly PE and PM-10 emission rates for this emissions unit (1.7 lbs/hr and 1.4 lbs/hr, respectively).

The following test methods shall be employed to determine compliance with the allowable PE and PM-10 rates and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A, for PE; and Method 201 of 40 CFR, Part 51, Appendix M, for PM-10. In addition, during each test run, visible emission readings shall be performed for each bahouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Sand Mullor (P299)
Activity Description: No. 7 ML Sand Mullor (New Mullor Added Under PTI # 13-2790)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line sand mullor (new mullor added in the 1994 modification of no. 7 mold line), controlled by wet scrubbers nos. 37, 38, 39, 43, 44, and 45, (also known as 6-1, 6-2, 6-3, 8-1, 8-2, and 8-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-2790)	Emissions of particulate matter less than 10 microns in diameter (PM-10) shall not exceed 0.56 lb/hr. Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average. 0.69 lb of PE/hr The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-12(I)(30). See section A.I.2.a.
	OAC rule 3745-17-12(I)(30)	PE from each of wet scrubbers nos. 37, 38, 39, 43, 44, 45, and 46 serving this emissions unit shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

	See section A.I.2.b.
OAC rule 3745-17-07(A)(1)	The visible emission limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 37, 38, 39, 43, 44, and 45.

2.b This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

2.c The exhaust gas flow rate from each of wet scrubbers nos. 37, 38, and 39 shall not exceed 43,750 actual cubic feet per minute, and the exhaust gas flow rate from each of wet scrubbers nos. 43, 44, and 45 shall not exceed 42,000 actual cubic feet per minute.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The total operating hours in any year for mold line number 7 shall not exceed 3,840 hours based on a rolling, 365-day summation.

3. The pressure drop across each scrubber serving this emissions unit shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

4. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating

hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall maintain daily records of the operating hours for mold line number 7 and the updated 365-day, rolling summation of hours of operation for mold line number 7.

3. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

4. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.5. are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-2790, issued on June 30, 1994. The monitoring and record keeping requirements contained in the above-referenced PTI are

subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hours restrictions specified in sections A.II.1. and A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1. through A.IV.4. are as stringent as or more stringent than the reporting requirements contained in PTI 13-2790, issued on June 30, 1994. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
0.69 lb of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1c. Emission Limitation -
Emissions of PM-10 shall not exceed 0.56 lb/hr.

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined using Method 201 of 40 CFR, Part 51, Appendix M. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1d. Emission Limitation -
PE from each of wet scrubbers nos. 37, 38, 39, 43, 44, and 45 serving one or more of emissions units P298 through P301 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE concentration limitation shall be determined using the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P298 through P301 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE concentration (0.010 gr/dscf from each scrubber serving these emissions units) and, if possible, the hourly PE and PM-10 emission rates for this emissions unit (0.69 lb/hr and 0.56 lb/hr, respectively).

The following test methods shall be employed to determine compliance with the allowable PE and PM-10 rates and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A, for PE; and Method 201 of 40 CFR, Part 51, Subpart M, for PM-10. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative

USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Casting Cooling (P300)
Activity Description: No. 7 ML Casting Cooling

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line casting cooling, controlled by wet scrubbers nos. 43, 44, and 45 (also known as 8-1, 8-2, and 8-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-2790)	Emissions of particulate matter less than or equal to 10 microns in diameter (PM-10) shall not exceed 4.2 lbs/hr. Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average. 5.1 lbs of PE/hr The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-12(I)(30). See section A.I.2.a.
	OAC rule 3745-17-12(I)(30)	PE from each of wet scrubbers nos. 43, 44, and 45 serving one or more of emissions units P298 through P301 shall not exceed 0.010 grain

	per actual cubic foot of total exhaust gases. See section A.I.2.b.
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 43, 44, and 45.

2.b This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

2.c The exhaust gas flow rate from each of wet scrubbers nos. 43, 44, and 45 shall not exceed 42,000 actual cubic feet per minute.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The total operating hours in any year for mold line number 7 shall not exceed 3,840 hours based on a rolling, 365-day summation.

3. The pressure drop across each scrubber serving this emissions unit shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

4. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall maintain daily records of the operating hours for mold line number 7 and the updated 365-day, rolling summation of hours of operation for mold line number 7.

3. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

4. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.5. are as stringent as or more stringent than the

monitoring and record keeping requirements contained in PTI 13-2790, issued on June 30, 1994. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hours restrictions specified in sections A.II.1. and A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1. through A.IV.4. are as stringent as or more stringent than the reporting requirements contained in PTI 13-2790, issued on June 30, 1994. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
5.1 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1c. Emission Limitation -
Emissions of PM-10 shall not exceed 4.2 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined using Method 201 of 40 CFR, Part 51, Appendix M. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1d. Emission Limitation -
PE from each of wet scrubbers nos. 43, 44, and 45 serving one or more of emissions units P298 through P301 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE concentration limitation shall be determined using the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P298 through P301 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE concentration (0.010 gr/dscf from each scrubber serving these emissions units) and, if possible, the hourly PE and PM-10 emission rates for this emissions unit (5.1 lbs/hr and 4.2 lbs/hr, respectively).

The following test methods shall be employed to determine compliance with the allowable PE and PM-10 rates and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A, for PE; and Method 201 of 40 CFR, Part 51, Appendix M, for PM-10. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: No. 7 ML Sand Conveyor and Hopper (P301)
Activity Description: No. 7 ML Sand Conveyor and Hopper

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
no. 7 mold line conveyor equipment and storage hoppers, controlled by wet scrubbers nos. 37, 38, 39, 43, 44, and 45 (also known as 6-1, 6-2, 6-3, 8-1, 8-2, and 8-3, respectively)	OAC rule 3745-31-05(A)(3) (PTI 13-2790)	Emissions of particulate matter less than or equal to 10 microns in diameter (PM-10) shall not exceed 5.6 lbs/hr. Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average. 6.9 lbs of PE/hr The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-12(I)(30). See section A.I.2.a.
	OAC rule 3745-17-12(I)(30)	PE from each of wet scrubbers nos. 37, 38, 39, 43, 44, and 45 serving one or more of emissions units P298 through P301 shall not exceed

	0.010 grain per actual cubic foot of total exhaust gases. See section A.I.2.b.
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 37, 38, 39, 43, 44, and 45.

2.b This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

2.c The exhaust gas flow rate from each of wet scrubbers nos. 37, 38, and 39 shall not exceed 43,750 actual cubic feet per minute, and the exhaust gas flow rate from each of wet scrubbers nos. 43, 44, and 45, shall not exceed 42,000 actual cubic feet per minute.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(d), the total combined operating hours for mold lines numbers 1 through 3 and 7 shall not exceed 64.4 hours during any calendar day.

2. The total operating hours in any year for mold line number 7 shall not exceed 3,840 hours based on a rolling, 365-day summation.

3. The pressure drop across each scrubber serving this emissions unit shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

4. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 15 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of mold lines numbers 1 through 3 and 7 (and for the total combined operating hours for such lines) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall maintain daily records of the operating hours for mold line number 7 and the updated 365-day, rolling summation of hours of operation for mold line number 7.

3. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

4. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

6. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.5. are as stringent as or more stringent than the

monitoring and record keeping requirements contained in PTI 13-2790, issued on June 30, 1994. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hour restrictions specified in sections A.II.1. and A.II.2. of these terms and conditions.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges specified in section A.II. of these terms and conditions:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the wet scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1. through A.IV.4. are as stringent as or more stringent than the reporting requirements contained in PTI 13-2790, issued on June 30, 1994. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
6.9 lbs of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1c. Emission Limitation -
Emissions of PM-10 shall not exceed 5.6 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined using Method 201 of 40 CFR, Part 51, Appendix M. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit for each wet scrubber serving this emissions unit is maintained.

1d. Emission Limitation -
PE from each of wet scrubbers nos. 37, 38, 39, 43, 44, and 45 serving one or more of emissions units P298 through P301 shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE concentration shall be determined using the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P298 through P301 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE concentration (0.010 gr/dscf from each scrubber serving these emissions units) and, if possible, the hourly PE and PM-10 emission rates for this emissions unit (6.9 lbs/hr and 5.6 lbs/hr, respectively).

The following test methods shall be employed to determine compliance with the allowable PE and PM-10 rates and PE concentration: Method 5 of 40 CFR, Part 60, Appendix A, for PE; and Method 201 of 40 CFR, Part 51, Appendix M, for PM-10. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: OSCI-Rocker Barrel Blast (P411)
Activity Description: OSCI-Rocker Barrel Blast

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OSCI-rocker barrel blast, blast load feeder and unload shakeout, controlled by baghouse no. 92 (also known as C unit) - Formerly this emissions unit was also vented to baghouse no. 94 (also known as the pulse flow baghouse).	OAC rule 3745-31-05(A)(3) (PTI 13-1967)	Particulate emissions (PE) from any baghouse serving this emissions unit shall not exceed 0.01 grain per actual cubic foot of total exhaust gases. There shall be no visible PE from any stack serving this emissions unit.
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-12(I)(7)(e)	PE from baghouse no. 94 serving emissions units P411 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (The permittee has completely vented this emissions unit to baghouse no. 92.)

OAC rule 3745-17-12(I)(7)(c)	PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 have now been shut down and P041, P415, and P908 are now also vented to baghouse no. 92.)

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to the baghouse.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 10 inches of water column while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse at all times while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across the baghouse, in inches of water column, once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
There shall be no visible PE from any stack serving this emissions unit.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 22 of 40 CFR, Part 60, Appendix A.

1b. Emission Limitation -
PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.01 grain per actual cubic foot of total exhaust gases and 0.014 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A.

1c. Emission Limitation -
PE from baghouse no. 94 serving emissions units P411 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (The permittee completely has vented this emissions unit to baghouse no. 92.)

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

2. The permittee shall conduct, or have conducted, emission testing for emissions units P029, P030, P032, P033, P035, P036, P040, P041, P050, P411, P415, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of this permit.

The emission testing shall be conducted to determine compliance with the PE concentration limitations for baghouse no. 92.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the PE concentration limitations: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 4.6L (P412)
Activity Description: Core Line 4.6L

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
4.6 L core line (The line consists of three sections identified as the water pump/water jacket, side core, and keycore sections. The water pump/water jacket section includes 5 isocure core machines, core sand mixers, core wash station, and core wash dry oven. The side core section includes 3 isocure core machines, core sand mixers, and core wash dry oven. The keycore section includes 12 isocure core machines, core sand mixers, core conveyors, core wash dry oven, bowl cleaning oven, core blow-off station and core assembly station.)	OAC rule 3745-31-05(A)(3) (PTI 13-2701)	18.2 lbs of volatile organic compounds (VOC) per hour 290.7 lbs of VOC per day 53.1 tons of VOC per year Particulate emissions (PE) shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases from each of stacks D-29, D-30, D-31, D-47, E-21, and E-22 serving wet scrubbers nos. 6, and 35 through 39 respectively. PE shall not exceed 0.0055 grain per actual cubic foot of exhaust gases from baghouse #78 (D-Unit) Total PE shall not exceed 1.4 lbs/hr or 6.3 tons/year. Particulate matter less than 10 microns in diameter (PM-10) shall

		not exceed 1.24 lbs/hr or 5.46 tons/year. There shall be no visible PE from any stack serving this emissions unit with the exception of stacks D-46, D-47, E-21, and E-22. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1). See section A.I.2.c.
WATER PUMP/WATER JACKET SECTION: 5 isocure core machines, controlled by triethylamine (TEA) acid scrubber no. 10C (also known as 4.6 L TEA scrubber - east)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-21-07(G)(2)	None, exempt pursuant to OAC rule 3745-21-07(G)(9)(h). (See section A.I.2.a.)
core sand mixers, controlled by baghouse no. 78 (also known as D unit baghouse)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

core wash station	OAC rule 3745-21-07(G)(2)	This portion of the emissions unit does not employ, apply, evaporate or dry any photochemically reactive material (PRM), or any substance containing such PRM. Therefore, there are no applicable emission limitations from this rule.
indirect heat, natural gas-fired core wash dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(1)	See section A.I.2.b.
SIDE CORE SECTION: 3 isocure core machines, controlled by TEA acid scrubber no. 10C	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-21-07(G)(2)	None, exempt pursuant to OAC rule 3745-21-07(G)(9)(h). (See section A.I.2.a.)
core sand mixers, controlled by wet scrubbers nos. 35 and 36 (also known as 5-2 and 5-3 wet collectors, respectively)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

indirect heat, natural gas-fired core wash dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
KEYCORE SECTION: 12 isocure core machines, controlled by TEA acid scrubbers nos. 10B (also known as 4.6 L TEA scrubber - west) and 10C	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	OAC rule 3745-21-07(G)(2)	None, exempt pursuant to OAC rule 3745-21-07(G)(9)(h). (See section A.I.2.a.)
core sand mixers, controlled by wet scrubbers nos. 35 and 36	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
core blow-off station, controlled by wet scrubbers nos. 37, 38, and 39 (also known as 6-1, 6-2, and 6-3 wet collectors, respectively)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
core conveyors	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limiitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
indirect heat, natural gas-fired core wash dry oven and bowl cleaning oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
core assembly station	There are no applicable rules for this portion of the emissions unit.	none

2. Additional Terms and Conditions

2.a Although OAC rule 3745-21-07(G)(9)(h) specifies an exemption for the use of a phenolic urethane resin binder system in foundry core-making and mold-making operations, the exemption is not yet part of the federally approved SIP. This new exemption was promulgated by Ohio EPA and became effective on June 15, 1999. Ohio EPA has received confirmation from USEPA concerning the acceptability of this exemption, and the permittee has agreed to consider the exemption as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the exemption as a revision to the Ohio SIP for ozone.

2.b Organic compound (OC) emissions from each oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

2.c The allowable PM-10 emission rates were calculated by multiplying the allowable PE rates by a factor of 0.873. This factor was developed by PEI Associates for Ohio EPA State Implementation Plan development.

2.d. Pursuant to the provisions of OAC rule 3745-17-07(C), the permittee is hereby granted the following equivalent visible particulate emission limitations for stacks E-21 and E-22, serving this emissions unit, in lieu of the 20% and 60% opacity limitations as specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).

Except as otherwise provided below and in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee shall not cause or allow the discharge into the ambient air from stacks E-21 and E-22, serving this emissions unit, any visible particulate emissions greater than 57% and 24% opacity, respectively, as a six-minute average.

Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3), the permittee may cause or allow the discharge into the ambient air from stacks E-21 and E-22, serving this emissions unit, visible particulate emissions exceeding 57% opacity, as a six-minute average for stack E-21, and 24% opacity, as a six-minute average for stack E-22, for not more than six consecutive minutes in any sixty minutes, but shall not exceed 63% opacity, as six-minute average, for stack E-21, and 60% opacity, as a six-minute average, for stack E-22, at any time.

II Operational Restrictions

1. The pressure drop across each of scrubbers nos. 10B and 10C shall be continuously maintained within a range of 4 to 6 inches of water column at all times while the emissions unit is in operation.

2. The pressure drop across each of scrubbers nos. 6 and 35 through 39 shall be maintained within a range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water pump motor amperage for each of scrubbers nos. 35 through 39 shall be maintained at or above 15 amps while the emissions unit is in operation.

4. The scrubber water pump motor amperage for scrubber no. 6 shall be maintained at or above 20 amps, at all times while the emissions unit is in operation.

5. The pressure drop across baghouse no. 78 shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

6. The permittee shall maintain the pH of the acid solution in scrubbers nos. 10B and 10C at a pH no greater than 4.0.

7. The permittee shall burn only natural gas or LPG or Propane as backup fuels in the core wash dry ovens and bowl cleaning oven of this emissions unit.

III Monitoring and/or Recordkeeping

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible emissions from baghouse and scrubbers serving this emissions unit and for any visible fugitive emissions escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for each scrubber once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across baghouse no. 78 when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across baghouse no. 78, in inches of water column, once for each day the emissions unit is in operation.

4. The permittee shall collect and record, for each control system, the downtime of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall operate and maintain equipment to monitor the pH of the scrubber liquor for scrubbers nos. 10B and 10C when the emissions unit is in operation. The pH monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pH of the acid solution in scrubbers nos. 10B and 10C, once for each day the emissions unit is in operation.

6. For each day during which the permittee burns a fuel other than natural gas or LPG or Propane as backup fuel in any of the core wash dry ovens or the bowl cleaning oven of this emissions unit, the permittee shall maintain a record to the type and quantity of the fuel burned.

IV Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse and scrubber serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

3. The permittee shall submit quarterly written deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 did not comply with the required range specified in section A.II.3. of these terms and conditions.

4. The permittee shall submit quarterly written deviation (excursion) reports that identify all periods of time during which the conductivity of the acid solution in scrubbers nos. 10B or 10C was not maintained within the required range specified in section A.II.5. of these terms and conditions.

5. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

6. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in any of the core wash dry ovens or bowl cleaning oven of this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V Testing Requirements

1. Compliance with the emission limitations in section A.I. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from stacks D-47, E-21 (57% opacity EVEL) and E-22 (25% opacity EVEL) serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases from each of stacks D-29, D-30, D-31, D-47, E-21 and E-22 serving wet scrubbers nos. 6, and 35 through 39.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A.

1c. Emission Limitation -
There shall be no visible PE from any stack serving this emissions unit with the exceptions of stacks D-46, D-47, E-21, and E-22.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by Method 22 of 40 CFR, Part 60, Appendix A.

1d. Emission Limitations:
PE shall not exceed 1.4 lbs/hr or 6.3 tons/year.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A. Compliance with the above annual PE limitation shall be determined by multiplying the test results (lbs/hr) by the annual number of hours of operation for this emissions unit and dividing by 2,000.

1e. Emission Limitations:
PM-10 shall not exceed 1.24 lbs/hr and 5.46 tons/year.

Applicable Compliance Method:

Compliance with the above hourly PM-10 limitation shall be determined by testing using Method 201 of 40 CFR, Part 51, Appendix M. Compliance with the above annual PM-10 limitation shall be determined by multiplying the test results (lbs/hr) by the annual number of hours of operation and dividing by 2,000.

1f. Emission Limitations:
18.2 lbs of VOC per hour; 290.7 lbs of VOC per day; 53.1 tons of VOC per year

Applicable Compliance Method:
Compliance with the above hourly VOC emission limitation shall be determined by testing using Method 25 or 25A of 40 CFR, Part 60, Appendix A. Compliance with the above daily VOC emission limitation shall be determined by multiplying the test results (lbs/hr) by the daily number of hours of operation for this emissions unit. Compliance with the above annual VOC emission limitation shall be determined by multiplying the test results (lbs/hr) by the annual number of hours of operation for this emissions unit and dividing by 2,000.

1g. Emission Limitation -
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A, or using an appropriate USEPA AP-42 emission factor.

1h. Emission Limitations:
OC emissions from each oven shall not exceed 3 lbs/hr and 15 lbs/day, unless the OC emissions are reduced by at least 85 percent.

Applicable Compliance Method:
Compliance with the above emission limitations shall be determined by testing using Method 25 or 25A of 40 CFR, Part 60, Appendix A. Compliance with the above reduction requirement shall be determined by multiplying the fractional capture efficiency by the fractional control efficiency and multiplying by 100 percent. The capture efficiency shall be determined using Method 204 of 40 CFR, Part 51, Appendix M. The control efficiency shall be determined using the results of testing performed on the inlet and outlet of the control equipment using Method 25 or 25A and the following equation:

control efficiency = [(inlet testing results - outlet testing results)/inlet testing results] x 100 %

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the PE limitation (i.e., 1.4 lbs/hr) for the entire emissions unit, the PE limitation (i.e., 0.01 grain/dry cubic foot of total exhaust gases) for all 20 isocure core machines and core sand mixers (side core and keycore sections only), the VOC emission limitation (i.e., 18.2 lbs/hr) for the entire emissions unit, the OC emission limitation (i.e., 3 lbs/hr) for the three core wash dry ovens and the bowl cleaning oven, and the PM-10 emission limitation (i.e., 1.24 lbs/hr) for the entire emissions unit.

The following test methods shall be employed to determine compliance with the PE, PM-10, and VOC/OC limitations: Method 5 of 40 CFR, Part 60, Appendix A; Method 201 of 40 CFR, Part 51, Appendix M; and Methods 25 or 25A of 40 CFR, Part 60, Appendix A, respectively. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted simultaneously while this emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: NGT (TMEP) Core Line (P414)
Activity Description: NGT (TMEP) Core Line

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
NGT (TMEP) core line (The line consists of three sections identified as the water pump/water jacket/slab, side core, and keycore sections as well as a 50 ton sand bin. The water pump/water jacket/slab section includes 5 isocure core machines, core sand mixers, and core wash dry oven. The side core section includes 3 isocure core machines, core sand mixers, and core wash dry oven. The keycore section includes 12 isocure core machines, core sand mixers, core conveyors, core wash dry oven, bowl cleaning oven, and core assembly station.)	OAC rule 3745-31-05(A)(3) (PTI 13-3094)	The permittee shall employ a wet scrubber to control triethylamine (TEA) emissions from the isocure core machines at 99% overall control efficiency, by weight. Emissions of volatile organic compounds (VOC) shall be limited to 63.7 lbs of VOC/hr from all isocure core machines and all core wash dry ovens combined. Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average. PE from each of stacks D-45, K-11, K-13, and J-62 serving wet scrubber no. 132, baghouse no. 130, baghouse no. 131, and baghouse no. 128, respectively, shall not exceed 0.01 grain/dry standard cubic foot of total exhaust gases.

		0.67 lb of PE/hr, 1.28 tons of PE/year 0.58 lb of particulate matter less than 10 microns in diameter (PM-10)/hr, 1.12 tons of PM10/year See sections A.I.2.b. and A.I.2.d.
WATER PUMP/WATER JACKET/SLAB SECTION:		
5 isocure core machines, controlled by TEA acid scrubber no. 132 (also known as TEMP TEA scrubber)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	None, exempt pursuant to OAC rule 3745-21-07(G)(9)(h). (See section A.I.2.a.)
core sand mixers, controlled by baghouses nos. 130 and 131 (also known as TEMP baghouse - south and TEMP baghouse - north, respectively)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
indirect heat, natural gas-fired core wash dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

SIDE CORE SECTION:

3 isocure core machines, controlled by TEA acid scrubber no. 132 (also known as TEMP TEA scrubber)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	None, exempt pursuant to OAC rule 3745-21-07(G)(9)(h). (See section A.I.2.a.)
core sand mixers, controlled by baghouses nos. 130 and 131	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
indirect heat, natural gas-fired core wash dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

KEYCORE SECTION:

12 isocure core machines, controlled by TEA acid scrubber no. 132 (also known as TEMP TEA scrubber)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the

		limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(2)	None, exempt pursuant to OAC rule 3745-21-07(G)(9)(h). (See section A.I.2.a.)
core sand mixers, controlled by baghouses nos. 130 and 131	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
core conveyors	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
indirect heat, natural gas fired core wash dry oven and bowl cleaning oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).
core assembly station	none	none
50 TON SAND BIN		
50 ton sand bin, controlled by baghouse no. 128 (also known as TMEP 50 ton bin dust collector)	OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than the limitations established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	

The visible PE limitation in this rule is less stringent than the limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Although OAC rule 3745-21-07(G)(9)(h) specifies an exemption for the use of a phenolic urethane resin binder system in foundry core-making and mold-making operations, the exemption is not yet part of the federally approved SIP. This new exemption was promulgated by Ohio EPA and became effective on June 15, 1999. Ohio EPA has received confirmation from USEPA concerning the acceptability of this exemption, and the permittee has agreed to consider the exemption as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the exemption as a revision to the Ohio SIP for ozone.

2.b The allowable PM-10 emission rates were calculated by multiplying the allowable PE rates by a factor of 0.873. This factor was developed by PEI Associates for Ohio EPA State Implementation Plan development.

2.c The permittee shall employ only water-based, non-photochemically reactive core wash in the core wash stations.

2.d Emissions from some portions of this emissions unit are captured and vented to wet scrubber no. 132, baghouse no. 130, and baghouse no. 131, which are served by stacks D-45, K-11, and K-13, respectively. Other emissions from portions of emissions units not listed in this permit are also captured and vented to the above-mentioned control equipment. The hourly PE limitations were developed based on the percentage of air flow contribution of each portion of this emissions unit to each control equipment multiplied by the allowable concentration for each control equipment.

2.e The permittee shall employ procedures for unloading, handling and disposal of the dust collected in the baghouses so that it does not get airborne and does not accumulate underneath the baghouses. Any accumulation of dust under any of the baghouses or on any part of the roof or floor near the baghouses shall be deemed a violation of this condition.

II Operational Restrictions

1. The pressure drop across scrubber no. 132 shall be continuously maintained within a range of 4 to 6 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water flow rate for scrubber no. 132 shall be continuously maintained, at all times while the emissions unit is in operation, within a range that is established during the most recent

emission test that demonstrated that the emissions unit was in compliance. If no range has been established during testing, the manufacturer's written recommendation shall be used until a range is established during the next test that demonstrates that the emissions unit is in compliance.

3. The pressure drop across each of baghouses nos. 128, 130, and 131 shall be maintained within a range of 2 to 4 inches of water column at all times while the emissions unit is in operation.

4. The permittee shall produce no more than 168,860 tons of cores per year, as a rolling, 12-month summation.

5. The permittee shall maintain the conductivity of the acid solution in scrubber no. 132 within a range of 40 to 100 micromhos.

6. The permittee shall burn only natural gas in the core wash dry ovens and bowl cleaning oven of this emissions unit.

III Monitoring and/or Recordkeeping

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any of the stacks solely serving any of the core conveyors of this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 132 and the scrubber water flow rate for scrubber no. 132 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 132 once per shift for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water flow rate, in gallons per minute.

3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each of baghouses nos. 128, 130, and 131 when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s). The permittee shall collect and record the pressure drop across each of baghouses nos. 128, 130, and 131, in inches of water column, once per shift for each day the emissions unit is in operation.

4. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

5. The permittee shall perform checks during all times that dust collected in the hopper of a baghouse is being unloaded or handled, or such unloaded dust is being removed for disposal, for any visible fugitive dust emissions from the unloading area. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

6. The permittee shall operate and maintain equipment to monitor the conductivity of the scrubber liquor for scrubber no. 132 when the emissions unit is in operation. The conductivity monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall collect and record the conductivity of the acid solution in scrubber no. 132, in micromhos, once per shift for each day the emissions unit is in operation.

7. The permittee shall maintain monthly records of the total number of cores produced. The permittee shall also maintain monthly records of the rolling, twelve-month summation of cores produced. This shall be calculated by adding the number of cores produced for the preceding 11 calendar months plus the number of cores produced for the current calendar month.

8. For each day during which the permittee burns a fuel other than natural gas in any of the core wash dry ovens or the bowl cleaning oven of this emissions unit, the permittee shall maintain a record to the type and quantity of the fuel burned.

9. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.8. are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI 13-3094, issued on September 18, 1996 and modified on July 21, 1999. The monitoring and record keeping requirements contained

in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from any of the stacks solely serving any of the core conveyors of this emissions unit and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

2. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for scrubber no. 132, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

3. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the pressure drop across each of baghouses nos. 128, 130, and 131 did not comply with the required ranges specified in section A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

4. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

5. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

6. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the conductivity of the acid solution in scrubber no. 132 was not maintained within the required range specified in section A.II.5. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

7. The permittee shall submit quarterly written reports that (a) identify all days during which any visible emissions were observed from the area where baghouse dust is unloaded, handled, and removed for disposal and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local

air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters.

8. The permittee shall submit written deviation (excursion) reports that identify any monthly record indicating that the annual production restriction (as a rolling, 12-month summation) was exceeded, as well as the corrective actions that were taken to achieve compliance.

9. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in any of the core wash dry ovens or bowl cleaning oven of this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

10. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1. through A.VI.9. are as stringent as or more stringent than the reporting requirements contained in PTI 13-3094, issued on September 18, 1996 and modified on July 21, 1999. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V Testing Requirements

1. Compliance with the emission limitations and the control efficiency limitation in section A.I. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by Method 9 of 40 CFR, Part 60, Appendix A.

1b. Control Requirement:
The permittee shall employ a wet scrubber to control TEA emissions from the isocure core machines at 99% overall control efficiency, by weight.

Applicable Compliance Method:
Compliance with the above control requirement shall be determined by stack testing of the inlet and outlet streams of the scrubber using Method 18 of 40 CFR, Part 60, Appendix A and testing of the capture efficiency using Method 204 of 40 CFR, Part 51, Appendix M. The results shall be used in the following equation:

overall reduction efficiency = control efficiency x capture efficiency

where:

control efficiency = [(inlet TEA emission rate - outlet TEA emission rate) / inlet TEA emission rate] x 100 %.

1c. Emission Limitation -
PE from each of stacks D-45, K-11, K-13, and J-62 serving wet scrubber no. 132, baghouse no. 130, baghouse no. 131, and baghouse no. 128, respectively, shall not exceed 0.01 grain/dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A.

1d. Emission Limitations:
0.67 lb of PE/hr, 1.28 tons of PE/year

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A. Compliance with the above annual PE limitation shall be determined by multiplying the test results (lbs/hr) by the annual number of hours of operation of this emissions unit and dividing by 2,000.

1e. Emission Limitations:
0.58 lb of PM-10/hr, 1.12 tons of PM-10/year

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined by testing using Method 201 of 40 CFR, Part 51, Appendix M. Compliance with the above annual PM-10 limitation shall be determined by multiplying the test results (lbs/hr) by the annual number of hours of operation of this emissions unit and dividing by 2,000.

1f. Emission Limitation -
Emissions of VOC shall be limited to 63.7 lbs of VOC/hr from all isocure core machines and all core wash dry ovens combined.

Applicable Compliance Method:
Compliance with the above hourly VOC emission limitation shall be determined by Method 25 or 25A of 40 CFR, Part 60, Appendix A.

1g. Emission Limitation -
0.020 lb of PE/mmBtu of actual heat input

Applicable Compliance Method:

Compliance with the above PE limitation shall be determined by either testing using Method 5 of 40 CFR, Part 60, Appendix A, or using an appropriate USEPA AP-42 emission factor.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months after issuance of this permit.

The emission testing shall be conducted to determine compliance with the PE limitation (i.e., 0.01 grain/dry standard cubic foot of total exhaust gases) for all 20 isocure core machines and all core sand mixers and the VOC emission limitation (i.e., 63.7 lbs/hr) for the 20 isocure core machines and the 3 core wash dry ovens.

The following test methods shall be employed to determine compliance with the PE and VOC limitations: Method 5 of 40 CFR, Part 60, Appendix A; and Method 25 or 25A of 40 CFR, Part 60, Appendix A, respectively. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or

local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Preblast Operation (P415)
Activity Description: Preblast Operation For Cleaned Castings

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
preblast operation for cleaned castings, controlled by baghouse no. 92 (also known as C unit)	OAC rule 3745-31-05(A)(3) (PTI 13-2993)	Visible particulate emissions (PE) from any stack serving this emissions unit shall not exceed 5 % opacity. There shall be no visible fugitive emissions from this emissions unit. PE from baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 shall not exceed 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 have now been shut down and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.) PE from this emissions unit shall not exceed 0.74 pound/hour. PE from this emissions unit shall not exceed 3.23 tons per year.

	See A.I.2.b. below.
OAC rule 3745-17-11(B)(1)	The PE limitation established in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established by OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to baghouse no. 92.

2.b The 5 % opacity limitation for the baghouse stacks serving this emissions unit shall apply to emissions from the baghouse stacks only at such time as the baghouse is controlling this emissions unit.

II Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within a range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a differential pressure monitor which monitors pressure drop across the baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop, in inches of water column, across the baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly written deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 5 % opacity.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation:
There shall be no visible fugitive emissions from this emissions unit.

Applicable Compliance Method:

Compliance with the above visible emission limitation shall be determined using Method 22 of 40 CFR, Part 60, Appendix A.

1c. Emission Limitation:
PE from baghouse no. 92 serving emissions units P029 through P036, P040, P050, P411 and P415 shall not exceed 0.01 grain of PEper actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A.

1d. Emission Limitation:
PE from this emissions unit shall not exceed 0.74 pound/hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined using Method 5 of 40 CFR, Part 60, Appendix A. If isolation of the emissions from this emissions unit cannot be achieved because of operational restrictions, compliance will be assumed as long as compliance with the PE concentration limit (0.01 grain per actual cubic foot of total exhaust gases) for the baghouse is maintained.

1e. Emission Limitation:
3.23 tons of PE/year from this emissions unit

Applicable Compliance Method:
Compliance with the above annual PE limitation shall be assumed as long as compliance with the hourly PE limitation is maintained (the annual PE limitation was calculated by multiplying the hourly PE limitation by 8,760 and dividing by 2,000).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit and emissions units P029, P032, P033, P035, P036, P040, P041, P050, P411 and P415 (all served by baghouse no. 92) in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the PE concentration limitation (0.01gr of PE/actual cubic foot of total exhaust gases) for emissions units P029, P032, P033, P035, P036, P040, P041, P050, P411 and P415 and, if isolation of this emissions unit is possible, the hourly PE limitation for this emissions unit (0.74 pound of PE/hour).

The following test method shall be employed to determine compliance with the PE concentration limitation and the hourly PE limitation: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using

USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit(s) and the testing procedures provide a valid characterization of the emissions from the emissions unit(s) and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Line 5.0L (P416)
Activity Description: Core Line 5.0L

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
5.0L core line [This line includes 7 isocure core machines, 50-ton sand storage bins (2), sand turbo, sand hopper, 7 core sand mixers, core wash dry oven, wash slusher, conveyors and wash dip tank.]	OAC rule 3745-31-05(A)(3) (PTI #13-3064)	12.20 lbs of volatile organic compounds ("VOC")/hr and 195.1 lbs of VOC/day Visible particulate emissions ("PE") from any stack serving any portion of this emissions unit shall not exceed 5 % opacity. 0.57 lb of PE/hr 1.1 TPY of PE 0.50 lb of particulate matter less than ten microns in diameter ("PM-10")/hr 0.96 TPY of PM-10 See sections A.I.2.b, A.I.2.c, and A.I.2.e.
7 isocure core machines, controlled by triethylamine (TEA) acid scrubber no. 10A (also known as #7 and 5.0 L TEA scrubber)	OAC rule 3745-31-05(A)(3) (PTI 13-3064)	All of the emissions from the core machines shall be vented to a scrubber that reduces TEA

		emissions by at least 99 %, by weight.
	OAC rule 3745-17-11(B)(1)	The hourly PE limitation established in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-21-07(G)(9)(h)	See section A.I.2.a.
indirect heat, natural gas-fired core wash dry oven	OAC rule 3745-17-10(B)(1)	0.020 lb of PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
primary sand turbos, controlled by rod bed wet scrubber no. 4 (also known as #4 CR scrubber)	OAC rule 3745-31-05(A)(3) (PTI #13-3064)	PE from the stack serving wet scrubber no. 4, which serves this portion of the emissions unit and portions of emissions units nos. P056, P106, P414, and P912, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.
	OAC rule 3745-17-11(B)(1)	The hourly PE limitation established in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).

50-ton sand storage bins (2), secondary sand turbo, 7 core sand mixers, controlled by baghouse no. 133 [also known as #2 CL baghouse (south)]	OAC rule 3745-31-05(A)(3) (PTI #13-3064)	. PE from the stack serving baghouse no. 133, which serves this portion of the emissions unit, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.
	OAC rule 3745-17-11(B)(1)	The hourly PE limitation established in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
drill station, controlled by baghouse no. 134 [also known as #2 CL baghouse (north)]	OAC rule 3745-31-05(A)(3) (PTI #13-3064)	PE from the stack serving baghouse no. 134, which serves this portion of the emissions unit, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.
	OAC rule 3745-17-11(B)(1)	The hourly PE limitation established in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
wash slusher, wash dip tank, conveyors	OAC rule 3745-31-05(A)(3) (PTI #13-3064)	The permittee shall employ only water-based core wash that contains no organic compounds in this portion of the emissions unit.
	OAC rule 3745-17-11(B)(1)	The hourly PE limitation established in this rule is less stringent than that established

	OAC rule 3745-17-07(A)(1)	pursuant to OAC rule 3745-31-05(A)(3).
sand hopper, controlled by baghouses nos. 133 and 134	OAC rule 3745-31-05(A)(3) (PTI #13-3064)	The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)(1)	PE from the stack serving baghouse no. 133, which serves this portion of the emissions unit, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases. PE from the stack serving baghouse no. 134, which serves this portion of the emissions unit, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	The hourly PE limitation established in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3). The visible PE limitation in this rule is less stringent than that established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Although OAC rule 3745-21-07(G)(9)(h) specifies an exemption for the use of a phenolic urethane resin binder system in foundry core-making and mold-making operations, the exemption is not yet part of the federally approved SIP. This new exemption was promulgated by Ohio EPA and became effective on June 15, 1999. Ohio EPA has received confirmation from USEPA concerning the acceptability of this exemption, and the permittee has agreed to consider the exemption as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of the exemption as a revision to the Ohio SIP for ozone.

2.b The allowable PM-10 emission rates were calculated by multiplying the PE rates by a factor of 0.873. This factor was developed by PEI Associates for Ohio EPA State Implementation Plan development.

2.c All PE from the 50-ton sand bins (2), secondary sand turbos, and 7 Klein sand mixers shall be vented to baghouse no. 133 and all emissions from the drill station shall be vented to baghouse no. 134. All PE from the sand hopper shall be vented to baghouses nos. 133 and 134.

2.d The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not get airborne and does not accumulate underneath the baghouses. Any accumulation of dust under any of the baghouses or on any part of the roof or floor near the baghouses shall be deemed a violation of this condition.

2.e The hourly PE limitations were calculated based upon the air flow contribution percentage of each portion of the emissions unit to each scrubber/baghouse and the allowable concentration for PE for each scrubber/baghouse.

II Operational Restrictions

1. The pressure drop across scrubber no. 10A shall be continuously maintained within the range of 4 to 6 inches of water column at all times while the emissions unit is in operation.

2. The pressure drop across scrubber no. 4 shall be continuously maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

3. The scrubber water flow rate for scrubber no. 4 shall be continuously maintained, at all times while the emissions unit is in operation, within a range that is established during the most recent emission test that demonstrated that the emissions unit was in compliance. If no range has been established during testing, the manufacturer's written recommendation shall be used until a range is established during the next test that demonstrates that the emissions unit is in compliance.

4. The permittee shall operate and maintain the conductivity of the acid solution in scrubber no. 10A within a range of 40 to 100 micromhos.

5. The pressure drop across each baghouse shall be maintained within a range of 2 to 4 inches of water column at all times while the emissions unit is in operation.

6. The weight of cores produced shall not exceed any of the following:

   8.41 tons of cores/hour;
   135 tons of cores/day; and
   32,300 tons of cores per year, as a rolling, 12-month summation.

The core production restrictions may be adjusted by Ohio EPA if VOC contents of binder materials or control efficiencies of control equipment are improved such that the maximum hourly and annual emission limitations are not exceeded.

7. The permittee shall burn only natural gas in this emissions unit.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 10A while the emissions unit is in operation. The monitoring device and any recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall monitor and record the pressure drop across scrubber no. 10A, in inches of water column, once per shift for each day the emissions unit is in operation.

2. The permittee shall maintain the following records for all core-making machines of this emissions unit for each day this emissions unit is in operation:

   a. the amount of sand mixed, in pounds;

   b. the maximum number of hours that one or more machines operated during the day; and

   c. the average hourly sand usage rate (a/b), in pounds/hour.

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from the stacks serving the conveyor portion(s) of this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 4 and the scrubber water flow rate for scrubber no. 4 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information for scrubber no. 4 once per shift for each day the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water column; and

b. the scrubber water flow rate, in gallons per minute.

5. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse when the emissions unit is in operation. The pressure drop monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s). The permittee shall collect and record the pressure drop across each baghouse once per shift for each day the emissions unit is in operation.

6. The permittee shall operate and maintain equipment to monitor the conductivity of scrubber no. 10A when the emissions unit is in operation. The conductivity monitor shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions, operating manual(s). The permittee shall collect and record the conductivity of the acid solution in scrubber no. 10A once per shift for each day the emissions unit is in operation.

7. The permittee shall maintain daily records of the following for this emissions unit:

a. the total weight of cores produced, in tons;

b. the total number of hours of operation of one or more core-making machines; and

c. the average weight of cores produced per hour (a/b), in tons per hour.

8. The permittee shall maintain monthly records of the total number of cores produced. The permittee shall also maintain monthly records of the rolling, 12-month summation of cores produced. This shall be calculated by adding the number of cores produced for the preceding 11 calendar months plus the number of cores produced for the current calendar month.

9. The permittee shall perform checks during all times that dust collected in the hopper of a baghouse is being unloaded or such unloaded dust is being removed for disposal, for any visible emissions of fugitive dust from the unloading area. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;
b. the total duration of any abnormal visible emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

10. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

11. For each day during which the permittee burns a fuel other than natural gas in the core wash dry oven of this emissions unit, the permittee shall maintain a record of the type and quantity of the fuel burned in this oven.

12. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the monitoring and record keeping requirements specified in sections A.III.1. through A.III.11. are as stringent as or more stringent than the monitoring and record keeping requirements contained in PTI # 13-3064, issued on November 14, 1996. The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV Reporting Requirements

1. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the conductivity of the acid solution in scrubber no. 10A was not maintained within the required range specified in section A.II.4. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the pressure drop across scrubber no. 10A was not maintained within the required range specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from the stacks serving the conveyor portion(s) of this emissions unit and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters for scrubber no. 4 were not maintained within the required ranges specified in sections A.II.2. and A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance:

    a. the static pressure drop across the scrubber; and

    b. the scrubber water flow rate.

5. The permittee shall submit written deviation (excursion) reports that identify all periods of time during which the pressure drop across either baghouse did not comply with the required range specified in section A.II.5. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

6. The permittee shall submit written deviation (excursion) reports that identify any daily record indicating that either the hourly or daily core production restrictions specified in section A.II.6. of these terms and conditions were exceeded.

7. The permittee shall submit written deviation (excursion) reports that identify any monthly record indicating that the annual core production restriction (as a 12-month, rolling summation) was exceeded.

8. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE were observed from the area where baghouse dust is unloaded and (b) describe any corrective actions taken to eliminate the visible PE. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

9. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

10. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the core wash dry oven of this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

11. The deviation (excursion) reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c., except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

12. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the reporting requirements specified in sections A.IV.1. through A.VI.11. are as stringent as or more stringent than the reporting requirements contained in PTI # 13-3064, issued on November 14, 1996. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V Testing Requirements

1. Compliance with the emission limitations and control requirements in section A.I. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving any portion of this emissions unit shall not exceed 5 % opacity.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined using Method 9 of 40 CFR, Part 60, Appendix A, except that the data reduction procedures shall not be used.

1b. Emission Limitation:
0.020 lb of PE/mm Btu of actual heat input

Applicable Compliance Method:
For the use of natural gas, and except as provided below, compliance with the above PE limitation shall be determined by either multiplying the maximum hourly gas burning capacity of the emissions unit (mmcf/hr) by the AP-42 emission factor for natural gas (1.9 lbs of PE/mmcf), and dividing by the maximum hourly heat input capacity of the emissions unit (14.2 mmBtu/hr) or by testing using the method specified in OAC rule 3745-17-03(B)(9). The above PE emission factor was obtained from AP-42, 5th Edition (revised 7/98), Chapter 1.4, Table 1.4-2.

1c. Emission Limitations:
12.20 lbs of VOC/hr and 195.1 lbs of VOC/day

Applicable Compliance Method:
Compliance with the above hourly and daily VOC emission limitations shall be determined by either multiplying an emission factor of 1.45 pounds of VOC per ton of sand employed by the tons of sand employed per hour and per day, respectively, as obtained from the record keeping requirements specified in section A.III.2. of these terms and conditions or by testing using Method 25 of 40 CFR, Part 60, Appendix A.

1d. Emission Limitation -
0.57 lb of PE/hr

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A.

1e. Emission Limitation -
1.1 TPY of PE

Applicable Compliance Method:
Compliance with the above annual PE limitation shall be determined by multiplying the stack test results (lbs/hr) by the number of hours of operation for the calendar year and dividing by 2,000 lbs/ton.

1f. Emission Limitation -
0.50 lb of PM-10/hr

Applicable Compliance Method:
Compliance with the above hourly PM-10 limitation shall be determined by testing using Method 201 of 40 CFR, Part 51, Appendix M.

1g. Emission Limitation -
0.96 TPY of PM-10

Applicable Compliance Method:
Compliance with the above annual PM-10 limitation shall be determined by multiplying the stack test results (lbs/hr) by the number of hours of operation for the calendar year and dividing by 2,000 lbs/ton.

1h. Emission Limitation:
PE from the stack serving wet scrubber no. 4, which serves this portion of the emissions unit and portions of emissions units nos. P056, P106, P414, and P912, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A.

1i. Emission Limitation -
PE from the stack serving baghouse no. 133, which serves this portion of the emissions unit, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A.

1j. Emission Limitation -
PE from the stack serving baghouse no. 134, which serves this portion of the emissions unit, shall not exceed 0.01 grain per dry standard cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by testing using Method 5 of 40 CFR, Part 60, Appendix A.

1k. Control Requirement:
All of the emissions from the core machines shall be vented to a scrubber that reduces TEA emissions by at least 99 %, by weight.

Applicable Compliance Method:
Compliance with the above control requirement shall be determined by stack testing of the inlet and outlet streams of the scrubber using Method 18 of 40 CFR, Part 60, Appendix A and testing of the capture efficiency using Method 204 of 40 CFR, Part 51, Appendix M. The results shall be used in the following equation:

overall reduction efficiency = control efficiency x capture efficiency

where:

control efficiency = [(inlet TEA emission rate - outlet TEA emission rate) / inlet TEA emission rate] x 100 %.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit and emissions units P056, P106, P414, and P912 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after the issuance of this permit.

The emission testing shall be conducted to determine compliance with the PE concentration (0.01 grain of PE per dry standard cubic foot of total exhaust gases) for the stack serving the primary turbos (scrubber no. 4).

The following test methods shall be employed to determine compliance with the allowable PE concentration: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 1 (P702)
Activity Description: Core Making Machine # 1 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P702 - cold cure core-making machine # 1 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).
	OAC rule 3745-21-07(G)(2)	Organic compound (OC) emissions, including TEA emissions, shall not exceed the

following on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition, the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm) of exhaust air flow through the scrubber;
1.286 lbs of PE/hr;
3.981 tons of PE/yr; and
5 percent opacity, as a six-minute average

OC emissions, including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year; and

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;
32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units:

1. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

2. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

   a. the pH of the scrubber liquor, in Standard Units; and

   b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

   a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

   b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

   c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

   d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed, in tons;

   e. the amount of sand employed in each emissions unit, in tons;

   f. the total amount of sand employed in all emissions units, in tons;

   g. the total number of core packages produced;

   h. the number of hours when one or more core-making machines were in operation;

   i. the hours of operation of each core-making machine;

   j. the average sand usage rate for each core-making machine (e/i);

   k. the total average hourly sand usage rate for all core-making machines (f/h); and

   l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

   a. the number of core packages produced;

   b. the amount of sand employed, in tons; and

   c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

   a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

   b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

   c. all exceedances of the rolling, 12-month restriction for annual sand usage;

   d. all exceedances of the hourly sand usage restriction for emissions unit P702; and

   e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:
Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor

developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P702 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the emissions unit was in compliance or another emission factor that is satisfactory to the appropriate Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

1f. Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources." Compliance with this opacity limitation shall be assumed if compliance is maintained with the 5 percent opacity limitation for the scrubber stack serving emissions units P702 through P711.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and
Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The

test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P702 - cold cure core-making machine # 1 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P702) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Triethylamine
TLV (mg/m3): 4.1
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
MAGLC (ug/m3): 127

Pollutant: Naphtalene
TLV (mg/m3): 52
Maximum Hourly Emission Rate (lbs/hr): 1.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
MAGLC (ug/m3): 1,612

Pollutant: Phenol
TLV (mg/m3): 19
Maximum Hourly Emission Rate (lbs/hr): 4.33
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
MAGLC (ug/m3): 589

Pollutant: Xylene
TLV (mg/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
MAGLC (ug/m3): 13,457

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 2 (P703)
Activity Description: Core Making Machine # 2 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P703 - cold cure core-making machine # 2 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm);
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour;
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units:

   The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by both the appropriate Ohio EPA District Office or local air agency.

2. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

   a. the pH of the scrubber liquor in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed, in tons;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

a. the number of core packages produced;

b. the amount of sand employed, in tons;and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons:

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

c. all exceedances of the rolling, 12-month restriction for annual sand usage;

d. all exceedances of the hourly sand usage restriction for emissions unit P703; and

e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for each of emission units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:
Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P703 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the emissions unit was in compliance or another emission factor that is satisfactory to the appropriate

Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

1f. Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources." Compliance with this opacity limitation shall be assumed if compliance is maintained with the 5 percent opacity limitation for the scrubber stack serving emissions units P702 through P711.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Operating Restrictions:
The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation, and the hourly sand usage for emissions P702 through P711 shall not exceed 32.75 tons of sand/hour.

Applicable Compliance Method:
Compliance with the hourly and annual sand usage restrictions for emissions units P702 through P711 shall be determined using the records collected pursuant to sections A.III.2. and A.III.3, respectively.

2e. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2f. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and
Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P703 - cold cure core-making machine # 2 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P703) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum

ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Triethylamine
TLV (mg/m3): 4.1
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
MAGLC (ug/m3): 127

Pollutant: Naphtalene
TLV (mg/m3): 52
Maximum Hourly Emission Rate (lbs/hr): 1.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
MAGLC (ug/m3): 1,612

Pollutant: Phenol
TLV (mg/m3): 19
Maximum Hourly Emission Rate (lbs/hr): 4.33
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
MAGLC (ug/m3): 589

Pollutant: Xylene
TLV (mg/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
MAGLC (ug/m3): 13,457

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 3 (P704)
Activity Description: Core Making Machine # 3 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P704 - cold cure core-making machine # 3 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions unit P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition, the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emission are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm) of exhaust air through the scrubber;
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units:

2. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

3. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

a. the pH of the scrubber liquor, in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed, in tons;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

a. the number of cores packages produced;

b. the amount of sand employed, in tons; and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

c. all exceedances of the rolling, 12-month restriction for annual sand usage;

d. all exceedances of the hourly sand usage restriction for emissions unit P704; and

e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:
Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P704 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the

emissions unit was in compliance or another emission factor that is satisfactory to the appropriate Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

1f. Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources." Compliance with this opacity limitation shall be assumed if compliance is maintained with the 5 percent opacity limitation for the scrubber stack serving emissions units P702 through P711.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in

tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and

Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P704 - cold cure core-making machine # 3 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P704) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Triethylamine
   TLV (mg/m3): 4.1
   Maximum Hourly Emission Rate (lbs/hr): 0.83
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
   MAGLC (ug/m3): 127

   Pollutant: Naphtalene
   TLV (mg/m3): 52
   Maximum Hourly Emission Rate (lbs/hr): 1.86
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
   MAGLC (ug/m3): 1,612

   Pollutant: Phenol
   TLV (mg/m3): 19
   Maximum Hourly Emission Rate (lbs/hr): 4.33
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
   MAGLC (ug/m3): 589

   Pollutant: Xylene
   TLV (mg/m3): 434
   Maximum Hourly Emission Rate (lbs/hr): 2.27
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
   MAGLC (ug/m3): 13,457

   Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound

with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 4 (P705)
Activity Description: Core Making Machine # 4 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P705 - cold cure core-making machine # 4 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition, the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm) of exhaust air through the scrubber;
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units:

2. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

3. The maximum annual sand usage for emissions units P702 through P711shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

a. the pH of the scrubber liquor, in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for the following emissions units P702 through P711:

a. the number of core packages produced;

b. the amount of sand employed, in tons; and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

c. all exceedances of the rolling, 12-month restriction for annual sand usage;

d. all exceedances of the hourly sand usage restriction for emissions unit P705; and

e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:
Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P705 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the

emissions unit was in compliance or another emission factor that is satisfactory to the appropriate Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

1f. Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources." Compliance with this opacity limitation shall be assumed if compliance is maintained with the 5 percent opacity limitation for the scrubber stack serving emissions units P702 through P711.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in

tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and

Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P705 - cold cure core-making machine # 4 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P705) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Triethylamine
   TLV (mg/m3): 4.1
   Maximum Hourly Emission Rate (lbs/hr): 0.83
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
   MAGLC (ug/m3): 127

   Pollutant: Naphtalene
   TLV (mg/m3): 52
   Maximum Hourly Emission Rate (lbs/hr): 1.86
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
   MAGLC (ug/m3): 1,612

   Pollutant: Phenol
   TLV (mg/m3): 19
   Maximum Hourly Emission Rate (lbs/hr): 4.33
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
   MAGLC (ug/m3): 589

   Pollutant: Xylene
   TLV (mg/m3): 434
   Maximum Hourly Emission Rate (lbs/hr): 2.27
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
   MAGLC (ug/m3): 13,457

   Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

   a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound

with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 6 (P707)
Activity Description: Core Making Machine # 6 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P707 - cold cure core-making machine # 6 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition, the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm) of exhaust air through the scrubber;
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units:

2. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

3. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

   a. the pH of the scrubber liquor, in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed, in tons;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

a. the number of core packages produced;

b. the amount of sand employed, in tons; and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

   a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

   b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

   c. all exceedances of the rolling, 12-month restriction for annual sand usage;

   d. all exceedances of the hourly sand usage restriction for emissions unit P707; and

   e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitations, and operational restriction for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:

Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P707 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the emissions unit was in compliance or another emission factor that is satisfactory to the appropriate

Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:

0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and
Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P707 - cold cure core-making machine # 6 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P707) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum

ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Triethylamine
TLV (mg/m3): 4.1
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
MAGLC (ug/m3): 127

Pollutant: Naphtalene
TLV (mg/m3): 52
Maximum Hourly Emission Rate (lbs/hr): 1.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
MAGLC (ug/m3): 1,612

Pollutant: Phenol
TLV (mg/m3): 19
Maximum Hourly Emission Rate (lbs/hr): 4.33
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
MAGLC (ug/m3): 589

Pollutant: Xylene
TLV (mg/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
MAGLC (ug/m3): 13,457

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 7 (P708)
Activity Description: Core Making Machine # 7 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P708 - cold cure core-making machine # 7 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

1. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

2. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm);
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units.

2. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

3. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

   a. the pH of the scrubber liquor, in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed, in tons;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

a. the number of core packages produced;

b. the amount of sand employed, in tons; and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions unit P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

c. all exceedances of the rolling, 12-month restriction for annual sand usage;

d. all exceedances of the hourly sand usage restriction for emissions unit P708; and

e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restriction for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:

Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P708 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the emissions unit was in compliance or another emission factor that is satisfactory to the appropriate Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the

amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and
Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P708 - cold cure core-making machine # 7 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P708) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum

ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Triethylamine
TLV (mg/m3): 4.1
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
MAGLC (ug/m3): 127

Pollutant: Naphtalene
TLV (mg/m3): 52
Maximum Hourly Emission Rate (lbs/hr): 1.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
MAGLC (ug/m3): 1,612

Pollutant: Phenol
TLV (mg/m3): 19
Maximum Hourly Emission Rate (lbs/hr): 4.33
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
MAGLC (ug/m3): 589

Pollutant: Xylene
TLV (mg/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
MAGLC (ug/m3): 13,457

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 8 (P709)
Activity Description: Core Making Machine # 8 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P709 - cold cure core-making machine # 8 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition, the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm) of exhaust air through the scrubber;
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year;

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units.

2. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

3. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

   a. the pH of the scrubber liquor, in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed, in tons;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

a. the number of core packages produced;

b. the amount of sand employed, in tons; and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

   a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

   b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

   c. all exceedances of the rolling, 12-month restriction for annual sand usage;

   d. all exceedances of the hourly sand usage restriction for emissions unit P709; and

   e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restriction for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:

Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P709 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the emissions unit was in compliance or another emission factor that is satisfactory to the appropriate

Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

1f. Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources." Compliance with this opacity limitation shall be assumed if compliance is maintained with the 5 percent opacity limitation for the scrubber stack serving emissions units P702 through P711.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and
Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P709 - cold cure core-making machine # 8 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P709) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and

the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Triethylamine
TLV (mg/m3): 4.1
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
MAGLC (ug/m3): 127

Pollutant: Naphtalene
TLV (mg/m3): 52
Maximum Hourly Emission Rate (lbs/hr): 1.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
MAGLC (ug/m3): 1,612

Pollutant: Phenol
TLV (mg/m3): 19
Maximum Hourly Emission Rate (lbs/hr): 4.33
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
MAGLC (ug/m3): 589

Pollutant: Xylene
TLV (mg/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
MAGLC (ug/m3): 13,457

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 9 (P710)
Activity Description: Core Making Machine # 9 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P710 - cold cure core-making machine # 9 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition, the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm) of exhaust air through the scrubber;
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units:

2. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

5. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

   a. the pH of the scrubber liquor, in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

a. the number of core packages produced;

b. the amount of sand employed, in tons; and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

   a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

   b. all periods of time during which the scrubber liquor recirculation flow rat, did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

   c. all exceedances of the rolling, 12-month restriction for annual sand usage;

   d. all exceedances of the hourly sand usage restriction for emissions unit P710; and

   e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restriction for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:

Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P710 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the emissions unit was in compliance or another emission factor that is satisfactory to the appropriate Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the

amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

1f. Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources." Compliance with this opacity limitation shall be assumed if compliance is maintained with the 5 percent opacity limitation for the scrubber stack serving emissions units P702 through P711.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and
Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P710 - cold cure core-making machine # 9 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P710) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum

ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Triethylamine
TLV (mg/m3): 4.1
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
MAGLC (ug/m3): 127

Pollutant: Naphtalene
TLV (mg/m3): 52
Maximum Hourly Emission Rate (lbs/hr): 1.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
MAGLC (ug/m3): 1,612

Pollutant: Phenol
TLV (mg/m3): 19
Maximum Hourly Emission Rate (lbs/hr): 4.33
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
MAGLC (ug/m3): 589

Pollutant: Xylene
TLV (mg/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
MAGLC (ug/m3): 13,457

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Making Machine # 10 (P711)
Activity Description: Core Making Machine # 10 at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P711 - cold cure core-making machine # 10 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Particulate emissions (PE) shall not exceed the following limitations: 0.005 grain of PE per actual cubic foot of exhaust gases (gr/acf); 0.129 pound of PE/hour; and 0.398 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. 0.16 pound of TEA emissions/hour See A.I.2.a. and A.I.2.b.
	OAC rule 3745-21-07(G)(2)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).

Organic compound (OC) emissions, including TEA emissions, shall not exceed the following limitations on any day that any photochemically reactive material is employed:

8 pounds of OC emissions/hour and 40 pounds of OC emissions/day.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. the use of an acid packed tower scrubber employing a minimum of 99% control efficiency, by weight, for catalyst emissions; and

ii. usage of no more than 12,449.4 pounds of sand/hour.

2.b The BAT determination for core-making machines # 1 through # 10 (emissions units P702 through P711) includes the use of an acid packed tower scrubber employing a minimum of 99 percent control efficiency, by weight, for catalyst emissions.

In addition, the combined limits for core-making machines # 1 through # 10 (emissions units P702 through P711) vented to a common acid packed tower scrubber to control catalyst emissions are as follows:

0.005 gr of PE/acf;
40,500 actual cubic feet per minute (acfm) of exhaust air through the scrubber;
1.286 pounds of PE/hour;
3.981 tons of PE/year; and
5 percent opacity, as a six-minute average

OC emissions including TEA emissions:
57.834 tons of OC emissions/year

TEA emissions:
1.134 tons of TEA emissions/year

maximum usages of no more than:
131 core packages/hour;
360,000 core packages/year;

32.75 tons of sand/hour; and
90,000 tons of sand/year, as a rolling, 12-month summation.

II Operational Restrictions

1. emissions unit P702: cold cure core-making machine # 1
emissions unit P703: cold cure core-making machine # 2
emissions unit P704: cold cure core-making machine # 3
emissions unit P705: cold cure core-making machine # 4
emissions unit P706: cold cure core-making machine # 5 (not installed)
emissions unit P707: cold cure core-making machine # 6
emissions unit P708: cold cure core-making machine # 7
emissions unit P709: cold cure core-making machine # 8
emissions unit P710: cold cure core-making machine # 9
emissions unit P711: cold cure core-making machine #10

   The above emissions units P702 through P711 are similar and emissions from these units are vented to a common packed tower scrubber using sulfuric acid to control the TEA emissions. The following terms and conditions apply to all of these emissions units:

2. The pH and the recirculation rate of the scrubber liquor shall be maintained at the following levels for the scrubber serving emissions units P702 through P711:

   a. the scrubber liquor pH shall be continuously maintained below 4.5 Standard Units while any core machine is in operation; and

   b. the scrubber liquor recirculation rate, in gallons per minute, shall be continuously maintained at a rate not less than the rate established during the most recent emission test that demonstrated that emissions units P702 through P711 were in compliance at all times while any core machine was in operation. The permittee may employ an alternative method (i.e., a fan/pump amperage indicator system) to show compliance with this term upon approval by the appropriate Ohio EPA District Office or local air agency.

3. The maximum annual sand usage for emissions units P702 through P711 shall not exceed 90,000 tons, based upon a rolling, 12-month summation of the sand usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain a monitor, automatic controller, and recorder to continuously monitor and record on a chart, or use an alternative continuous monitoring, controlling and recording method with prior approval from the appropriate Ohio EPA District Office or local air agency, the following while any core-making machine is in operation:

   a. the pH of the scrubber liquor, in Standard Units; and

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency.

These monitors, controllers and recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

2. The permittee shall collect and record the following information, and information required to calculate the following information, each day, for emissions units P702 through P711:

a. the pH of the scrubber liquor, in Standard Units, once at the beginning of each shift, on a daily basis;

b. the scrubber liquor recirculation flow rate, in gallons per minute, or alternative parameter with prior approval from the appropriate Ohio EPA District Office or local air agency, once at the beginning of each shift, on a daily basis;

c. a log or record of operating times for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

d. the amount of sand employed on each day in each emissions unit where any photochemically reactive material is employed, in tons;

e. the amount of sand employed in each emissions unit, in tons;

f. the total amount of sand employed in all emissions units, in tons;

g. the total number of core packages produced;

h. the number of hours when one or more core-making machines were in operation;

i. the hours of operation of each core-making machine;

j. the average sand usage rate for each core-making machine (e/i);

k. the total average hourly sand usage rate for all core-making machines (f/h); and

l. the total average hourly core package production rate for all core-making machines (g/h).

3. The permittee shall maintain monthly records of the following information for emissions units P702 through P711:

a. the number of core packages produced;

b. the amount of sand employed, in tons; and

c. the rolling, 12-month summation of the amount of sand employed, in tons.

4. The permittee shall collect and record the total PE and OC and TEA emissions from emissions units P702 through P711 for each calendar year, in tons.

5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all periods of time during which the scrubber liquor pH did not comply with the pH requirements specified above;

b. all periods of time during which the scrubber liquor recirculation flow rate did not comply with the flow rate requirements established during the most recent emission test that demonstrated that these emissions units were in compliance, while any of the core-making machines were in operation;

c. all exceedances of the rolling, 12-month restriction for annual sand usage;

d. all exceedances of the hourly sand usage restriction for emissions unit P711; and

e. all exceedances of the hourly core package production and sand usage restrictions for emissions units P702 through P711.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports

shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports that identify the following for each calendar year for emissions units P702 through P711:

   a. the total number of core packages produced;

   b. the total sand usage rate, in tons; and

   c. the total annual PE, OC emissions, and TEA emissions, in tons.

   These reports shall be submitted by January 31 of each year for the previous calendar year.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection system), control device, and monitoring equipment when the emissions unit was in operation. The reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations, control efficiency limitation, and operational restriction for each of emissions units P702 through P711 shall be determined in accordance with the following methods:

1a. Emission Limitation:
8 pounds of OC emissions/hour, when any employing photochemically reactive material

Applicable Compliance Methods:
Compliance with the hourly OC emission limitation shall be determined either by (1) emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, or by (2) using the sum of products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand (12,449.4 pounds/hour) employed in this emissions unit, in pounds of sand/hour, that may be employed per hour when employing any photochemically reactive material. Also, compliance with the hourly OC emission limitation is ensured if compliance is maintained with the hourly sand usage limitation.

1b. Emission Limitation:
40 pounds of OC emissions/day, when any employing photochemically reactive material

Applicable Emission Limitations:

Compliance with the daily OC emission limitation shall be determined by using the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, in pound of OC emissions per ton of sand, times the maximum weight of sand, in pounds of sand/day, that may be employed per day in this emissions unit when employing any photochemically reactive material.

1c. Emission Limitation -
0.16 pound of TEA emissions/hour and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
Compliance with the hourly TEA emission limitation shall be determined either by (1) emission testing in accordance with Method 18, 40 CFR, Part 60, Appendix A, or by (2) using the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions unit was in compliance, times the maximum weight of sand that may be employed per hour (12,449.4 pounds) in this emissions unit. Also, compliance with the hourly TEA emission limitation is ensured if compliance is maintained with the hourly sand usage limitation. Compliance with the TEA emission control efficiency limitation for this emissions unit shall be assumed if compliance is demonstrated with the 99 percent TEA emission control efficiency for the scrubber serving emissions units P702 through P711.

1d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 0.129 pound of PE/hour

Applicable Compliance Method:
Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the scrubber exhaust in accordance with Method 5, 40 CFR, Part 60, Appendix A. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the scrubber is less than or equal to 0.005 gr of PE/acf. Compliance with the pound/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P711 to the scrubber and by 0.00857.

1e. Emission Limitation -
0.398 ton of PE/year

Applicable Compliance Method:
Compliance with the annual ton of PE limitation shall be determined by the product of an emission factor developed from the most recent emission test that demonstrated that the emissions unit was in compliance or another emission factor that is satisfactory to the appropriate Ohio EPA District Office or local air agency, in pound of PE/ton of sand employed, times the

amount of sand employed in this emissions unit during the calendar year, in tons of sand/year, times 1 ton/2,000 pounds.

1f. Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources." Compliance with this opacity limitation shall be assumed if compliance is maintained with the 5 percent opacity limitation for the scrubber stack serving emissions units P702 through P711.

2. Compliance with the emission limitations, control efficiency limitation, and operational restrictions for combined emissions units P702 through P711 shall be determined in accordance with the following methods:

2a. Emission Limitation:
57.834 tons of OC emissions (including TEA emissions)/year

Applicable Compliance Method:
This limitation was derived by dividing 42.0903 pounds of OC emissions (including TEA emissions) per hour by 32.75 tons of sand per hour and then multiplying the result by 90,000 tons of sand per year and by 1 ton/2,000 pounds. Compliance with the combined annual OC emission limitation shall be determined either by calculating the sum of the products of the emission factors of 0.00063 pound of OC emissions (without TEA emissions) per pound of sand and 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated that emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year.

2b. Emission and Control Efficiency Limitations:
1.134 tons of TEA emissions/year and 99 percent TEA emission control efficiency for the scrubber

Applicable Compliance Method:
The tons/year limitation was derived by dividing 0.8253 pound of TEA emissions/hour by 32.75 tons of sand/hour and then multiplying by 90,000 tons of sand/year and by 1 ton/2,000 pounds. Compliance with the total annual TEA emission limitation shall be determined by calculating the product of the emission factor of 0.0000126 pound of TEA emissions per pound of sand, or any emission factor developed from the most recent test that demonstrated the emissions units were in compliance, times the total weight of sand employed in emissions units P702 through P711, in tons of sand/year. Compliance with the TEA emission control efficiency limitation shall be determined by inlet/outlet testing using Method 18 of 40 CFR, Part 60, Appendix A.

2c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2d. Emission Limitations:
0.005 grain of PE per actual cubic foot and 1.286 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by emission testing in accordance with Method 5, 40 CFR, Part 60, Appendix A.

2e. Emission Limitation -
3.981 tons of PE/year

Applicable Compliance Method:
Compliance with the above tons/year limitation is ensured if compliance is maintained with the 1.286 pounds of PE/hour limitation and with the annual sand usage restriction for emissions units P702 through P711.

2f. Operating Restrictions:
The maximum annual core package production shall not exceed 131 core packages/hour and 360,000 core packages/year for emissions units P702 through P711.

Applicable Compliance Method:
Compliance with the total hourly and annual core package production restrictions for emissions units P702 through P711 shall be determined using the records collected pursuant to sections A.III.2. and A.III.3, respectively.

3. The permittee shall conduct, or have conducted, emission testing for emissions units P702 through P711 in accordance with the following requirements:

a. The emission testing shall be conducted within 12 months after issuance of this permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the hourly PE and grain of PE/acf limitations, the hourly OC and TEA emission limitations, and the TEA emission control efficiency limitation, for combined emissions units P702 through P711.

c. The following test methods shall be employed to demonstrate compliance with the PE and OC and TEA emission limitations and the TEA emission control efficiency limitation for combined emissions units P702 through P711:

Method 5 of 40 CFR, Part 60, Appendix A, for PE;
Method 25 or 25A of 40 CFR, Part 60, Appendix A, for OC emissions; and
Method 18 of 40 CFR, Part 60, Appendix A, or any modification of Method 18 as approved by the appropriate Ohio EPA District Office or local air agency, for TEA emissions.

The control efficiency (i.e., the percent reduction in TEA emissions between the inlet and outlet of the scrubber serving emissions units P702 through P711) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

d. The pH of the scrubber liquid and the scrubber liquor recirculation flow rate, or alternative parameter with prior approval from the appropriate Ohio EPA or local air agency, shall be recorded during each emission test run.

e. The tests shall be conducted while emissions units P702 through P711 are operating at or near their maximum capacities (maximum TEA use), unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P711 - cold cure core-making machine # 10 at the Cleveland Aluminum Casting Plant (CACP) vented to a common 40,500 acfm packed tower sulfuric acid scrubber (serving emissions units P702 through P711) to control triethylamine (TEA) emissions		

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

1. The permit to install for this emissions unit (P7011) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum

ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Triethylamine
TLV (mg/m3): 4.1
Maximum Hourly Emission Rate (lbs/hr): 0.83
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 13.50
MAGLC (ug/m3): 127

Pollutant: Naphtalene
TLV (mg/m3): 52
Maximum Hourly Emission Rate (lbs/hr): 1.86
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 30.37
MAGLC (ug/m3): 1,612

Pollutant: Phenol
TLV (mg/m3): 19
Maximum Hourly Emission Rate (lbs/hr): 4.33
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 70.86
MAGLC (ug/m3): 589

Pollutant: Xylene
TLV (mg/m3): 434
Maximum Hourly Emission Rate (lbs/hr): 2.27
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 37.12
MAGLC (ug/m3): 13,457

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Rollover Pouring Machine A (P712)
Activity Description: Rollover Pouring Machine A at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P712 - rollover pouring machine A vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks (capacity 10,000 pounds/hour of aluminum per machine) [Emissions unit P713 has not been installed as yet.]	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	Combined emission limitations for emissions units P712 and P713, which shall be vented to the baghouse using a flow rate no greater than 70,000 acf/minute: 0.005 grain of particulate emissions (PE)/actual cubic foot of exhaust gases/(gr/acf); 5 percent opacity, as a six-minute average; 3 pounds of PE/hour; 9.288 tons of PE/year; 41.265 pounds of organic compound (OC) emissions/hour; and 56.70 tons of OC emissions/year.
	OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
	OAC rule 3745-17-08(B)	
	OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI #13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P712 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from each of these emissions units shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches while these emissions units are in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual core package usage for emissions units P712 and P713 shall not exceed 360,000 core packages per year, based upon a rolling, 12-month summation of the core package usage figures.

III Monitoring and/or Recordkeeping

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse, at all times, while these emissions units are in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manual(s). The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

3. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the number of core packages used for each month; and

   b. the rolling, 12-month summation of the core package usage figures.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

3. The permittee shall quarterly submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitation for core package usage.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions units P712 and P713 shall be determined in accordance with the following methods:

1a. Emission Limitation:
combined PE limitations for emissions units P712 and P713 of 0.005 gr of PE/acf and 3.0 pounds of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pounds of PE/hour limitation for emissions units P712 and P713 was calculated based upon the air flow rate from the emissions units to the baghouse multiplied by the allowed concentration (0.005 gr of PE/acf) for the baghouse and multiplied by 0.00857. Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the total baghouse exhaust in accordance with Method 5 or 17, 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for these emissions units shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions units P712 and P713 to the baghouse and by 0.00857.

Emission Limitation:
combined emission limit for P712 and P713 of 9.288 tons of PE/year

Applicable Emission Limitation:
This PE limitation was determined by multiplying 3.0 pounds of PE/hour by 8,760 hours/year and then by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation.

Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

1b. Emission Limitation:
combined OC emission limitation for emissions units P712 and P713 of 41.27 pounds of OC emissions/hour

Applicable Compliance Method:
This OC emission limitation was determined by multiplying an internal emission factor of 0.00063 pound of OC emissions per pound of sand by the amount of sand in a core package (500 pounds) introduced into the rollovers, and then multiplying by 131 core packages per hour (capacity). Compliance with the above OC emission limitation shall be determined either by (1) multiplying the emission factor of 0.00063 pound of OC emissions/pound of sand by 500 pounds

of sand and by the maximum number of core packages used in any hour or (2) by testing pursuant to Method 25 or 25A of 40 CFR, Part 60, Appendix A.

Emission Limitation:
combined emission limitation for emissions units P712 and P713 of 56.7 tons of OC emissions/year

Applicable Compliance Method:
This OC emission limitation was determined by dividing 41.27 pounds of OC emissions/hour by 131 core packages/hour and then multiplying by 360,000 core packages/year and by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance with the annual core package usage restriction is maintained.

2. The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the following requirements:

2a. The emission testing shall be conducted within 12 months following the issuance of this permit and 6 months prior to permit expiration.

2b. The emission testing shall be conducted to demonstrate compliance with the emission limitations of 0.005 gr of PE/acf, 3.0 pounds of PE/hour, and 41.27 pounds of OC emissions/hour.

2c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

2d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

The following test method shall be employed to demonstrate compliance with the hourly OC emission limitation:

Method 25 or 25A of 40 CFR, Part 60, Appendix A.

2e. The tests shall be conducted while these emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

2f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will

be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

Comprehensive written reports on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the Method 5 test and within 45 days following completion of the Method 25 or 25A test. The permittee may request additional time for the submittal of the written reports, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Thermal Sand Recovery Continuous Oven System A (P714)
Activity Description: Thermal Sand Recovery Continuous Oven System A including TSR Furnace, Quench, Heat Treat Oven, and Cooling Operations at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P714 - 33 MMBtu/hour natural gas-fired thermal sand recovery continuous oven system A with an OC emission thermal incinerator and vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	0.005 grain of particulate emissions (PE)/actual cubic foot of exhaust gases (gr/acf); 4.071 pounds of PE/hour; 12.605 tons of PE/year; 4.62 pounds of nitrogen oxides (NOx) emissions/hour; 20.236 tons of NOx emissions/year; 1.155 pounds of carbon monoxide (CO) emissions/hour; 5.059 tons of CO emissions/year; 0.02 pound of sulfur dioxide (SO2) emissions/hour; 0.0867 ton of SO2 emissions/year; 26.082 pounds of organic compound (OC) emissions/hour from thermal breakdown of binders; 51.030 tons of OC emissions/year from thermal breakdown of binders;

OAC rule 3745-17-07(A)(1)	0.092 pound of OC emissions/hour from natural gas combustion; and
OAC rule 3745-17-08(B)	0.402 ton of OC emissions/year from natural gas combustion.
OAC rule 3745-17-11(B)(1)	Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average.

Best available technology (BAT) is more restrictive.

BAT is more restrictive.

BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination for this emissions unit also includes the following:

i. compliance with the terms and conditions of PTI # 13-03354;
ii. the use of a baghouse;
iii. low NOx technology; and
iv. a thermal incinerator with an overall OC emission reduction of 85 percent, by weight.

II Operational Restrictions

1. The 33 MMBTU/hour natural gas-fired thermal sand recovery oven system consists of an oven wherein a maximum of 360,000 poured and unpoured (unfit to pour) sand molds per year are directly heated to a temperature at which the binders will disintegrate followed by an area where the castings will be quenched, aged and gradually cooled.

The thermal sand recovery system is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

The visible PE from the stack of the baghouse serving this emissions unit shall not exceed 5 percent opacity as a six-minute average.

2. Exhaust containing both OC emissions and PE from the binder breakdown part of the thermal sand recovery oven shall be vented to the thermal incinerator and then to the baghouse. The remaining exhaust containing PE from the quenching, aging and cooling part of the thermal sand recovery oven shall be vented directly to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 at all times while the emissions unit is in operation.

4. The average combustion chamber temperature within the thermal incinerator, for any 3-hour block of time, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

5. At maximum operating conditions, the thermal sand recovery oven and the thermal incinerator shall maintain a combined 95 percent OC emission control efficiency with a 100 percent OC emission capture efficiency through the use of a permanent total enclosure.

   The permanent total enclosure shall be maintained under negative pressure, at a minimum pressure differential that is not less than the minimum pressure differential established during the most recent emission test that demonstrated the emissions unit was in compliance, whenever the emissions unit is in operation.

6. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

7. The maximum annual number of core packages processed for this emissions unit shall not exceed 360,000 core packages per year, based upon a rolling, 12-month summation of the core package processing figures.

8. The maximum annual operating hours for this emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours. Natural gas may be combusted in this emissions unit for a maximum of 8760 hours per year.

III Monitoring and/or Recordkeeping

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse, at all times, while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manual(s). The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

3. The permittee shall operate and maintain a continuous temperature monitor, recorder and controller that measures, records and controls the thermal incinerator combustion chamber temperature in degrees Fahrenheit when the emissions unit is in operation. The monitoring, recording and controlling devices shall be capable of accurately measuring, recording and controlling the desired parameter. The temperature monitor, recorder and controller shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. all 3-hour blocks of time during which the thermal incinerator average combustion chamber temperature, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance; and

b. a log of the downtimes for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

4. The permittee shall maintain and operate monitoring devices and a recorder that simultaneously measure and record the pressure inside and outside the permanent total enclosure, while the emissions unit is in operation. The monitoring and recording devices shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record and maintain the following information on a daily basis:

a. the difference in pressure between the permanent total enclosure and the surrounding area(s); and

b. a log or record of operating time for the permanent total enclosure, monitoring equipment, and the associated emissions unit.

5. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the number of core packages produced and operating hours when processing sand cores for each month; and

   b. the rolling, 12-month summation of the number of core packages produced and operating hours when processing sand cores.

6. The permittee shall collect and record, for the baghouse, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II..

2. The permittee shall submit temperature deviation (excursion) reports that identify all 3-hour blocks of time during which the thermal incinerator average combustion chamber temperature was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

3. The permittee shall submit pressure differential deviation (excursion) reports that identify all periods of time during which the permanent total enclosure was not maintained at the required differential pressure specified above.

4. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month limitations for operating hours and the number of core packages.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control devices, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emission unit P714 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 4.071 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5, 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the total baghouse exhaust in accordance with Method 5 or 17, 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P714 to the baghouse and by 0.00857.

Emission Limitation:
12.605 tons of PE/year

Applicable Compliance Method:
Compliance with the annual PE limitation is ensured if compliance is maintained with the hourly PE limitation and the operating hours restriction.

Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

1b. Emission Limitation:
4.62 pounds of NOx emissions/hour

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 140 pounds of NOx emissions per million cubic feet of natural gas from AP-42, Section 1.4, by the

maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation:
20.236 tons of NOx emissions/year

Applicable Compliance Method:
Compliance with the annual NOx emission limitation shall be determined by multiplying the USEPA emission factor of 140 pounds of NOx emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the annual natural gas consumption rate (in millions of cubic feet/year). Also, compliance with the annual NOx emission limitation is ensured if compliance is maintained with the hourly NOx emission limitation.

1c. Emission Limitation:
1.155 pounds of CO emissions/hour

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 35 pounds of CO emissions per million cubic feet of natural gas from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 10 of 40 CFR, Part 60, Appendix A.

Emission Limitation:
5.059 tons of CO emissions/year

Applicable Compliance Method:
Compliance with the annual CO emission limitation shall be determined by multiplying the USEPA emission factor of 35 pounds of CO emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the annual natural gas consumption rate (in millions of cubic feet/year). Also, compliance with the annual CO emission limitation is ensured if compliance is maintained with the hourly CO emission limitation.

1d. Emission Limitation:
0.02 pound of SO2 emissions/hour

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 0.6 pound of SO2 emissions per million cubic feet of natural gas from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 6 of 40 CFR, Part 60, Appendix A.

Emission Limitation:
0.0867 ton of SO2 emissions/year

Applicable Compliance Method:
Compliance with the annual SO2 emission limitation shall be determined by multiplying the USEPA emission factor of 0.6 pound of SO2 emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the annual natural gas consumption rate (in millions of cubic feet/year). Also, compliance with the annual SO2 emission limitation is ensured if compliance is maintained with the hourly SO2 emission limitation.

1e. Emission Limitation:
26.082 pounds of OC emissions/hour from thermal breakdown of binders and 0.092 pound of OC emissions/hour from natural gas combustion

Applicable Compliance Methods:
The permittee shall demonstrate compliance with the above value of pound of OC emissions/hour from thermal breakdown of binders by emission testing in accordance with Method 25 or 25A, 40 CFR, Part 60, Appendix A, and from natural gas combustion by either (1) multiplying the USEPA emission factor of 48 percent of 5.8 pounds of non-methane total OC/MMCF from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (million cubic feet/hour) or (2) testing pursuant to Method 25 or 25A of 40 CFR, Part 60, Appendix A.

Emission Limitation:
51.030 tons of OC emissions/year from thermal breakdown of binders and 0.402 ton of OC emissions/year from natural gas combustion

Applicable Compliance Method:
The OC emission limitation for thermal breakdown of binders was determined by dividing 26.082 pounds of OC emissions/hour by 92 core packages/hour, and then multiplying by 360,000 core packages/year and by 1 ton/2000 pounds. The OC emission limitation for natural gas combustion was determined by multiplying 0.092 pound of OC emissions/hour by 8,760 hours/year and by 1 ton/2000 pounds. Compliance with the above tons/year limitations is ensured if compliance is maintained with the restriction on annual core packages processed and with the hourly OC emission limitations.

Capture and Control Efficiency Limitations:
100 percent OC emission capture efficiency and 85 percent OC emission control efficiency limitations for the thermal incinerator

Applicable Compliance Methods:
Compliance with the above efficiency limitations shall be determined using the methods and procedures specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

2a. The emission testing shall be conducted within 12 months from the date of issuance of this permit and 6 months prior to permit expiration.

2b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 4.071 pounds of PE/hour, the OC limitation of 26.174 pounds of OC/hour, and the OC capture and control efficiencies of 100 percent and 85 percent, respectively, for the thermal incinerator.

2c. The pressure drop across the baghouse and the thermal incinerator combustion chamber temperature shall be recorded during each emissions test run, in inches of water column and degrees Fahrenheit, respectively. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

2d. The following test methods shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

The following test methods shall be employed to demonstrate compliance with the OC emission limitation and the OC emission control efficiency limitation:

Method 25 or 25A of 40 CFR, Part 60, Appendix A.

2e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

Comprehensive written reports on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the Method 5 test and within 45 days following completion of the Method 25 or 25A test. The permittee may request additional time for the submittal of the written reports, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

2f. The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

2g. The test methods which must be employed to demonstrate compliance with the capture efficiency and control efficiency limitation for OC are specified below: Alternative U.S. EPA approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR, Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The appropriate Ohio EPA District Office or local air agency will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Casting Cleaning Line Including Shot Blast Operation (P715)
Activity Description: Casting Cleaning Line Including Shot Blast Operation at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P715 - casting cleaning shot blast operation using steel shot with a 30,000 acfm baghouse	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	0.005 grain of particulate emissions (PE)/actual cubic foot of exhaust gases (gr/acf); 1.286 pounds of PE/hour; 3.981 tons of PE/year; and 5 percent opacity, as a six-minute average
	OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
	OAC rule 3745-17-08(B)	BAT is more restrictive.
	OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. **Additional Terms and Conditions**

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. This system consists of a shot blast cabinet using steel shot and is vented to a 30,000 acf/minute baghouse.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for this emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse, at all times, while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manual(s). The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emission unit P715 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 1.286 pounds of PE/hour

Applicable Compliance Method:
The permittee shall demonstrate compliance with the above values of gr/acf and pound/hour by emission testing in accordance with Method 5 or 17, 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

1b. Emission Limitation:
3.981 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 1.286 pounds of PE per hour by 6,192 hours/year and multiplying by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. the emission testing shall be conducted within 12 months from the effective date of this permit and within 6 months prior to permit expiration;

b. the emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 1.286 pounds of PE/hour;

c. the pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column.

d. the following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency;

e. the test shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency; and

f. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to

Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Aluminum Receiving Furnace A (P720)
Activity Description: Aluminum Receiving Furnace A at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P720 - aluminum receiving furnace A: 15 MMBTU/hour natural gas-fired, 90,000 pounds holding furnace	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	0.005 grain of particulate emissions (PE)/actual cubic foot of exhaust gases (gr/acf); 1.286 pounds of PE/hour; 5.631 tons of PE/year; 5 percent opacity, as a six-minute average; 2.100 pounds of nitrogen oxides (NOx) emissions/hour; 9.198 tons of NOx emissions/year; 0.525 pound of carbon monoxide (CO) emissions/hour; 2.300 tons of CO emissions/year; 0.009 pound of sulfur dioxide (SO2) emissions/hour; 0.039 ton of SO2 emissions/year; 0.042 pound of organic compound (OC) emissions/hour; and 0.183 ton of OC emissions/year
	OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.

OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of low NOx technology.

II Operational Restrictions

1. The permittee shall use this emissions unit for only the following activities:

   a. alloy composition correction;
   b. receiving clean molten aluminum from a melting furnace via liquid aluminum launder A;
   c. receiving clean molten aluminum from delivery trucks; and
   d. melting clean aluminum ingot or plant-recycled clean aluminum scrap.

   This emissions unit shall be charged with only clean aluminum ingot, scrap and/or molten aluminum. Aluminum contaminated with oil, grease, plastic, paint, rubber, paper, rags or other smoke-producing materials shall not be charged to this emissions unit.

2. The visible PE from the stack serving this emissions unit shall not exceed 5 percent opacity, as a 6-minute average.

3. This emissions unit shall be equipped with low NOx technology. Low NOx technology is a regenerative combustion system to minimize the generation of NOx emissions, and is not traditional low NOx burner technology (i.e., staged combustion).

4. Any alloying performed in this emissions unit shall be done while employing only clean materials.

III Monitoring and/or Recordkeeping

1. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the wet scrubbers serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

2. The permittee shall perform visual checks of all lots, consignments, bins or truckloads of aluminum charge materials received prior to charging into emissions unit P720. The presence of any materials other than clean aluminum ingots, molten aluminum, clean return scrap, or clean alloying materials shall be noted in an operations log. If any other charge materials other than clean aluminum ingots, molten aluminum, clean return scrap, or clean alloying materials are observed, corrective actions (preferably refraining from charging) shall be taken and these actions shall be noted in the operations log.

IV Reporting Requirements

51 The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

2. The permittee shall submit quarterly deviation reports that:

a. identify all instances where any charge materials other than clean aluminum ingots, molten aluminum, clean return scrap, or clean alloying materials were observed in the raw materials charged into emissions unit P720; and

b. describe the corrective actions taken to prevent the charging of other charge materials other than clean aluminum ingots, molten aluminum, clean return scrap, or clean alloying materials.

V Testing Requirements

1. Compliance with the emission limitations and operational restrictions for emission unit P720 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 1.286 pounds of PE/hour

Applicable Compliance Method:

Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17, 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

Emission Limitation:
5.631 tons of PE/year

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 6.2 pounds of PE per million cubic feet of natural gas from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

Emission Limitation -
5 percent opacity, as a six-minute average

Applicable Compliance Method;
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

1b. Emission Limitation:
2.100 pounds of NOx emissions/hour

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 140 pounds of NOx emissions per million cubic feet of natural gas from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 7 of 40 CFR, Part 60, Appendix A.

Emission Limitation:
9.198 tons of NOx emissions/year

Applicable Compliance Method:
Compliance with the annual NOx emission limitation shall be determined by multiplying the USEPA emission factor of 140 pounds of NOx emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the annual natural gas consumption rate (in millions of cubic feet/year). Also, compliance with the annual NOx emission limitation is ensured if compliance is maintained with the hourly NOx emission limitation.

1c. Emission Limitation:
0.525 pound of CO emissions/hour

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 35 pounds of CO emissions per million cubic feet of natural gas from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 10 of 40 CFR, Part 60, Appendix A.

Emission Limitation:
2.300 tons of CO emissions/year

Applicable Compliance Method:
Compliance with the annual CO emission limitation shall be determined by multiplying the USEPA emission factor of 35 pounds of CO emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the annual natural gas consumption rate (in millions of cubic feet/year). Also, compliance with the annual CO emission limitation is ensured if compliance is maintained with the hourly CO emission limitation.

1d. Emission Limitation:
0.009 pound of SO2 emissions/hour

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 0.6 pound of SO2 emissions per million cubic feet of natural gas from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 6 of 40 CFR, Part 60, Appendix A.

Emission Limitation:
0.039 ton of SO2 emissions/year

Applicable Compliance Method:
Compliance with the annual SO2 emission limitation shall be determined by multiplying the USEPA emission factor of 0.6 pound of SO2 emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the annual natural gas consumption rate (in millions of cubic feet/year). Also, compliance with the annual SO2 emission limitation is ensured if compliance is maintained with the hourly SO2 emission limitation.

1e. Emission Limitation -
0.042 pound of OC emissions/hour

Applicable Compliance Method:
Compliance shall be determined by either (1) multiplying the USEPA emission factor of 48 percent of 5.8 pounds of non-methane total OC emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the maximum hourly natural gas consumption rate (in millions of cubic feet/hour) or (2) by testing pursuant to Method 25 of 40 CFR, Part 60, Appendix A.

Emission Limitation:
0.183 ton of OC emissions/year

Applicable Compliance Method:
Compliance with the annual OC emission limitation shall be determined by multiplying the USEPA emission factor of 48 percent of 5.8 pound of non-methane total OC emissions/million cubic feet of natural gas from AP-42, Section 1.4, by the annual natural gas consumption rate (in millions of cubic feet/hour). Also, compliance with the annual OC emission limitation is ensured if compliance is maintained with the hourly OC emission limitation.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Sand Primary Coolers (P724)
Activity Description: Hot Sand Primary Coolers at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P724 - hot sand primary coolers vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.57 pound of PE/hour; and 1.76 tons per year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P724 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P724 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.57 pound of PE/hour

Applicable Compliance Method:

Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P724 was calculated based on the air flow rate (13,300 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the total baghouse exhaust in accordance with Method 5 or 17, 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P724 to the baghouse and by 0.00857.

1b. Emission Limitation -
1.76 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.57 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:

Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months after the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.57 pound of PE/hour for emissions unit P724, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented to the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Scrap Core Processing (P725)
Activity Description: Scrap Core Processing at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P725 - scrap core processing vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.171 pound of PE/hour; and 0.53 ton of PE/hour. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/hour. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P725 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P725 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.171 pound of PE/hour

Applicable Compliance Method
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P725 was calculated based on the air flow rate (4,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the gr/acf and pound/hour limitations shall be determined by PE testing of the total baghouse exhaust in accordance with Method 5 or 17, 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P725 to the baghouse and by 0.00857.

1b. Emission Limitation:
0.53 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.171 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months after the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.171 pound of PE/hour for emissions unit P725, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented to the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: In-Process Sand Storage and Handling (P729)
Activity Description: In-Process Sand Storage and Handling at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P729 - in-process sand storage and handling vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.171 pound of PE/hour; and 0.53 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P729 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P729 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.171 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P729 was calculated based on the air flow rate (4,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P729 to the baghouse and by 0.00857.

1b. Emission Limitation -
0.53 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.171 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.171 pound of PE/hour for emissions unit P729, and for the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to determine compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented to the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Machine Sand Hoppers and Transport (P733)
Activity Description: Core Machine Sand Hoppers and Transport at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P733 - core machine sand hoppers and transport vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.171 pound of PE/hour; and 0.53 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P733 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from the emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P733 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.171 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P733 was calculated based on the air flow rate (4,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P733 to the baghouse and by 0.00857.

1b. Emission Limitation -
0.53 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.171 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented to the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.171 pound of PE/hour for emissions unit P733, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented to the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented to the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Sand Final Cooler and Transport (P735)
Activity Description: Core Sand Final Cooler and Transport at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P735 - core sand final cooler and transport vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.257 pound of PE/hour; and 0.796 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P735 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II..

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P735 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.257 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P735 was calculated based on the air flow rate (6,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P735 to the baghouse and by 0.00857.

1b. Emission Limitation -
0.796 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.257 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emissions Limitations:
0.005 gr of PE/acf and 3.43 pounds/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.257 pound of PE/hour for emissions unit P735, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA Distict Office or local air agency.

3e. The test shall be conducted while all emissions units vented into the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hot Sand Transport (P741)
Activity Description: Hot Sand Transport at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P741 - hot sand transport vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.64 pound of PE/hour; and 1.99 tons of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P741 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II..

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P741 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.64 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P741 was calculated based on the air flow rate (15,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P741 to the baghouse and by 0.00857.

1b. Emission Limitation -
1.99 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.64 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emissions Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.64 pound of PE/hour for emissions unit P741, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented into the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sand Screen (P742)
Activity Description: Sand Screen at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P742 - sand screen vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.086 pound of PE/hour; and 0.27 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P742 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P742 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.086 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P742 was calculated based on the air flow rate (2,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P742Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P729 to the baghouse and by 0.00857. to the baghouse and by 0.00857.

1b. Emission Limitation -
0.27 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.086 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:

Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.086 pound of PE/hour for emissions unit P742, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented into the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Liner Blast (P744)
Activity Description: Liner Blast at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P744 - liner blast vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.09 pound of PE/hour; and 0.29 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P744 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P744 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.09 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P744 was calculated based on the air flow rate (2,200 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P744 to the baghouse and by 0.00857.

1b. Emission Limitation -
0.29 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.09 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.09 pound of PE/hour for emissions unit P744, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented into the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: New Sand Transport/Sand Addition (P745)
Activity Description: New Sand Transport/Sand Addition at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P745 - new sand transport/sand addition vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.04 pound of PE/hour; and 0.13 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P745 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P745 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.04 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P745 was calculated based on the air flow rate (1,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P745 to the baghouse and by 0.00857.

1b. Emission Limitation -
0.13 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.04 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.04 pound of PE/hour for emissions unit P745, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented to the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented into the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Core Box Cleaning (P746)
Activity Description: Core Box Cleaning at CACP

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P746 - core box cleaning vented to a 4-compartment Central Baghouse System (245,000 actual cubic feet per minute) via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks	OAC rule 3745-31-05(A)(3) (PTI # 13-03354)	The particulate emissions (PE) limitations for this emissions unit are as follows: 0.005 grain of PE/actual cubic foot of exhaust gases (gr/acf); 0.086 pound of PE/hour; and 0.27 ton of PE/year. Visible PE from any stack shall not exceed 5 percent opacity, as a six-minute average. The combined PE limitations for all sand handling emissions units are as follows: 0.005 gr of PE/acf; 3.43 pounds of PE/hour; and 10.6 tons of PE/year. Exhaust gases from all sand handling emissions units shall be vented into the baghouse using a

	flow rate no greater than 80,000 acf/minute.
OAC rule 3745-17-07(A)(1)	Best available technology (BAT) is more restrictive.
OAC rule 3745-17-08(B)	BAT is more restrictive.
OAC rule 3745-17-11(B)(1)	BAT is more restrictive.

2. Additional Terms and Conditions

2.a The BAT determination also includes compliance with the terms and conditions of PTI # 13-03354 and the use of a baghouse.

II Operational Restrictions

1. Emissions unit P746 is vented to a 4-compartment Central Baghouse System via one (1) inlet plenum common to emissions units P712, P714, P724, P725, P729, P733, P735, P741, P742, P744, P745 and P746 and exiting through two (2) exit plenums, four (4) fans and two (2) stacks.

2. All of the PE from this emissions unit shall be vented to the baghouse.

3. The pressure drop across the baghouse shall be maintained in the range of 1 to 10 inches at all times while the emissions unit is in operation.

4. The permittee shall minimize or eliminate visible PE of fugitive dust during the unloading and disposal of the dust collected in the baghouse. Any spill of dust that has accumulated underneath the baghouse shall be promptly removed and the cause of the spill shall be expeditiously corrected.

5. The maximum annual operating hours for the emissions unit shall not exceed 6,192, based upon a rolling, 12-month summation of the operating hours.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse serving the emissions unit while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manual(s).

The permittee shall record the pressure drop, in inches of water column, across the baghouse at the beginning of each shift on a daily basis.

2. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the operating hours for each month; and

   b. the rolling, 12-month summation of the operating hours.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

4. The permittee shall collect and record the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified in A.II.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the operating hours limitation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. The permittee shall submit quarterly reports containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations for emissions unit P746 shall be determined in accordance with the following methods:

1a. Emission Limitations:
0.005 gr of PE/acf and 0.086 pound of PE/hour

Applicable Compliance Method:
Since multiple emissions units are ducted into a single baghouse, the pound of PE/hour limitation for emissions unit P746 was calculated based on the air flow rate (2,000 acf/minute) from the emissions unit to the baghouse multiplied by the allowed concentration (0.005 gr/acf) for the baghouse and multiplied by 0.00857. Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 or 17 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for this emissions unit shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from emissions unit P746 to the baghouse and by 0.00857.

1b. Emission Limitation -
0.27 ton of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 0.086 pound of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the hourly PE limitation and with the annual operating hours limitation.

1c. Emission Limitation:
5 percent opacity, as a six-minute average

Applicable Compliance Method:
Compliance with the 5 percent opacity limitation shall be determined in accordance with Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60, "Standards of Performance for New Stationary Sources."

2. Compliance with the combined emission limitations for all sand handling emissions units vented into the baghouse shall be determined in accordance with the following methods:

2a. Emission Limitations:
0.005 gr of PE/acf and 3.43 pounds of PE/hour

Applicable Compliance Method:
Compliance with the above values of gr/acf and pound/hour shall be determined by testing in accordance with Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency. Compliance with the gr of PE/acf limitation for this emissions unit shall be assumed if the tested value for all PE from the baghouse is less than or equal to 0.005 gr of PE/acf. Compliance with the pounds/hour limitation for these emissions units shall be determined by taking the tested value, in gr of PE/acf, and multiplying by the flow rate, in acf/minute, from all sand handling emissions units to the baghouse and by 0.00857.

2b. Emission Limitation -
10.6 tons of PE/year

Applicable Compliance Method:
This limitation was determined by multiplying 3.43 pounds of PE/hour by 6,192 hours/year and then multiplying the resulting value by 1 ton/2000 pounds. Compliance with the above tons/year limitation is ensured if compliance is maintained with the 0.005 gr of PE/acf limitation and with the annual operating hours limitations for all sand handling emissions units vented into the baghouse.

3. The permittee shall conduct, or have conducted, emission testing for the emissions unit in accordance with the following requirements:

3a. The emission testing shall be conducted within 12 months of the effective date of this permit and within 6 months prior to permit expiration.

3b. The emission testing shall be conducted to demonstrate compliance with the PE limitations of 0.005 gr of PE/acf and 0.086 pound of PE/hour for emissions unit P746, and the combined PE limitations of 0.005 gr of PE/acf and 3.43 pounds of PE/hour for all sand handling emissions units vented into the baghouse.

3c. The pressure drop across the baghouse shall be recorded during each emissions test run, in inches of water column. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22.

3d. The following test method shall be employed to demonstrate compliance with the PE limitations:

Method 5 of 40 CFR, Part 60, Appendix A, or Method 17 of 40 CFR, Part 60, Appendix A with prior approval from the appropriate Ohio EPA District Office or local air agency.

3e. The test shall be conducted while all emissions units vented into the baghouse are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

3f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and dates of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the appropriate Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 1 (P901)
Activity Description: Cupola 1 And Associated Charging And Tapping Operations

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons per hour cupola no. 1 [Carbon monoxide (CO) emissions are controlled by direct flame afterburners (or equivalent), followed by particulate emission (PE) control equipment consisting of automatic, flooded disc venturi wet scrubber no. 61 (also known as no. 1 cupola wet collector).]	OAC rule 3745-31-05(A)(3) (PTI 13-152)	See section A.I.2.a. The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A)(1) and 3745-21-08(D).
	OAC rule 3745-17-12(I)(38)(a)	PE from scrubber no. 61 serving this emissions unit shall not exceed 29.1 pounds per hour.
	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving scrubber no. 61 shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	40 CFR 52.1881(b)(15)(xviii)	Sulfur dioxide (SO2) emissions from this emissions unit shall not

		exceed 6.0 pounds of SO2 per ton of material processed.
	OAC rule 3745-21-08(D)	See section A.I.2.a.
tapping of cupola (Tapping emissions are captured and exhausted to dropout stack G-36 by a 25,000 acfm forehearth exhaust hood located above the taphole.)	OAC rule 3745-17-12(I)(16)	The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from stack G-36 serving this portion of this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	See section A.I.2.b.
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by wet scrubber no. 71	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B) and (B)(3)	See section A.I.2.c.

2. Additional Terms and Conditions

2.a CO gases generated during the operation of this emissions unit shall not be emitted unless the gases are combusted at a temperature of at least 1,300 degrees Fahrenheit for 0.3 second or greater in a direct-flame afterburner or equivalent device equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

2.b Reasonably available control measures, consisting of maintaining an unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola, shall be employed to minimize or eliminate visible PE of fugitive dust.

2.c Reasonably available control measures, consisting of venting emissions from the hopper loading and charge bucket loading operations to scrubber no. 71, shall be employed to minimize or eliminate visible PE of fugitive dust. Such equipment shall meet the following requirements:

i. the collection efficiency is sufficient to minimize or eliminate visible PE of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

ii. the control equipment achieves an outlet PE concentration of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there are no visible PE from the exhaust stack(s), whichever is less stringent.

2.d Pursuant to OAC rule 3745-17-12(I)(38)(b), all PE from the tapping operations associated with this emissions unit shall be captured and vented to stack G-36.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(c), the total combined operating hours for the cupolas associated with emissions units P901 through P903 and P907 shall not exceed 64 hours during any calendar day. Time intervals during which a cupola is not in a state of blast (standby mode) shall not be included in the determination of daily operating hours. Blast is defined as the period during which air is forced through the tuyeres onto a cupola burden consisting of coke, limestone and scrap metal.

2. Operational restrictions for scrubber no. 61 serving this emissions unit:

   a. the pressure drop across the scrubber shall be maintained within the range of 40 to 50 inches of water column at all times while the emissions unit is in operation;

   b. the scrubber water flow rate shall be maintained at a value of not less than 7,137 gallons per minute at all times while the emissions unit is in operation; and

   c. the draft fan amperage shall be continuously maintained at a value of not less than 100 amps at all times while the emissions unit is in operation.

3. Operational restriction for the afterburners (or equivalent) serving this emissions unit:

The average combustion temperature within the cupola near the direct-flame afterburners (or equivalent devices), for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,300 degrees Fahrenheit.

4. Operational restrictions for scrubber no. 71 serving this emissions unit:

   The pressure drop across the scrubber shall be continuously maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

   The scrubber water flow rate shall be continuously maintained at a value of not less than 30 gallons per minute at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P901 through P903 and P907 (and for the total combined operating hours for such emissions units) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. Monitoring and record keeping requirements for scrubber no. 61 serving this emissions unit:

   The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber, the scrubber water flow rate, and the exhaust gas flow rate (in terms of fan motor amperage) while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 61 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the draft fan amperage.

3. Monitoring and record keeping requirements of the upper stack temperature serving the cupola for this emissions unit:

   The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the temperature, in degrees Fahrenheit, within the upper stack of the cupola when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be

installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the cupola: all 3-hour blocks of time during which the average combustion temperature within the cupola, when the emissions unit was in operation, was less than 1,300 degrees Fahrenheit.

4. Monitoring and record keeping requirements for scrubber no. 71 serving this emissions unit:

   The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 71 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water flow rate, in gallons per minute.

5. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit and for any visible fugitive PE escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible

emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV Reporting Requirements

1. Reporting requirements for scrubber no. 61 serving this emissions unit:

   The permittee shall submit deviation (excursion) reports that identify any measured scrubber parameter that is not maintained within the required ranges or not maintained above the required levels specified in section A.II.2. of these terms and conditions. These reports shall include the following information:

   a. the date of the excursion;
   b. the time interval over which the excursion occurred;
   c. the value of the excursion;
   d. the cause(s) of the excursion;
   e. the corrective action that has been taken or will be taken to prevent excursions in the future; and
   f. a copy of any chart that shows the excursion.

2. Reporting requirement for the cupola upper stack temperature control system serving this emissions unit:

   The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature within the cupola upper stack does not comply with the temperature restriction specified in section A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. Reporting requirement for the daily operating hours restriction:

   The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

4. Reporting requirements for scrubber no. 71 serving this emissions unit:

   The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the ranges or not maintained above the levels specified in section A.II.4. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

7. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from any stack serving this emission unit or any visible fugitive PE escaping from the building containing this emissions unit were observed and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations and the control requirements in sections A.I.1. and A.I.2. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from stack G-36 serving this emissions unit or the stack serving scrubber no. 61 shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
Visible fugitive PE from charging operations or the charge bucket and hopper loading portions of this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance with the above visible fugitive PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

1c. Emission Limitation:
The PE from scrubber no. 61 serving this emissions unit shall not exceed 29.1 pounds per hour.

Applicable Compliance Method:

Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). Stack test results from testing performed on November 11, 1997 demonstrate compliance with the PE limitation for scrubber no. 61 (29.1 pounds per hour).

Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.

1d. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
If required, compliance with the above SO2 emission limitation shall be determined by the following method: Method 6 of 40 CFR, Part 60, Appendix A.

1e. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

1f. Compliance with OAC rule 3745-17-08(B)(3) shall be determined by the method specified in OAC rule 3745-17-03(B)(7). Compliance with the visible PE portion of OAC rule 3745-17-08(B)(3) shall be determined by Method 22 of 40 CFR, Part 60, Appendix A.

1g. Emission Limitation:
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit and emissions units P141, P145, P171 through P174, P177, and P902 (tapping operations only) in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to expiration of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate for scrubber no. 61 (29.1 lbs/hr); the allowable SO2 emissions for scrubber no. 61 (6 lbs/ton of material processed); the allowable PE rate for stack G-36 (28.3 lbs/hr); the allowable PE concentration for wet scrubber no. 71 (0.030 gr/dscf); the allowable visible PE for the stacks of scrubber no. 61 and wet scrubber no. 71, and stack G-36; and the allowable visible fugitive PE for dumping of the charge into the cupola and loading the hoppers and charge bucket.

The following test methods shall be employed to determine compliance with the allowable emission rate: Method 5 of 40 CFR, Part 60, Appendix A for PE, Method 6 of 40 CFR, Part 60, Appendix A for SO2 emissions, and Method 9 of 40 CFR, Part 60, Appendix A for visible particulate emissions. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, including charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

   Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

   A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons per hour cupola no. 1 [CO emissions are controlled by a direct flame afterburners (or equivalent), followed by PE control equipment consisting of automatic, flooded disc venturi wet scrubber no. 61 (also known as no. 1 cupola wet collector).]	OAC rule 3745-17-18-24(Z)	SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.
tapping of cupola (Tapping emissions are captured and exhausted to dropout stack G-36 by a 25,000 acfm forehearth exhaust hood located above the tap-hole.)	none	none
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	none	none
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by wet scrubber no. 71	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
Compliance with the above SO2 emission limitation shall be determined by the following method: Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 2 (P902)
Activity Description: Cupola 2 And Associated Charging And Tapping Operations

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons per hour cupola no. 2 [Carbon monoxide (CO) emissions are controlled by a direct flame afterburners (or equivalent), followed by particulate emission (PE) control equipment consisting of automatic, flooded disc venturi wet scrubber no. 62 (also known as no. 2 cupola wet collector).]	OAC rule 3745-31-05(A)(3) (PTI 13-250)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A)(1) and 3745-21-08(D).
	OAC rule 3745-17-12(I)(39)(a)	The PE from scrubber no. 62 serving this emissions unit shall not exceed 27.4 pounds per hour.
	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving scrubber no. 62 shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	40 CFR 52.1881(b)(15)(xviii)	Sulfur dioxide (SO2) emissions from this emissions unit shall not

		exceed 6.0 pounds of SO2 per ton of material processed.
tapping of cupola (Tapping emissions are captured and exhausted to dropout stack G-36 by a 25,000 acfm forehearth exhaust hood located above the taphole.)	OAC rule 3745-21-08(D)	See section A.I.2.a.
	OAC rule 3745-17-12(I)(16)	The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from stack G-36 serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	See section A.I.2.b.
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by wet scrubber no. 72 (also known as # 2 C & S wet collector)	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B) and (B)(3)	See section A.I.2.c.

2. Additional Terms and Conditions

2.a CO gases generated during the operation of this emissions unit shall not be emitted unless the gases are combusted at a temperature of at least 1,300 degrees Fahrenheit for 0.3 second or greater in a direct-flame afterburner or equivalent device equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

2.b Reasonably available control measures, consisting of maintaining an unvented canopy hood above the charge door to assist in collecting charging emissions by the draft in the cupola, shall be employed to minimize or eliminate visible PE of fugitive dust.

2.c Reasonably available control measures, consisting of venting emissions from the hopper loading and charge bucket loading operations to scrubber no. 72, shall be employed to minimize or eliminate visible PE of fugitive dust. Such equipment shall meet the following requirements:

i. the collection efficiency is sufficient to minimize or eliminate visible PE of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

ii. the control equipment achieves an outlet PE concentration of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there are no visible PE from the exhaust stack(s), whichever is less stringent.

2.d Pursuant to OAC rule 3745-17-12(I)(39)(b), all PE from the tapping operations associated with this emissions unit shall be captured and vented to stack G-36.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(c), the total combined operating hours for the cupolas associated with emissions units P901 through P903 and P907 shall not exceed 64 hours during any calendar day. Time intervals during which a cupola is not in a state of blast (standby mode) shall not be included in the determination of daily operating hours. Blast is defined as the period during which air is forced through the tuyeres onto a cupola burden consisting of coke, limestone and scrap metal.

2. Operational restrictions for scrubber no. 62 serving this emissions unit:

   a. the pressure drop across the scrubber shall be maintained within the range of 40 to 50 inches of water column at all times while the emissions unit is in operation;

   b. the scrubber water flow rate shall be maintained at a value of not less than 7,137 gallons per minute at all times while the emissions unit is in operation; and

   c. the draft fan amperage shall be continuously maintained at a value of not less than 100 amps at all times while the emissions unit is in operation.

3. Operational restriction for the afterburners (or equivalent) serving this emissions unit:

The average combustion temperature within the cupola near the direct-flame afterburners (or equivalent devices), for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,300 degrees Fahrenheit.

4. Operational restrictions for scrubber no. 72 serving this emissions unit:

   The pressure drop across the scrubber shall be continuously maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

   The scrubber water flow rate shall be continuously maintained at a value of not less than 30 gallons per minute at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of P901 through P903 and P907 to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. Monitoring and record keeping requirements for scrubber no. 62 serving this emissions unit:

   The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber, the scrubber water flow rate, and the exhaust gas flow rate (in terms of fan motor amperage) while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 62 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the draft fan amperage.

3. Monitoring and record keeping requirements of the upper stack temperature serving the cupola for this emissions unit:

   The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the temperature, in degrees Fahrenheit, within the upper stack of the cupola when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day for the cupola: all 3-hour blocks of time during which the average combustion temperature within the cupola, when the emissions unit was in operation, was less than 1,300 degrees Fahrenheit.

4. Monitoring and record keeping requirements for scrubber no. 72 serving this emissions unit:

   The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 72 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water flow rate, in gallons per minute.

5. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit and for any visible fugitive PE escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV Reporting Requirements

1. Reporting requirements for scrubber no. 62 serving this emissions unit:

   The permittee shall submit deviation (excursion) reports that identify any measured scrubber parameter that is not maintained within the required ranges or not maintained above the required levels specified in section A.II.2. of these terms and conditions. These reports shall include the following information:

   a. the date of the excursion;
   b. the time interval over which the excursion occurred;
   c. the value of the excursion;
   d. the cause(s) of the excursion;
   e. the corrective action that has been taken or will be taken to prevent excursions in the future; and
   f. a copy of any chart that shows the excursion.

2. Reporting requirement for the cupola upper stack temperature control system serving this emissions unit:

   The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature within the cupola upper stack does not comply with the temperature restriction specified in section A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. Reporting requirement for the daily operating hours restriction:

   The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

4. Reporting requirements for scrubber no. 72 serving this emissions unit:

   The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the ranges or not maintained above the levels specified in section A.II.4. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

7. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from any stack serving this emission unit or any visible fugitive PE escaping from the building containing this emissions unit were observed and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarters.

V Testing Requirements

1. Compliance with the emission limitations and the control requirements in sections A.I.1. and A.I.2. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from stack G-36 serving this emissions unit or the stack serving scrubber no. 62 shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
Visible fugitive PE from charging operations or the charge bucket and hopper loading portions of this emissions unit shall not exceed 20 % opacity, as a three-minute average.

Applicable Compliance Method:
Compliance with the above visible fugitive PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

1c. Emission Limitation:
The PE from scrubber no. 62 serving this emissions unit shall not exceed 27.4 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
Compliance with the above SO2 emission limitation shall be determined by the following method: Method 6 of 40 CFR, Part 60, Appendix A.

1e. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

1f. Compliance with OAC rule 3745-17-08(B)(3) shall be determined by the method specified in OAC rule 3745-17-03(B)(7). Compliance with the visible PE portion of OAC rule 3745-17-08(B)(3) shall be determined by Method 22 of 40 CFR, Part 60, Appendix A.

1g. Emission Limitation:
The total combined PE from emissions units P141, P145, P171 through P174, P177, P901 (tapping operations only), and P902 (tapping operations only) shall not exceed 28.3 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit and emissions units P141, P145, P171 through P174, P177, and P901 (tapping operations only) in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to expiration of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate for scrubber no. 62 (27.4 lbs/hr); the allowable SO2 emissions for scrubber no. 62 (6 lbs/ton of material processed); the allowable PE rate for stack G-36 (28.3 lbs/hr); the allowable PE concentration for wet scrubber no. 72 (0.030 gr/dscf); the allowable visible PE for the stacks of scrubber no. 62 and wet scrubber no. 72, and stack G-36; and the allowable visible fugitive PE for dumping of the charge into the cupola and loading the hoppers and charge bucket.

The following test methods shall be employed to determine compliance with the allowable emission rate: Method 5 of 40 CFR, Part 60, Appendix A for PE, Method 6 of 40 CFR, Part 60, Appendix A for SO2 emissions, and Method 9 of 40 CFR, Part 60, Appendix A for visible particulate emissions. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, including charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test, and the person(s) who will be conducting the test. Failure to submit such notification for review and approval prior to the test may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test shall be signed by the person or persons responsible for the test and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

The following parameters, at a minimum, shall be monitored and recorded every fifteen minutes during the emission testing:

a. the date, the time, the run number and the charge number;
b. the pressure drop (in inches of water column) across scrubber no. 62;
c. the blast rate in scfm;
d. the back pressure of the cupola system, in inches of water column;
e. the water flow rate for scrubber no. 62, in gpm, and the amps of the pump motor;
f. the downcomer water flow rate, in gpm, and the amps of the pump motor;
g. the amps of the main fan;
h. the cupola liquid level (readings shall be taken from cupola liquid level gauge);
i. the afterburner temperature in degrees Fahrenheit; and
j. the percent oxygen enrichment (readings shall be taken from oxygen enrichment gauge).

3. The following parameters, at a minimum, shall be monitored and recorded for the testing period:

   a. the process weight rate (in tons per hour) of raw material charged;
   b. Method 9 readings of the opacity of the charge door visible fugitive PE (observations shall be made throughout the testing period in accordance with the procedures specified in Method 9 of 40 CFR, Part 60, Appendix A); and
   c. the coke breeze in lb/min (average for duration of each test run).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons per hour cupola no. 2 [Carbon monoxide (CO) emissions are controlled by a direct flame afterburner (or equivalent), followed by particulate emission (PE) control equipment consisting of automatic, flooded disc venturi wet scrubber no. 62 (also known as no. 2 cupola wet collector).]	OAC rule 3745-17-18-24(Z)	SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.
tapping of cupola (Tapping emissions are captured and exhausted to dropout stack G-36 by a 25,000 acfm forehearth exhaust hood located above the taphole.)	none	none
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	none	none
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by wet scrubber no. 72	none	none

(also known as # 2 C & S wet collector)

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
Compliance with the above SO2 emission limitation shall be determined by the following method: Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 3 (P903)
Activity Description: Cupola 3 And Associated Charging And Tapping Operations

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons per hour cupola no. 3 [Carbon monoxide (CO) emissions are controlled by direct flame afterburners (or equivalent), followed by particulate emission (PE) control equipment consisting of automatic, flooded disc venturi wet scrubber no. 63 (also known as no. 3 cupola wet collector).]	OAC rule 3745-31-05(A)(3) (PTI 13-030)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A)(1) and 3745-21-08(D).
	OAC rule 3745-17-12(I)(40)(a)	PE from scrubber no. 63 serving this emissions unit shall not exceed 27.4 pounds per hour.
	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving scrubber no. 63 shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	40 CFR 52.1881(b)(15)(xviii)	Sulfur dioxide (SO2) emissions from this emissions unit shall not

		exceed 6.0 pounds of SO2 per ton of material processed.
	OAC rule 3745-21-08(D)	See section A.I.2.a.
tapping of cupola [Tapping emissions are captured and vented to wet scrubber no. 74 (also known as #4 C & S wet collector).]	OAC rule 3745-17-12(I)(40)(b)	The PE from stack E-25 (serving scrubber no. 74) serving this portion of the emissions unit shall not exceed 1.5 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from stack E-25 serving this portion of this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	See section A.I.2.b.
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by wet scrubber no. 73 (also known as #3 C & S wet collector)	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B) and (B)(3)	See section A.I.2.c.

2. Additional Terms and Conditions

2.a CO gases generated during the operation of this emissions unit shall not be emitted unless the gases are combusted at a temperature of at least 1,300 degrees Fahrenheit for 0.3 second or greater in a direct-flame afterburner or equivalent device equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

2.b Reasonably available control measures, consisting of maintaining an unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola, shall be employed to minimize or eliminate visible PE of fugitive dust.

2.c Reasonably available control measures, consisting of venting emissions from the hopper loading and charge bucket loading operations to scrubber no. 73, shall be employed to minimize or eliminate visible PE of fugitive dust. Such equipment shall meet the following requirements:

i. the collection efficiency is sufficient to minimize or eliminate visible PE of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

ii. the control equipment achieves an outlet PE concentration of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there are no visible PE from the exhaust stack(s), whichever is less stringent.

2.d Pursuant to OAC rule 3745-17-12(I)(40)(b), all PE from the tapping operations associated with this emissions unit shall be captured and vented to stack E-25 (serving scrubber no. 74).

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(c), the total combined operating hours for the cupolas associated with emissions units P901 through P903 and P907 shall not exceed 64 hours during any calendar day. Time intervals during which a cupola is not in a state of blast (standby mode) shall not be included in the determination of daily operating hours. Blast is defined as the period during which air is forced through the tuyeres onto a cupola burden consisting of coke, limestone and scrap metal.

2. Operational restrictions for scrubber no. 63 serving this emissions unit:

   a. the pressure drop across the scrubber shall be maintained within the range of 40 to 50 inches of water column at all times while the emissions unit is in operation;

   b. the scrubber water flow rate shall be maintained at a value of not less than 7,137 gallons per minute at all times while the emissions unit is in operation; and

   c. the draft fan motor amperage shall be continuously maintained at a value of not less than 100 amps at all times while the emissions unit is in operation.

3. The average combustion temperature within the cupola near the direct-flame afterburner (or equivalent devices), for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,300 degrees Fahrenheit.

4. The pressure drop across each of scrubbers nos. 73 and 74 shall be continuously maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

   The scrubber water flow rate for each of scrubbers nos. 73 and 74 shall be continuously maintained at a value of not less than 30 gallons per minute at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P901 through P903 and P907 (and for the total combined operating hours for such emissions units) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across scrubber no. 63, the scrubber water flow rate for scrubber no. 63, and the draft fan motor amperage for scrubber no. 63 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 63 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the draft fan motor amperage.

3. Monitoring and record keeping requirements of the upper stack temperature serving the cupola for this emissions unit:

   The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the temperature, in degrees Fahrenheit, within the upper stack of the cupola when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

   The permittee shall collect and record the following information for each day for the cupola: all 3-hour blocks of time during which the average combustion temperature within the cupola, when the emissions unit was in operation, was less than 1,300 degrees Fahrenheit.

4. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each of scrubbers nos. 73 and 74 and the scrubber water flow rate for each of scrubbers nos. 73 and 74 while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for each of scrubbers nos. 73 and 74 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water flow rate, in gallons per minute.

5. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit and for any visible fugitive PE escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal visible emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature within the cupola upper stack does not comply with the

temperature restriction specified in section A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

2. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the following scrubber parameters for scrubbers nos. 63, 73, and 74 were not maintained within the ranges or not maintained above the levels specified in sections A.II.2. and A.II.4. of these terms and conditions for each scrubber, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber;

   b. the scrubber water flow rate; and

   c. the draft fan motor amperage for scrubber no. 63.

4. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

5. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

6. The permittee shall submit quarterly written reports which (a) identify all days during which any visible PE from any stack serving this emission unit or any visible fugitive PE escaping from the building containing this emissions unit were observed and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations and the control requirements in sections A.I.1. and A.I.2. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
Visible fugitive PE from charging operations or the charge bucket and hopper loading portions of this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance with the above visible fugitive PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

1c. Emission Limitation:
The PE from scrubber no. 63 serving this emissions unit shall not exceed 27.4 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10). Stack test results from testing performed on November 12, 1997 demonstrate compliance with the PE limitation for scrubber no. 63 (27.4 pounds per hour). Therefore, no testing is specifically required by this permit; however, if appropriate, testing may be required pursuant to OAC rule 3745-15-04(A). Such testing may be required at opacity levels less than the visible PE limitation in section A.I.1. of these terms and conditions.

1d. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
Compliance with the above SO2 emission limitation shall be determined by the following method: Method 6 of 40 CFR, Part 60, Appendix A.

1e. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

1f. Compliance with the mass emission portion of OAC rule 3745-17-08(B)(3) shall be determined by the method specified in OAC rule 3745-17-03(B)(7). Compliance with the visible PE portion of OAC rule 3745-17-08(B)(3) shall be determined by Method 22 of 40 CFR, Part 60, Appendix A.

1g. Emission Limitation:

The PE from stack E-25 (serving scrubber no. 74) serving this portion of the emissions unit shall not exceed 1.5 lbs/hr.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to expiration of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE rate for scrubber no. 63 (27.4 lbs/hr); the allowable SO2 emissions for scrubber no. 63 (6 lbs/ton of material processed); the allowable PE rate for stack E-25 (1.5 lbs/hr); the allowable PE concentration for wet scrubber no. 73 (0.030 gr/dscf); the allowable visible PE for the stacks of scrubber no. 63 and wet scrubber no. 73, and stack E-25; and the allowable visible fugitive PE for dumping of the charge into the cupola and loading the hoppers and charge bucket.

The following test methods shall be employed to determine compliance with the allowable emission rate: Method 5 of 40 CFR, Part 60, Appendix A for PE, Method 6 of 40 CFR, Part 60, Appendix A for SO2 emissions, and Method 9 of 40 CFR, Part 60, Appendix A for visible particulate emissions. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The test shall be conducted while the emissions unit is operating at or near its maximum capacity, including charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons per hour cupola no. 3 [Carbon monoxide (CO) emissions are controlled by a direct flame afterburners (or equivalent), followed by particulate emission (PE) control equipment consisting of automatic, flooded disc venturi wet scrubber no. 63 (also known as no. 3 cupola wet collector).]	OAC rule 3745-17-18-24(Z)	SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.
tapping of cupola [Tapping emissions are captured and vented to wet scrubber no. 74 (also known as #4 C & S wet collector).]	none	none
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	none	none
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by wet scrubber no. 73 (also known as #3 C & S wet collector)	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
Compliance with the above SO2 emission limitation shall be determined by the following method: Method 6 of 40 CFR, Part 60, Appendix A.

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cupola 7 (P907)
Activity Description: Cupola 7 And Associated Charging And Tapping Operations

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons of per hour cupola no. 7 [Carbon monoxide (CO) emissions are controlled by direct flame afterburners (or equivalent), followed by particulate emission (PE) control equipment consisting of venturi wet scrubber no. 67 (also known as no. 7 cupola wet collector).]	OAC rule 3745-31-05(A)(3) (PTI 13-1063)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A)(1), 3745-17-08(B) and (B)(3), and 3745-21-08(D).
	OAC rule 3745-17-12(I)(43)(a)	PE from scrubber no. 67 serving this emissions unit shall not exceed 26.8 pounds per hour.
	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving scrubber no. 67 shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
	40 CFR 52.1881(b)(15)(xviii)	Sulfur dioxide (SO2) emissions from this emissions unit shall not exceed 6.0 pounds of SO2 per ton of material processed.

	OAC rule 3745-21-08(D)	See section A.I.2.a.
tapping of cupola (Tapping emissions are captured and exhausted to dropout stack C-23 by a 25,000 acfm forehearth exhaust hood located above the taphole.)	OAC rule 3745-17-12(I)(43)(b)	PE from stack C-23 serving this portion of the emissions unit shall not exceed 1.5 lbs/hr.
	OAC rule 3745-17-07(A)(1)	Visible PE from stack C-23 serving this portion of the emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B)	See section A.I.2.b.
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by baghouse no. 78 (also known as D unit)	OAC rule 3745-17-07(B)(1)	Visible fugitive PE from this portion of the emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.
	OAC rule 3745-17-08(B) and (B)(3)	See section A.I.2.c.
	OAC rule 3745-17-12(I)(9)	PE from baghouse no. 78 serving this portion of the emissions unit and emissions units F025, P097, P140, P290, and P291 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

2. Additional Terms and Conditions

2.a CO gases generated during the operation of this emissions unit shall not be emitted unless the gases are combusted at a temperature of at least 1,300 degrees Fahrenheit for 0.3 second or greater in a direct-flame afterburner or equivalent device equipped with an indicating pyrometer which is positioned in the working area at the operator's eye level.

2.b Reasonably available control measures, consisting of maintaining an unvented canopy hood above the charge door to assist in collecting charging emissions by the draft in the cupola, shall be employed to minimize or eliminate visible PE of fugitive dust.

2.c Reasonably available control measures, consisting of the capture and venting of emissions from the hopper loading and charge bucket loading operations to baghouse no. 78, shall be employed to minimize or eliminate visible PE of fugitive dust. Such equipment shall meet the following requirements:

i. the collection efficiency is sufficient to minimize or eliminate visible PE of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

ii. the control equipment achieves an outlet PE concentration of not greater than 0.030 grain of PE per dry standard cubic foot of exhaust gases or there are no visible PE from the exhaust stack(s), whichever is less stringent.

2.d Pursuant to OAC rule 3745-17-12(I)(43)(b), all PE from the tapping operations associated with this emissions unit shall be captured and vented to stack C-23.

II Operational Restrictions

1. Pursuant to OAC rule 3745-17-12(I)(47)(c), the total combined operating hours for the cupolas associated with emissions units P901 through P903 and P907 shall not exceed 64 hours during any calendar day. Time intervals during which a cupola is not in a state of blast (standby mode) shall not be included in the determination of daily operating hours. Blast is defined as the period during which air is forced through the tuyeres onto a cupola burden consisting of coke, limestone and scrap metal.

2. Operational restrictions for scrubber no. 67 serving this emissions unit:

a. the pressure drop across the scrubber shall be maintained within the range of 40 to 50 inches of water column at all times while the emissions unit is in operation;

b. the scrubber water flow rate shall be maintained at a value of not less than 7,137 gallons per minute at all times while the emissions unit is in operation; and

c. the draft fan motor amperage shall be continuously maintained at a value of not less than 450 amps at all times while the emissions unit is in operation.

3. The average combustion temperature within the cupola near the direct-flame afterburners (or equivalent devices), for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,300 degrees Fahrenheit.

4. The pressure drop across baghouse no. 78 shall be continuously maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. Pursuant to OAC rule 3745-17-12(I)(47)(e), daily records shall be maintained for the operating times of each of emissions units P901 through P903 and P907 (and for the total combined operating hours for such emissions units) to document compliance with the daily operating hours restriction specified in section A.II.1. of these terms and conditions.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber, the scrubber water flow rate, and the fan motor amperage while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall collect and record the following information for scrubber no. 67 once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column;

   b. the scrubber water flow rate, in gallons per minute; and

   c. the draft fan amperage.

3. The permittee shall operate and maintain a continuous temperature monitor and recorder that measures and records the temperature, in degrees Fahrenheit, within the cupola when the emissions unit is in operation. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

   The permittee shall collect and record the following information for each day for the cupola: all 3-hour blocks of time during which the average combustion temperature within the cupola, when the emissions unit was in operation, was less than 1,300 degrees Fahrenheit.

4. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across baghouse no. 78 while the emissions unit is in operation. The monitoring device shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall collect and record the pressure drop, in inches of water column, for baghouse no. 78 once for each day the emissions unit is in operation.

5. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

6. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible PE from any stack serving this emissions unit and for any visible fugitive PE escaping from the building containing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;
   b. whether the emissions are representative of normal operations;
   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   d. the total duration of any visible emission incident; and
   e. any corrective actions taken to minimize or eliminate the visible emissions.

   If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident had ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any measured scrubber no. 67 parameter that is not maintained within the required ranges or not maintained above the required levels specified in section A.II.2. of these terms and conditions. These reports shall include the following information:

   a. the date of the excursion;
   b. the time interval over which the excursion occurred;
   c. the value of the excursion;

d. the cause(s) of the excursion;
e. the corrective action that has been taken or will be taken to prevent excursions in the future; and
f. a copy of any chart that shows the excursion.

2. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the average temperature within the cupola upper stack did not comply with the temperature restriction specified in section A.II.3. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

3. The permittee shall submit deviation (excursion) reports that identify any exceedances of the daily operating hours restriction specified in section A.II.1. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

4. The permittee shall submit deviation (excursion) reports that identify all periods of time during which the pressure drop across baghouse no. 78 was not maintained within the range specified in section A.II.4. of these terms and conditions, as well as the corrective actions that were taken to achieve compliance.

5. The permittee shall submit quarterly exceedance reports in accordance with section A.1.c. of the General Terms and Conditions of this permit, except that they shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

6. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarters.

7. The permittee shall submit quarterly written reports that (a) identify all days during which any visible PE from any stack serving this emission unit or any visible fugitive PE escaping from the building containing this emissions unit were observed and (b) describe any corrective actions taken to minimize or eliminate the visible emissions. These reports shall be submitted to the appropriate Ohio EPA District Office or local air agency by February 15, May 15, August 15, and November 15 of each year and shall cover the previous calendar quarter.

V Testing Requirements

1. Compliance with the emission limitations and the control requirements in sections A.I.1. and A.I.2. and the operational restrictions in section A.II. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
Visible fugitive PE from charging operations or the charge bucket and hopper loading portions of this emissions unit shall not exceed 20 % opacity, as a three-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance with the above visible fugitive PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(3).

1c. Emission Limitation:
The PE from scrubber no. 67 serving this emissions unit shall not exceed 26.8 pounds per hour.

Applicable Compliance Method:
Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1d. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
Compliance with the above SO2 emission limitation shall be determined by the following method:

Method 6 of 40 CFR, Part 60, Appendix A

1e. Compliance with OAC rule 3745-17-08(B) shall be determined by the method specified in OAC rule 3745-17-08(C).

1f. Compliance with OAC rule 3745-17-08(B)(3) shall be determined by the method specified in OAC rule 3745-17-03(B)(7). Compliance with the visible PE portion of OAC rule 3745-17-08(B)(3) shall be determined by Method 22 of 40 CFR, Part 60, Appendix A.

1g. Emission Limitation -
PE from stack C-23 serving this portion of the emissions unit shall not exceed 1.5 lbs/hr.

Applicable Compliance Method:

Compliance with the above hourly PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1h. Emission Limitation -
PE from baghouse no. 78 serving this portion of the emissions unit and emissions units F025, P097, P140, P290, and P291 shall not exceed 0.0055 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit and for emissions units F025, P097, P140, P290, and P291 in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to expiration of this permit.

The emission testing shall be conducted to determine compliance with the allowable PE concentration for baghouse no. 78 (0.0055 gr/dscf); the allowable SO2 emissions (6 lbs/ton of material processed); the allowable PE rate for wet scrubber no. 67 (26.8 lbs/hr); the allowable PE rate for stack C-23 (1.5 lbs/hr); the allowable visible PE for the stacks of baghouse no. 78 and wet scrubber no. 67, and stack C-23; and the allowable visible fugitive PE for dumping of the charge into the cupola and loading the hoppers and charge bucket.

The following test methods shall be employed to determine compliance with the allowable emission and concentration limits: Method 5 of 40 CFR, Part 60, Appendix A for PE, Method 6 of 40 CFR, Part 60, Appendix A for SO2 emissions, and Method 9 of 40 CFR, Part 60, Appendix A for visible particulate emissions. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, including charging and tapping operations, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

. The following parameters, at a minimum, shall be monitored and recorded every fifteen minutes during the emission testing:

a. the date, the time, the run number and the charge number;
b. the pressure drop (in inches of water column) across scrubber no. 67 and baghouse no. 78;
c. the blast rate in standard cubic feet per minute;
d. the back pressure of the cupola system, in inches of water column;
e. the water flow rate for scrubber no. 67, in gallons per minute (gpm), and the amps of the pump motor;
f. the downcomer water flow rate, in gpm, and the amps of the pump motor;
g. the amps of the main fan;
h. the cupola liquid level (readings shall be taken from cupola liquid level gauge);
i. the afterburner temperature, in degrees Fahrenheit; and
j. the percent oxygen enrichment (readings shall be taken from oxygen enrichment gauge).

3. The following parameters, at a minimum, shall be monitored and recorded for the testing period:

a. the process weight rate (in tons per hour) of raw material charged;
b. Method 9 readings of the opacity of the charge door visible fugitive PE (observations shall be made throughout the testing period in accordance with the procedures specified in Method 9 of 40 CFR, Part 60, Appendix A); and
c. the coke breeze, in lb/min (average for duration of each test run).

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
100 tons of per hour cupola no. 7 [CO emissions are controlled by a direct flame afterburners (or equivalent), followed by PE control equipment consisting of automatic, flooded disc venturi wet scrubber no. 67 (also known as no. 7 cupola wet collector).]	OAC rule 3745-17-18-24(Z)	SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.
tapping of cupola (Tapping emissions are captured and exhausted to dropout stack C-23 by a 25,000 acfm forehearth exhaust hood located above the taphole.)	none	none
dumping of cupola charge (bucket) into cupola (An unvented canopy hood above the charge door assists in collecting charging emissions by the draft in the cupola.)	none	none
loading of coke, limestone, steel, iron, cupola flux, and any other materials into the charge bucket, controlled by baghouse no. 78 (also known as D unit)	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

1. Emission Limitation:
SO2 emissions from this emissions unit shall not exceed a maximum of 6.0 pounds of SO2 per ton of material processed.

Applicable Compliance Method:
Compliance with the above SO2 emission limitation shall be determined by the following method:

Method 6 of 40 CFR, Part 60, Appendix A

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Shot Reclaim & Refuse System (P908)
Activity Description: Shot Reclaim & Refuse System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
shot reclamation and refuse system, including conveyors, vibrating pan feeders, shakeouts, storage hoppers and rotating drums, controlled by baghouses nos. 82 and 92 (also known as A unit and C unit, respectively) - Emissions formerly vented to baghouse no. 94 are now vented to baghouse no. 92.	OAC rule 3745-17-12(I)(7)(e)	PE from baghouse no. 94 serving emissions units P411 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (The permittee has completely vented this emissions unit to baghouses nos. 82 and 92.) [Emissions from this emissions unit that formerly were vented to baghouse no. 94 are now vented to baghouse no. 92. Baghouse no. 92 serving emissions units P029, P032, P033, P035, P036, P040, P050, and P411 has a PE limitation from OAC rule 3745-17-12(I)(7)(c) of 0.014 grain per actual cubic foot of total exhaust gases. (P030, P031 and P034 have now been shut down, and P041, P415, and a portion of P908 are now also vented to baghouse no. 92.)]

OAC rule 3745-17-12(I)(7)(a)	PE from baghouse no. 82 serving emissions units P027 through P029, P032, P038, P039, P042, and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (P030 and P031 are now permanently shut down, and P041 is now vented to baghouse no. 92.)
OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. Additional Terms and Conditions

2.a All PE generated by this emissions unit shall be captured and vented to the baghouses.

2.b Pursuant to OAC rule 3745-17-12(I)(7)(f)*, all PE generated by this emissions unit which, prior to June 14, 1991, were vented to the cleaning room wet collector shall be vented to baghouse no. 82.

* This rule citation reflects the settlement agreement reached between Ohio EPA and the permittee concerning the permittee's appeal to the Ohio Environmental Review Appeals Commission of the 1991 revisions and additions to OAC Chapter 3745-17. The revised rule was adopted by the Director of Ohio EPA in December 1997. USEPA and the permittee have agreed to consider this revised rule as federally enforceable during the time from the effective date of this permit to the effective date of USEPA approval of these limitations as a revision to the Ohio SIP for particulate matter.

II Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 1 to 10 inches of water column at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse, at all times, while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations,

instructions, and/or operating manual(s). The permittee shall collect and record the pressure drop across each baghouse once for each day the emissions unit is in operation.

2. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across each baghouse did not comply with the allowable range specified in section A.II.1. of these terms and conditions.

2. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.I.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation -
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation -
PE from baghouse no. 94 serving emissions units P411 and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases. (The permittee has completely vented this emissions unit to baghouses nos. 82 and 92.)

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

1c. Emission Limitation -
PE from baghouse no. 82 serving emissions units P027 through P032, P038, P039, P041, P042, and P908 shall not exceed 0.011 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for emissions units P027 through P032, P033, P035, P036, P038 through P042, P050, P411, P415, and P908 in accordance with the following requirements:

The emission testing shall be conducted within 2.5 years after issuance of this permit.

The emission testing shall be conducted to determine compliance with the allowable concentrations for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentrations for PE: Method 5 of 40 CFR, Part 60, Appendix A. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sand Mullors/ Sand Handling System (P912)
Activity Description: Sand Mullors/ Sand Handling System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
sand mullors and sand handling system, controlled by wet scrubbers nos. 4 and 6 - Formerly, emissions from this emissions unit were vented to wet scrubbers nos. 1 and 3 in addition to 4 and 6. Wet scrubber nos. 1 and 3 have been shut down.	OAC rule 3745-17-12(I)(45)	Particulate emissions (PE) from each of wet scrubbers nos. 4 and 6 serving this emissions unit shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

2. **Additional Terms and Conditions**

2.a All PE generated by this emissions unit shall be captured and vented to wet scrubbers nos. 4 and 6.

II Operational Restrictions

1. The pressure drop across each scrubber shall be maintained within the range of 4 to 8 inches of water column at all times while the emissions unit is in operation.

2. The scrubber water pump motor amperage for each scrubber shall be maintained at or above 20 amps, at all times while the emissions unit is in operation.

III Monitoring and/or Recordkeeping

1. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across each scrubber and the scrubber water pump motor amperage for each scrubber while the emissions unit is in operation. The monitoring devices and any recorders shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and/or operating manuals.

   The permittee shall collect and record the following information for each scrubber once for each day the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water column; and

   b. the scrubber water pump motor amperage.

2. The permittee shall collect and record, for each control system, the downtimes of the capture (collection) system, control device, and monitoring equipment for each day the emissions unit was in operation.

3. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

   d. the total duration of any visible emission incident; and

   e. any corrective actions taken to eliminate the visible emissions.

IV Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained within the required ranges for each scrubber, as well as the corrective actions that were taken to achieve compliance:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water pump motor amperage.

2. The permittee shall submit quarterly reports, for each control system, containing the daily downtimes for the capture (collection) system, control device, and monitoring equipment when the emissions unit was in operation. These reports shall be submitted by February 15, May 15, August 15, and November 15 of each year and shall include the previous calendar quarter.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V Testing Requirements

1. Compliance with the emission limitations in section A.1. of these terms and conditions shall be determined in accordance with the following methods:

1a. Emission Limitation:
Visible PE from any stack serving this emissions unit shall not exceed 20 % opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:
Compliance with the above visible PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(1).

1b. Emission Limitation:
PE from each of wet scrubbers nos. 4 and 6 serving this emissions unit shall not exceed 0.010 grain per actual cubic foot of total exhaust gases.

Applicable Compliance Method:
Compliance with the above PE limitation shall be determined by the method specified in OAC rule 3745-17-03(B)(10).

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted within six (6) months prior to the permit's expiration.

The emission testing shall be conducted to determine compliance with the allowable concentration for PE.

The following test method from OAC rule 3745-17-03(B)(10) shall be employed to determine compliance with the allowable concentration for PE: Method 5 of 40 CFR, Part 60, Appendix A. In addition, during each test run, visible emission readings shall be performed for each baghouse using USEPA Method 22. Alternative USEPA-approved test methods may be used with prior approval from the appropriate Ohio EPA District Office or local air agency.

The tests shall be conducted while this emissions unit and all other emissions units vented to wet scrubbers nos. 4 and 6 are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions units and the testing procedures provide a valid characterization of the emissions from the emissions units and/or the performance of the control equipment.

A comprehensive written report on the results of the emission tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests. The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

VI Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	none	none

2. Additional Terms and Conditions

None

II Operational Restrictions

None

III Monitoring and/or Recordkeeping

None

IV Reporting Requirements

None

V Testing Requirements

None

VI Miscellaneous Requirements

None