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

06/06/01

CERTIFIED MAIL

RE: Preliminary Proposed Title V
Chapter 3745-77 permit

15-76-01-0014
American Steel Foundries
Jon S. Schumacher
1001 East Broadway Street
Alliance, OH 44601

Dear Jon S. Schumacher:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 02/29/00. 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. **Please submit, in writing, any comments you may have within fourteen (14) days from your receipt of this letter to:**

Ohio Environmental Protection Agency
Jim Orlemann, Manager, Engineering Section
Division of Air Pollution Control
P.O.Box 1049
Columbus, OH 43216-1049

and

Canton Division of Air Pollution Control
420 Market Avnue N.
Canton, OH 44702-1544
(330) 489-3385

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.

Very truly yours,

Thomas G. Rigo

Thomas G. Rigo, Manager
Field Operations and Permit Section
Division of Air Pollution Control

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

State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Issue Date: 06/06/01	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: 15-76-01-0014 to:

American Steel Foundries
1001 East Broadway Street
Alliance, OH 44601

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

F001 (Roadways)
Plant Roadways (paved and unpaved)

F002 (Mold pouring and cooling)
Pouring and cooling includes all hot metal operation emissions after furnace tap to physical mold shakeout.

F003 (Mold makg & washg)
Mold Making &Washing

F004 (Grinding and chipping)
C&F Grinding and Chipping

F005 (7 Car Furnace)
7 Car Furnace 14.3 MMBtu/hr

F006 (N F&D Furnace)
N. F&D Furnace 11 MMBtu/hr

F007 (S F&D Furnace)
S F&D Furnace 11 MMBtu/hr

K001 (C&F Paint Spray)
C&F Paint Spray System. (Unit moved to New Process Building in 1984)

P001 (Electric Furnace)
Electric Arc Furnace

P002 (No. 2 Shakeout)
No. 2 Shakeout System

P003 (Monorail Blast)
Monorail Shot Blast

P004 (LPCP Line)
LPCP Shot Blast

P005 (Simpson Sand Cooler)
Simpson Sand Cooler

P006 (Chromite Separator)
Chromite Sand Separator System

P008 (S. End Sand System)
Conveyance, process and storage equipment for sand handling equipment in the south end of No.1 Foundry

P009 (Sand Washer)
Wet Sand Reclamination System

P010 (No. 17 Sand Mill)
No. 17 Sand Mill System

P011 (Silica Sand Str & Hdl)
Foundry Wing New Sand Handling System

P012 (SE Sand Sys # 2Fdy)
South End Sand Handling System servicing the south end of No.2 Foundry

P013 (No. 10 Shakeout)
No.10 Shakeout System

P014 (No. 1 Shakeout)
No.1 Shakeout System

P015 (No. 7 Shakeout)
No.7 Shakeout System

P016 (Chromite Sand Silo)
Chromite Sand Silo System

P017 (Cereal Silo)
Cereal Silo System

P018 (Bentonite Silo)
Bentonite Silo System

P019 (Heap Sand Silo)
Heap Sand Silo System

P020 (No. 4 Sand Mill)
No.4 Sand Mill System

P023 (No. 3 Sand Mill)
No.3 Sand Mill System

P024 (Laempe Core Mach)
Laempe Core Making System

P025 (Kloster Sand Cooler)
Kloster Sand Cooler System

P026 (Carrier Blast)
Carrier Shot Blast

P028 (Rapper Station)
Sand Rapping System

P029 (Crusher/Screener)
Crusher Screener System at No. 1 Unit

P030 (No. 19 Sand Mill)
No.19 Sand Mill System

P031 (No. 1 Sand Cooler)
Sand Cooler System at No.1 Unit

P032 (N. E. Sand System)
North End Sand Handling System

P033 (No. 16 Sand Mill)
No.16 Sand Mill System

P034 (Backup Sand Storage Silo)
Backup silo to store extra process sand

P901 (Core Making (Baked))
Core Making (Baked)

P902 (Core Making (Shell))
Core Making (Shell)

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:

Canton Division of Air Pollution Control
420 Market Avnue N.
Canton, OH 44702-1544
(330) 489-3385

OHIO ENVIRONMENTAL PROTECTION AGENCY

_____

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, 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.

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.

c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written 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.) See B.8 below if no deviations occurred during the quarter.
iii. Written reports, which identify any deviations from the federally enforceable <u>monitoring, recordkeeping, and reporting requirements</u> contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i)

and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

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 are true, accurate, and complete.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to 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"), the permittee shall comply with the requirement to register such a plan.

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.

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.

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. 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.

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.

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.

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.

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 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.

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.

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 appropriate Ohio EPA District Office or local air agency 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.

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.

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).

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.

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, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). 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; and

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.

(For further clarification, the permittee can refer to Engineering Guide #63 that is available in their STARSHIP software package.)

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.

18. Insignificant Activity

Each insignificant activity that has one or more applicable requirements shall comply with those applicable requirements.

B. State Only Enforceable Section

1. 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.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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. 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.)

3. 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.

4. 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.

5. 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).

6. 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.

7. 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.

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

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.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:

B002 - NGF makeup air heater, north foundry wing;
B003 - NGF makeup air heater, core room north (old Z119);
B004 - NGF makeup air heater, #1 foundry north (old Z128);
B005 - NGF makeup air heater, reclaim department (old Z122);
B006 - NGF makeup air heater, core room south (old Z121);
B007 - NGF makeup air heater, core room center (old Z120);
B008 - NGF makeup air heater, PH&L building north (old Z117);
B009 - NGF makeup air heater, PH&L building south (old Z118);
K002 - alphaset core wash;
K003 - CO2 core wash spray station;
K004 - betaset core wash;
P021 - pattern shop wood work;
P022 - core blowoff;
P027 - ARC wash;
Z001 - mobile equipment;
Z101 - plant parking lots (paved);
Z102 - plant parking lots (unpaved);
Z105 - plant storage piles (temporary plant);
Z106 - plant storage piles (temporary annex);
Z107 - small hot water boiler;
Z108 - main office boiler;
Z109 - pattern building heater;
Z110 - pattern department heater;
Z111 - B&E department heater;
Z112 - new C&F building heaters;
Z113 - parts cleaners LT20;
Z114 - parts cleaners GT20;
Z115 - sodium silicate tank;
Z116 - phenolic resin tank;
Z123 - makeup air units C&F east;
Z124 - makeup air units C&F west;
Z125 - misc. air heaters;
Z126 - misc. sanitary sewer vents;
Z127 - plant comfort air conditioners;
Z129 - misc plant portable gas heaters;
Z130 - misc electrical powered equipment;
Z131 - cooling tower;
Z201 - melted metals scrap storage bins;
Z202 - melted metals test lab;
Z203 - melted metals lime silo;
Z204 - melted metals additions and scrap charging;
Z302 - ladle drying;
Z303 - ladle cooling;
Z305 - sand test lab;
Z351 - sludge dewatering;
Z352 - water clarifier;
Z402 - core making (green);
Z403 - core making (alpha);
Z405 - core making (CO2);
Z406 - erich sand mill;
Z502 - c & f welding;

B. State Only Enforceable Section (continued)

Z503 - casting cutting;
Z504 - station grinding small parts;
Z554 - N Johnston furnace;
Z555 - S Johnston furnace;
Z557 - casting cooling after heat treating;
Z558 - surface flame hardening;
Z559 - mixing plastics for pattern shop;
Z560 - babbit shop;
Z561 - blacksmith temper furnace;
Z562 - blacksmith coal temper furnace; and
Z563 - blacksmith forge.

Each insignificant emissions unit at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within a permit to install for the emissions unit.

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Roadways (F001)

Activity Description: Plant Roadways (paved and unpaved)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
roadways and parking areas (paved and unpaved)	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold pouring and cooling (F002)

Activity Description: Pouring and cooling includes all hot metal operation emissions after furnace tap to physical mold shakeout.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
mold pouring and cooling for molds made on #1 & #2 slinger and #9 & #10 unit jolt machines	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.
	OAC rule 3745-18-06(E)(1)	Emissions of sulfur dioxide (SO2) shall not exceed 122.7 lbs/hr. See section A.III.1 below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. No monitoring or record keeping is required for the SO2 emission limitation because the maximum uncontrolled emission rate of SO2 cannot exceed the limitation.

IV. Reporting Requirements

None

V. Testing Requirements

1. Compliance with the SO2 emission limitation in section A.I.1 of these terms and conditions shall be determined in accordance with the following method:

V. Testing Requirements (continued)

1.a Emission Limitation:

122.7 lbs/hr of SO2

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the maximum production rate (tons of steel/hr) by the emission factor of 0.02 lb of SO2/ton of steel (SCC 30400708, U.S. EPA Source Classification Codes, 1997-98 update). If required, compliance shall be demonstrated through emission testing performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Mold makg & washg (F003)

Activity Description: Mold Making &Washing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
mold making and washing for #1 slinger (cope & drag), #2 slinger (cope & drag) and #9 & 10 unit jolt machines	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.c Resins and other liquid organic materials used in this emissions unit shall not be photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following daily records for all materials used in this mold making and washing operation:

a. the company identification of each material employed; and

b. for any liquid organic materials, documentation as to whether or not the material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any daily record showing the use of photochemically reactive materials in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544 within 30 days after the deviation occurs.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Grinding and chipping (F004)

Activity Description: C&F Grinding and Chipping

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
hand grinding and chipping of steel castings in the cleaning and finishing department	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: 7 Car Furnace (F005)

Activity Description: 7 Car Furnace 14.3 MMBtu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
7-car large casting annealing furnace rated at 14.3 mmBtu/hr	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: N F&D Furnace (F006)

Activity Description: N. F&D Furnace 11 MMBtu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
north F&D heat treating furnace rated at 11.0 mmBtu/hr	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: S F&D Furnace (F007)

Activity Description: S F&D Furnace 11 MMBtu/hr

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
south F&D heat treating furnace rated at 11.0 mmBtu/hr	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: C&F Paint Spray (K001)

Activity Description: C&F Paint Spray System. (Unit moved to New Process Building in 1984)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
C&F steel casting airless spray painting system with filters	OAC rule 3745-21-09(U)(1)(d)	3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as a daily volume-weighted average
	OAC rule 3745-17-11(A)(2)	0.551 lb/hr of particulate emissions
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall employ a dry exhaust filtration system while this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation. The permittee shall record the date of filter changes, including any incidents and repairs.

2. The permittee shall collect and record the following information each day for the emissions unit:

a. the name and identification number of each coating, as applied;

b. the VOC content (excluding water and exempt solvents) and the number of gallons (excluding water and exempt solvents) of each coating, as applied; and

c. when any non-compliant coating is used during any day, the permittee shall also record the daily volume-weighted average VOC content of all coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for Cvoc,2.

IV. Reporting Requirements

1. The permittee shall notify the Canton City Health Department, Air Pollution Control Division of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable limitation. This notification shall include a copy of such record and shall be sent within 45 days after the exceedance occurs.

2. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

3.5 pounds of VOC per gallon of coating, excluding water and exempt solvents, as a daily volume-weighted average

Applicable Compliance Method:

USEPA Method 24, in conjunction with the records required by section A.III.2, shall be used to determine the organic compound contents of the coatings.

1.b Emission Limitation:

0.551 lb/hr of particulate emissions

Applicable Compliance Method:

To determine the actual worst case emission rate for particulate matter, the following equation shall be used:

E = maximum coating usage rate (gal/hr) x pounds of solids per gal coating x (1-TE) X (1-CE)

E = particulate matter emissions rate (lb/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used.

CE = control efficiency of the dry exhaust filtration system.

If testing is required, the permittee shall conduct, or have conducted, an emission test for this emissions unit to demonstrate compliance with the allowable mass emission rate for particulates This emission test shall be conducted in accordance with the test methods and procedures in 40 CFR Part 60, Appendix A, Methods 1 through 5, and the procedures specified in OAC rule 3745-17-03. The test shall be conducted under maximum production rates unless specified or approved by Canton City Heath Department.

1.c Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Electric Furnace (P001)

Activity Description: Electric Arc Furnace

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
electric arc furnace, 30-ton, with side draft hood and Pangborn fabric filter, Model CM-1, ID 421000 (D007)	OAC rule 3745-17-11	17.4 lbs/hr of particulate emissions
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is 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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

17.4 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 19.0 TPH metal charged, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Shakeout (P002)

Activity Description: No. 2 Shakeout System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
no.2 mold shakeout system with ETA fabric filter, baghouse ID #473004 (D002)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	6.58 lbs/hr of particulate emissions (See section A.I.2.a. below)
	OAC rule 3745-17-08(B)	See section A.I.2.b. below.
	OAC rule 3745-17-07(B)	See section A.I.2.c. below.

2. Additional Terms and Conditions

2.a This is the total allowable from both P002 and P008 connected to the same baghouse. During the performance test of the common baghouse both emissions units shall be operated at maximum capacity.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

2. The baghouse #473004 used to control particulate emissions from this emissions unit also controls particulate emissions from the no.10 mold shakeout system (P013). This emissions unit shall not operate at the same time that emissions unit P013 is in operation. The baghouse #473004 is also used to control particulate emissions from the P008 sand handling system, #1 foundry south end, which operates when either the P002 or P013 shakeout system is operated.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on daily basis when the emissions unit is in operation.

2. The permittee shall maintain daily records of the hours of operation of this emissions unit.

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 periods of time that this emissions unit was in operation at the same time that emissions unit P013 (no.10 mold shakeout system) was in operation.

3. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

6.58 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared with the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while P002 is operating at or near its maximum capacity of 8.2 TPH metal charged and P008 is operating at or near its maximum capacity of 25.25 TPH sand handling, unless otherwise approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Monorail Blast (P003)

Activity Description: Monorail Shot Blast

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Monorail steel shot finish blast machine with Wheelabrator-Frye model 1111 -108TA Jet III fabric filter, baghouse ID #355016 (D008)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	9.1 lbs/hr of particulate emissions

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a weekly basis when the emissions unit is 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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03 (B)(1).

1.b Emission Limitation:

9.1 lbs/hr of particulate emissions

Applicable Compliance Methods:

If required, compliance shall be demonstrated based upon the requirements in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, 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 emission limitation in section A.I.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Small Parts Line (P004)

Activity Description: Small Parts Shot Blast (prior LPCP Shot Blast)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
"Knuckle" parts (prior LPCP line) shot blast with Wheelabrator-Frye model Super II fabric filter, baghouse ID #355019 (D014)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	3.0 lbs/hr of particulate emissions

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 and 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a weekly basis when the emissions unit is 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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

V. Testing Requirements (continued)

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03 (B)(1).

1.b Emission Limitation:

3.0 lbs/hr of particulate emissions

Applicable Compliance Methods:

If required, compliance shall be demonstrated based upon the requirements in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, 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 emission limitation in section A.I.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Simpson Sand Cooler (P005)

Activity Description: Simpson Sand Cooler

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Simpson sand cooler system with rotoclone and Sly wet impingement scrubber ID #333021 (D015)	OAC rule 3745-31-05 (PTI 15-448)	0.025 grain of particulate emissions per dry standard cubic foot of exhaust gases
		2.67 lbs/hr of particulate emissions
		11.7 tpy of particulate emissions
		See A.I.2.a below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.d below.

2. Additional Terms and Conditions

2.a This is the total allowable from both P005 and P025 connected to the same wet scrubber. During the performance test of the common impingement scrubber, both P005 and P025 shall be operated at maximum capacity.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.c Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.d The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The scrubber water supply pressure shall be continuously maintained at a value of not less than 20 pounds per square inch (gauge) at all times while the emissions unit is in operation.

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 25 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. 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 Permit to Install 15-448, issued on December 22, 1088. The monitoring and record keeping requirements contained in the above-referenced Permit to Install 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 Permit to Install.

2. The permittee shall properly operate and maintain equipment to continuously monitor and record the water supply pressure and the water flow rate while the emissions unit is in operation. The monitoring devices and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

a. the water supply pressure, in psig, on a once/shift basis;

b. the water flow rate, in gpm, on a once/shift basis; and

c. a log or record of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated emissions unit is in operation.

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 levels:

a. the water supply pressure; and

b. the scrubber water flow rate.

2. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitations:

0.025 grain of particulate emissions per dry standard cubic foot of exhaust gases

2.67 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the method and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

11.7 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 2.67 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

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 after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with both emissions units (P005 and P025) serviced by this wet scrubber operating at or near their maximum capacities of 25 TPH and 18 TPH, respectively, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the wet scrubber control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Chromite Separator (P006)

Activity Description: Chromite Sand Separator System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
chromite sand separator reclaim system with Sly fabric filter, baghouse ID # 473013 (D016)	OAC rule 3745-31-05 (PTI 15-560)	0.02 grain of particulate emissions per dry standard cubic foot of exhaust gases
		1.03 lbs/hr of particulate emissions
		4.5 tpy of particulate emissions
	OAC rule 3745-17-07(A)	Visible particulate matter emissions shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c. below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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 record the pressure drop across the baghouse on a weekly basis.

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. All deviation (excursion) reports shall be submited to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from this emissions unit for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.02 grain of particulate emissions per dry standard cubic foot of exhaust gases

1.03 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, 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 emission limitation in section A.I.1.

1.c Emission Limitation:

4.5 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emissions limitation was developed by multiplying the 1.03 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: S. End Sand System (P008)

Activity Description: Conveyance, process and storage equipment for sand handling equipment in the south end of No.1 Foundry

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand handling system, south end # 1 foundry, with ETA fabric filter, baghouse ID #473004 (D002)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	6.58 lbs/hr of particulate emissions (See section A.I.2.a. below)
	OAC rule 3745-17-08(B)	See section A.I.2.b. below.
	OAC rule 3745-17-07(B)	See section A.I.2.c. below.

2. Additional Terms and Conditions

2.a This is the total allowable particulate emission limitation from emissions units P002 and P008 (or alternatively emissions units P013 and P008) which are connected to the same baghouse. During the performance test of the common baghouse, both emissions units shall be operated at maximum capacity.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

2. This emissions unit shall be in operation anytime emissions unit P002 or P013 (mold sand shakeout system no.2 or no.10, respectively) is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is 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 periods of time that this emissions unit was not in operation when either emissions unit P013 (no.10 mold shakeout system) or P002 (no. 2 mold shakeout system) was operating.

3. All deviation (excursion) reports shall be submited to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

6.58 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while P002 (or P013 in the second test) is operating at or near its maximum capacity of 8.2 TPH metal charged and P008 is operating at or near its maximum capacity of 25.25 TPH sand handling, unless otherwise approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Washer (P009)

Activity Description: Wet Sand Reclamination System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand washer reclaim and handling system with Fuller-Draco fabric filter, baghouse ID #473009 (D010)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	6.56 lbs/hr of particulate emissions See section A.I.2.a below.
	OAC rule 3745-17-08(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a The total allowable particulate emission limitation for emissions units P009, P010 and P012, which are connected to the same baghouse, is 6.56 lbs/hr.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is 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.

IV. Reporting Requirements (continued)

2. All deviation (excursion) reports shall be submited to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

6.56 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all three emissions units (P009, P010, and P012) serviced by this fabric filter operating at maximum production rates (15, 25, and 25 TPH, respectively), unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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. 17 Sand Mill (P010)

Activity Description: No. 17 Sand Mill System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand mill system no.17 with Fuller-Draco fabric filter, baghouse ID #473009 (D010)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	6.56 lbs/hr of particulate emissions See section A.I.2.a below.
	OAC rule 3745-17-08(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a The total allowable particulate emission limitation for emissions units P009, P010 and P012, which are connected to the same baghouse, is 6.56 lbs/hr.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is 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.

IV. Reporting Requirements (continued)

2. All deviation (excursion) reports shall be submited to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

6.56 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all three emissions units (P009, P010, and P012) serviced by this fabric filter operating at maximum production rates (15, 25, and 25 TPH, respectively), unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Silica Sand Str & Hdl (P011)

Activity Description: Foundry Wing New Sand Handling System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
silica sand storage & handling equipment with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR, Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: SE Sand Sys # 2Fdy (P012)

Activity Description: South End Sand Handling System servicing the south end of No.2 Foundry

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand handling system, south end #2 foundry, with Fuller-Draco fabric filter, baghouse ID #473009 (D010)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	6.56 lbs/hr of particulate emissions See section A.I.2.a below.
	OAC rule 3745-17-08(B)	See section A.I.2.b below.

2. Additional Terms and Conditions

2.a The total allowable particulate emission limitation for emissions units P009, P010 and P012, which are connected to the same baghouse, is 6.56 lbs/hr.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is 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.

IV. Reporting Requirements (continued)

2. All deviation (excursion) reports shall be submited to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

6.56 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all three emissions units (P009, P010, and P012) serviced by this fabric filter operating at maximum production rates (15, 25, and 25 TPH, respectively), unless otherwise approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Shakeout (P013)

Activity Description: No.10 Shakeout System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
no.10 mold shakeout system with ETA fabric filter, baghouse ID #473004 (D002)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	6.58 lbs/hr of particulate emissions (See section A.I.2.a. below)
	OAC rule 3745-17-08(B)	See section A.I.2.b. below.
	OAC rule 3745-17-07(B)	See section A.I.2.c. below.

2. Additional Terms and Conditions

2.a This is the total allowable particulate emission limitation from emissions units P013 and P008 which are connected to the same baghouse. During the performance test of the common baghouse, both emissions units shall be operated at maximum capacity.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

2. The baghouse #473004 used to control particulate emissions from this emissions unit also controls particulate emissions from the no.2 mold shakeout system (P002). This emissions unit shall not operate at the same time that emissions unit P002 is in operation. The baghouse #473004 is also used to control particulate emissions from the P008 sand handling system, #1 foundry south end, which operates when either the P002 or P013 shakeout system is operated.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is in operation.

2. The permittee shall maintain daily records of the hours of operation of this emissions unit.

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 deviation (excursion) reports that identify all periods of time that this emissions unit was in operation at the same time that emissions unit P002 (no.2 mold shakeout system) was in operation.

3. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

6.58 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

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 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared with the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while P013 is operating at or near its maximum capacity of 8.2 TPH metal charged and P008 is operating at or near its maximum capacity of 25.25 TPH sand handling, unless otherwise approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Shakeout (P014)

Activity Description: No.1 Shakeout System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
no.1 mold shakeout system with ETA fabric filter, baghouse ID #243030 (D001)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	4.76 lbs/hr of particulate emissions
	OAC rule 3745-17-08(B)	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

2. The baghouse #243030 used to control particulate emissions from this emissions unit also controls particulate emissions from the no. 7 mold shakeout system (P015). This emissions unit shall not operate at the same time that emissions unit P015 is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on daily basis when the emissions unit is in operation.

2. The permittee shall maintain daily records of the hours of operation of this emissions unit.

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 periods of time that this emissions unit was in operation at the same time that emissions unit P015 (no.7 mold shakeout system) was in operation.

3. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

4.76 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared with the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 8.2 TPH metal charged, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Shakeout (P015)

Activity Description: No.7 Shakeout System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
no.7 mold shakeout system with ETA fabric filter, baghouse ID #243030 (D001)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	4.76 lbs/hr of particulate emissions
	OAC rule 3745-17-08(B)	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

2. The baghouse #243030 used to control particulate emissions from this emissions unit also controls particulate emissions from the no. 1 mold shakeout system (P014). This emissions unit shall not operate at the same time that emissions unit P014 is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on daily basis when the emissions unit is in operation.

2. The permittee shall maintain daily records of the hours of operation of this emissions unit.

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 periods of time that this emissions unit was in operation at the same time that emissions unit P014 (no.1 mold shakeout system) was in operation.

3. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

4.76 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared with the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 8.2 TPH metal charged, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Chromite Sand Silo (P016)

Activity Description: Chromite Sand Silo System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
chromite sand storage silo, ID# 313019, with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD). The three (3) silos (P016, P017, and P018) shall be discharged at a rate that will maintain the maximum production rate of the sand mills. The loading of the silo(s) may occur during a stack test, but can not be guaranteed due to the timing of the stack test and the inventory in the silo.

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR, Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Cereal Silo (P017)

Activity Description: Cereal Silo System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
cereal sand storage silo, ID# 313018, with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate, and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD). The three (3) silos (P016, P017, and P018) shall be discharged at a rate that will maintain the maximum production rate of the sand mills. The loading of the silo(s) may occur during a stack test, but can not be guaranteed due to the timing of the stack test and the inventory in the silo.

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Bentonite Silo (P018)

Activity Description: Bentonite Silo System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
bentonite sand storage silos, ID# 313020 and 313021, with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate, and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD). The three (3) silos (P016, P017, and P018) shall be discharged at a rate that will maintain the maximum production rate of the sand mills. The loading of the silo(s) may occur during a stack test, but can not be guaranteed due to the timing of the stack test and the inventory in the silo.

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Heap Sand Silo (P019)

Activity Description: Heap Sand Silo System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
heap sand storage silo with Griffin fabric filter, baghouse ID # 313022 (D012)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	2.21 lbs/hr of particulate emissions
	OAC rule 3745-17-08(B)	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. 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 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 using the operator's experience or previous stack testing conditions as a reference:

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 abnormal visible emission incident; and
e. any corrective actions taken to eliminate the abnormal visible emissions.

Persons responsible for making visible emission observations should acquire basic training in the general principles and practices of "reading " opacity. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water.

IV. Reporting Requirements

1. The permittee shall submit deviation (exceedance) reports that (a) identify all days during which abnormal visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted within 15 days of when the abnormal visible particulate emissions are observed.

2. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

2.21 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, 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 emission limitation in section A.I.1.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Sand Mill (P020)

Activity Description: No.4 Sand Mill System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand mill system, No. 4, # 154004, Clearfield, with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR, Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Sand Mill (P023)

Activity Description: No.3 Sand Mill System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand mill system, No.3, # 154003, Clearfield, with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Laempe Core Mach (P024)

Activity Description: Laempe Core Making System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Laempe L-100 one-piece coremaker and 2.8 mmBtu/hr natural gas-fired oven	OAC rule 3745-31-05 (PTI 15-1131)	1.37 lbs/hr of particulate emissions 4.11 tpy of particulate emissions 9.75 lbs/hr of methyl formate 29.2 tpy of methyl formate See A.I.2.a, A.I.2.b, and A.I.2.c below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.d below.
	OAC rule 3745-17-08(B)	See A.I.2.e below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	See A.I.2.g below.

2. Additional Terms and Conditions

2.a The permittee shall employ no more than 97.5 pounds of methyl formate in any one hour.

2.b The permittee shall employ no more than 20,833 pounds of methyl formate in any one month.

2.c The permittee shall employ no more than 250,000 pounds of methyl formate in any one year.

2.d Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.e Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.f The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirements specified in OAC rule 3745-31-05.

2. Additional Terms and Conditions (continued)

2.g Resins and other liquid organic materials used in this emissions unit shall not be photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

II. Operational Restrictions

1. The stack serving this emissions unit shall be a minimum of 30 feet high.

2. The permittee shall control the Laempe machine inlet sand temperature at 85 to 90 degrees Fahrenheit to maximize the reaction efficiency. Temperature fluctuations during the first 15 minutes of startup or when ambient air temperature exceeds 95 degrees Fahrenheit shall be allowed.

3. The permittee shall determine a minimum gassing time for each job type and shall adhere to this minimum gassing time when making cores so that emissions are reduced.

III. Monitoring and/or Record Keeping Requirements

1. 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 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 using the operator's experience or previous stack testing conditions as a reference:

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 abnormal visible emission incident; and
e. any corrective actions taken to eliminate the abnormal visible emissions.

Persons responsible for making visible emission observations should acquire basic training in the general principles and practices of "reading " opacity. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water.

2. The permittee shall keep the following daily records for all materials used in this emissions unit:

a. the company identification of each material employed, including bonding agents and core wash materials; and

b. for any liquid organic materials, documentation as to whether or not the material is a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).

3. The permittee shall properly operate and maintain equipment to continuously monitor the temperature of the sand at the inlet to the Laempe machine 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 inlet sand temperature once a shift when the emissions unit is in operation.

4. The permittee shall record the minimum and actual gassing times for each job type. The minimum gassing time (not to exceed 36 seconds) shall be adhered to in the operation of this emissions unit.

5. The permittee shall record the amount of methyl formate used each hour and each month in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (exceedance) reports that (a) identify all days during which abnormal visible particulate emissions were observed from the stack serving this emissions unit, and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions. These reports shall be submitted within 15 days of when the abnormal visible particulate emissions are observed.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify each day during which any photochemically reactive material(s) was(were) employed.

3. The permittee shall submit quarterly deviation (excursion) reports that include the following information:

a. an identification of each hour during which the usage of methyl formate exceeds 97.5 lbs/hr, and the actual usage of methyl formate during each such hour; and

b. an identification of each month during which the usage of methyl formate exceeds 20,833 pounds, and the actual usage of methyl formate during each such month.

4. The permittee shall submit quarterly temperature deviation (excursion) reports that identify all periods of time during which the Laempe inlet temperature did not comply with the allowable range specified above.

5. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

6. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

7. The permittee shall also submit annual reports that specify the total usage of methyl formate (in pounds), and the total particulate and methyl formate emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:

1.37 lbs/hr of particulate emissions

Applicable Compliance Method:

Emissions of particulates may be calculated using the particulate emission factor of 0.35 lb/ton of cores X 3.9 tons/hr of sand = 1.37 lbs/hr of particulate emissions. The Ohio EPA's RACM document, Table 2.8-1 for core making was used. The maximum amount of sand processed per hour equals 3.9 tons. If required, compliance shall be demonstrated based upon the emission testing requirements specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

1.c Emission Limitation:

4.11 tpy of particulate emissions

Applicable Compliance Method:

Calculate the annual emissions by multiplying the maximum hourly emissions of 1.37 lbs/hr times the actual hours of operation, in hrs/yr, and then divide by 2000 lbs/ton.

V. Testing Requirements (continued)

1.d Emission Limitation:

9.75 lbs/hr of methyl formate

Applicable Compliance Method:

Emissions of methyl formate (E) may be calculated using the following equation and assumptions:

E = PWR X RF X CRF X (1-RE)

where:

PWR = maximum process weight rate of sand, 7800 lbs/hr sand;
RF = resin (Beta Set) fraction of sand, 0.025 resin;
CRF = co-reactant Beta Cure (methyl formate) fraction of resin, 0.50 methyl formate; and
RE = reaction efficiency of methyl formate, 90%.

If required, compliance shall be demonstrated based upon the emission testing requirements specified in 40 CFR Part 60, Appendix A, Method 18.

1.e Emission Limitation:

29.2 tpy of methyl formate

Applicable Compliance Method:

Calculate the annual emissions by multiplying the maximum hourly emissions of 9.75 lbs/hr times the actual hours of operation, in hrs/yr, and then divide by 2000 lbs/ton.

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 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for methyl formate and the visible particulate emission limitation.

c. The following test methods shall be employed to demonstrate compliance with the allowable emission rates: for methyl formate, Methods 18 and 1 through 4 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Laempe L-100 one-piece coremaker and 2.8 mmBtu/hr natural gas-fired oven		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this emissions unit (P024) 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: methyl formate

TLV (ug/m3): 246000

Maximum Hourly Emission Rate (lbs/hr): 9.75

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 5800

MAGLC (ug/m3): 5800

III. Monitoring and/or Record Keeping Requirements (continued)

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: Kloster Sand Cooler (P025)

Activity Description: Kloster Sand Cooler System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
Simpson sand cooler system with rotoclone and Sly wet impingement scrubber ID #333021 (D015)	OAC rule 3745-31-05 (PTI 15-747)	0.025 grain of particulate emissions per dry standard cubic foot of exhaust gases
		2.67 lbs/hr of particulate emissions
		11.7 tpy of particulate emissions
		See A.I.2.a below.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.b below.
	OAC rule 3745-17-08(B)	See A.I.2.c below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.d below.

2. Additional Terms and Conditions

2.a These are the total allowable particulate emission limitations for emissions units P005 and P025 which are connected to the same wet impingement scrubber. During the performance test of the common wet impingement scrubber, emissions units P005 and P025 shall be operated at maximum capacity.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.c Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.d The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The scrubber water supply pressure shall be continuously maintained at a value of not less than 20 pounds per square inch (gauge) at all times while the emissions unit is in operation.

2. The scrubber water flow rate shall be continuously maintained at a value of not less than 25 gallons per minute at all times while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously monitor and record the water supply pressure and the water flow rate while the emissions unit is in operation. The monitoring devices and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information each day:

a. the water supply pressure, in psig, on a once/shift basis;

b. the water flow rate, in gpm, on a once/shift basis; and

c. a log or record of the downtime for the capture (collection) system, control device, and monitoring equipment when the associated 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 following scrubber parameters were not maintained at or above the required levels:

a. the water supply pressure; and

b. the scrubber water flow rate.

2. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P005 and P025 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitations:

0.025 grain of particulate emissions per dry standard cubic foot of exhaust gases

2.67 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the method and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

11.7 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 2.67 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

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 after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with both emissions units (P005 and P025) serviced by this wet scrubber operating at maximum capacity, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Carrier Blast (P026)

Activity Description: Carrier Shot Blast

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
steel shot carrier blast finish machine with Pangborn CH3 fabric filter, baghouse ID #355017 (D009)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	14.2 lbs/hr of particulate emissions
	OAC rule 3745-17-08(B)	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained between 4.0 and 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is 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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03 (B)(1).

1.b Emission Limitation:

14.2 lbs/hr of particulate emissions

Applicable Compliance Methods:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit(s), for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be employed.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD, 420 Market Avenue North, Canton, Ohio 44702-1544. 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 test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD office shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the subbmittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Rapper Station (P028)

Activity Description: Sand Rapping System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand rapper (knockout) system with Fuller-Draco fabric filter, baghouse ID #495002 (D005)	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)(1)	7.0 lbs/hr of particulate emissions
	OAC rule 3745-17-08(B)	See section A.I.2.a below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained between 4.0 and 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis when the emissions unit is 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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03 (B)(1).

1.b Emission Limitation:

7.0 lbs/hr of particulate emissions

Applicable Compliance Methods:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures 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:

a. The emission testing shall be conducted within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and opacity limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 21.67 TPH, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD, 420 Market Avenue North, Canton, Ohio 44702-1544. 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 test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD office shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the subbmittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Crusher/Screener (P029)

Activity Description: Crusher Screener System at No. 1 Unit

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
crusher/screener system: magnetic separator, midwestern screener & stedman crusher for No. 1 molding unit, with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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. 19 Sand Mill (P030)

Activity Description: No.19 Sand Mill System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand mill system; No. 19, Beardley & Piper, for No. 1 molding unit, with ETA fabric filter, baghouse ID # 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 Sand Cooler (P031)

Activity Description: Sand Cooler System at No.1 Unit

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand cooler system for No. 1 molding unit, with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: N. E. Sand System (P032)

Activity Description: North End Sand Handling System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand handling system, north end #2 foundry with ETA fabric filter, baghouse ID# 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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. 16 Sand Mill (P033)

Activity Description: No.16 Sand Mill System

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sand mill system, No. 16, Beardley & Piper, for No. 1 molding unit, with ETA fabric filter, baghouse ID # 473006 (D003)	OAC rule 3745-31-05 (PTI 15-1191)	0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases 4.78 lbs/hr of particulate emissions* 20.95 tpy of particulate emissions* * This represents the total allowable for all emissions units vented to this control device operating at the same time. The following emissions units are all vented to this common control device: P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 6.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to continuously 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 on a daily basis.

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. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

3. The permittee shall also submit annual reports that specify the total particulate emissions from emissions units P011, P016, P017, P018, P020, P023, P029, P030, P031, P032 and P033 for the previous calendar year. The reports shall be submitted by January 31 of each year.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:

0.01 grain of particulate emissions per dry standard cubic foot of exhaust gases

4.78 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the stack testing requirements in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

20.95 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 4.78 lbs/hr limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

V. Testing Requirements (continued)

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 6 months after issuance of the permit and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates and the visible particulate emission limitation. Additionally, the pressure drop range across the baghouse shall be recorded and compared to the 4.0 to 6.0 inches of water operational requirement.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates: for particulates, Methods 1 through 5 of 40 CFR Part 60, Appendix A and for the visible particulate emission limitation, Method 9 of 40 CFR Part 60, Appendix A.

d. The tests shall be conducted under maximum production rates with all eleven emissions units (P011, P016, P017, P018, P020, P023, P029, P030, P031, P032, and P033) serviced by this fabric filter operating at maximum production rates, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution Control Division (APCD).

e. Particulate emission tests shall also be conducted at the inlet of the control device to determine the uncontrolled mass rate of emissions for the emissions units, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, Methods 1 through 5 of 40 CFR Part 60, Appendix A shall be used.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD. 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(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

Personnel from the CCHD, APCD shall be permitted to witness the test(s), 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 emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the CCHD, APCD within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the CCHD, APCD.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Backup Sand Storage Silo (P034)

Activity Description: Backup silo to store extra process sand

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
backup sand storage silo; south unit with Griffin fabric filter bin vent ID # 473015 (D017)	OAC rule 3745-31-05 (PTI 15-1214)	2.0 lbs/hr of particulate emissions
		8.76 tpy of particulate emissions
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-07(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-17-11(B)(1)	See A.I.2.c below.

2. Additional Terms and Conditions

2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.c The particulate emission limitation required by OAC rule 3745-17-11 is less stringent than the particulate emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05.

2.d The collection efficiency shall be 100%. No fugitive dust emissions shall be emitted by this emissions unit. The captured emissions shall be vented to the fabric filter.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. 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 Permit to Install 15-1214, issued on June 12, 1996. The monitoring and record keeping requirements contained in the above-referenced Permit to Install 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 Permit to Install.

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 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 using the operator's experience or previous stack testing conditions as a reference:

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 abnormal visible emission incident; and
e. any corrective actions taken to eliminate the abnormal visible emissions.

Persons responsible for making visible emission observations should acquire basic training in the general principles and practices of "reading" opacity. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind, and the presence of uncombined water.

3. The permittee shall perform daily checks when the emissions unit is in operation 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 emission incident; and
c. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (exceedance) reports that (a) identify all days during which abnormal visible particulate emissions were observed from the stack serving this emissions unit and describe any corrective actions taken to eliminate the abnormal visible particulate emissions, and (b) identify all days during which any visible fugitive particulate emissions were observed and describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted within 15 days of when the abnormal visible particulate emissions from the stack and/or the visible fugitive particulate emissions are observed.

2. All deviation (excursion) reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544.

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:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon the visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:

2.0 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the requirements in 40 CFR Part 60, Appendix A, Methods 1 through 5 and the methods and procedures specified in OAC rule 3745-17-03(B)(10). No testing is specifically required by this permit but, if appropriate, 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 emission limitation in section A.I.1.

1.c Emission Limitation:

8.76 tpy of particulate emissions

Applicable Compliance Method:

The tons per year particulate emission limitation was developed by multiplying the 2.0 lbs/hr particulate emissions limitation by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 (Baked) (P901)

Activity Description: Core Making (Baked)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
core making (baked) including 4 tower ovens Z421, Z422, Z423 and Z424; 2 core wash applications of Holcote 578; fed by no. 3 and no. 4 sand mills (P023 & P020)	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.c Resins and other liquid organic materials used in this emissions unit shall not be photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following daily records for all materials used in this core making (baked) operation:

a. the company identification of each material employed including core wash materials; and

b. for any liquid organic materials, documentation as to whether or not the material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any daily record showing the use of photochemically reactive materials in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544 within 30 days after the deviation occurs.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

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 (Shell) (P902)

Activity Description: Core Making (Shell)

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may be specified in narrative form following the table.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
core making (Shell) system, including 1 batch oven (Z425), and fed by purchased resin coated sand (Super F E36N19)	OAC rule 3745-17-08(B)	See section A.I.2.a below.
	OAC rule 3745-17-07(B)	See section A.I.2.b below.
	OAC rule 3745-21-07(G)	See section A.I.2.c below.

2. Additional Terms and Conditions

2.a Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this emissions unit.

2.b Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.

2.c Resins and other liquid organic materials used in this emissions unit shall not be photochemically reactive materials, as defined in OAC rule 3745-21-01(C)(5).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall keep the following daily records for all materials used in this core making (shell) operation:

a. the company identification of each material employed, including resin coatings on sand used; and

b. for any liquid organic materials, documentation as to whether or not the material is a photochemically reactive material as defined in OAC rule 3745-21-01(C)(5).

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify any daily record showing the use of photochemically reactive materials in this emissions unit. The notification shall include a copy of such record and shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702-1544 within 30 days after the deviation occurs.

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific operation(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be employed. Additional applicable emissions limitations and/or control measures (if any) may 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 Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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