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

08/15/03

CERTIFIED MAIL

RE: Draft Title V Chapter 3745-77 permit

13-18-17-0314
ALCOA-Cleveland Works
James V. Apicella P.E.
1600 Harvard Avenue
Cleveland, OH 44105-3092

Dear James V. Apicella:

You are hereby notified that the Ohio Environmental Protection Agency has prepared the enclosed draft of the Title V permit for the facility referenced above. The purpose of this draft is to solicit public comments. A public notice concerning the draft will appear in the Ohio EPA Weekly Review and the major newspaper in the county where the facility is located. Comments and/or a request for a public hearing from the public and any affected parties will be accepted by Cleveland Division of Air Pollution Control within 30 days of the date of publication in the newspaper. You will be notified in writing if a public hearing is scheduled.

A decision on processing the Title V permit will be made after consideration of written public comments and oral testimony (if a public hearing is conducted). After the comment period, you will be provided with a Preliminary Proposed Title V permit and an opportunity to comment prior to the Proposed Title V permit submittal to USEPA.

If you have any questions or comments concerning this draft Title V permit, please contact Cleveland Division of Air Pollution Control.

Very truly yours,

Michael W. Ahern

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

cc: USEPA (electronically submitted)
File, DAPC PMU
Cleveland Division of Air Pollution Control
Pennsylvania

State of Ohio Environmental Protection Agency

DRAFT TITLE V PERMIT

Issue Date: 08/15/03	Effective Date: To be entered upon final issuance	Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 13-18-17-0314 to:

ALCOA-Cleveland Works
1600 Harvard Avenue
Cleveland, OH 44105-3092

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

B008 (Gas Boiler #8)
One of 2 - 98.8 MMBtu/hr gas fired boilers replacing the coal fired boilers

B009 (Gas Boiler #9)
One of 2 - 98.8 MMBtu/hr gas fired boilers replacing the coal fired boilers

K002 (Coating - B53)
Carpenter Shop Spray Paint Booth - Bldg 53

P003 (Furnaces 2502 Heat Treat and Age B120)
2502 Heat Treat and Age Oven - Bldg 120

P004 (Furnaces 2503 Heat Treat and Age B120)
2503 Heat Treat and Age Oven - Bldg 120

P007 (35001 Hammer)
35001 Steam Hammer - Bldg 114

P008 (35002 Hammer)
35002 Steam Hammer - Bldg 114

P009 (25001 Hammer)
25001 Steam Hammer - Bldg 114

P010 (8001 Hammer)
8001 Steam Hammer - Bldg 114

P011 (Press 15000)
15000 Hydraulic Press Complex - Bldg 112A

P012 (Press 8001)
8001 Hydraulic Press Complex - Bldg 112A

P013 (Press 8002/2500)
8002 & 2500 Ton Hydraulic Press Complex - Bldg 112A

P014 (Press 3004)
3004 Hydraulic Press Complex - Bldg 112A

P017 (Mech 1300 T Ajax)
1300 Ton Ajax Press - Bldg 101

P018 (Mech 1600 T Erie)
1600 Ton Erie Press - Bldg 101

P019 (Mech 4000 T Ajax)
4000 Ton Ajax Press - Bldg 101

P024 (Press 3003)
3003 Hydraulic Press Complex - Bldg 101

P029 (Press 35000)
35000 Hydraulic Press Complex - Bldg 206

P030 (Press 50000)
50000 Hydraulic Press Complex - Bldg 206

P032 (Torch Pit #1)
Acetylene Arc System - Torch Pit No. 1 (East) - Bldg 206

P046 (Furn HT - #1 Swindell)
No. 1 Swindell Heat Treat Furnace - Bldg 206

P047 (Furn HT - #2 Swindell)
No. 2 Swindell Heat Treat Furnace - Bldg 206

P048 (Furn HT - #3 Swindell)
No. 3 Swindell Heat Treat Furnace - Bldg 206

P049 (Furn HT - #4 Swindell)
No. 4 Swindell Heat Treat Furnace - Bldg 206

P054 (Furn HT - #5 Dispatch (30000))
No. 5 H.T. Despatch Furnace

P055 (Furn #15 Soaker)
120,000 lb Ignot Soaking Furnace (No. 15) - Bldg 206

P083 (Furn T-1 B101)
Titanium Reheat Furnaces T-1 - Bldg 101

P086 (Blast-T Whl B206)
Wheelabrator - Titanium - Bldg 206

P087 (Furn T-7 B206)
Titanium Reheat Furnace T-7

P091 (Grind Booth T-1)
Titanium Grinding Booth #1 - Bldg 206

P092 (Grind Booth T-2)
Titanium Grinding Booth #2 - Bldg 206

P093 (Grind Booth T-3)
Titanium Grinding Booth #3 - Bldg 206

P094 (Grind Booth T-4)
Titanium Grinding Booth #4 - Bldg 206

P096 (Grind Booth T-6)
Titanium Grinding Booth #6 - Bldg 206

P097 (Grind Booth T-7)
Titanium Grinding Booth #7 - Bldg 206

P100 (Furn T-8 Anneal B206)
Titanium Annealing Furnace T-8 - Bldg 206

P102 (Furn #12 Soaker)
No. 12 Soaker Furnace - Bldg 150

P104 (Press 8003/2583)
8003 & 2583 Hydraulic Press Complex - Bldg 112A

P105 (Furn RH 17001 B111)
17001 Furnace - Bldg

P107 (Furn RH 6005 B210)
6005 Reheat Furnace - Bldg 210

P108 (Blast #1 Whl B114)
No. 1 Wheelabrator Cabinet - Bldg 114A

P115 (Furn #2 Die B206)
No. 2 Die Preheat Furnace - Bldg 206

P116 (Furn #3 Die B206)
No. 3 Die Preheat Furnace - Bldg 206

P117 (Furn #4 Die B206)
No. 4 Die Preheat Furnace - Bldg 206

P118 (Furn #5 Die B206)
No. 5 Die Preheat Furnace - Bldg 206

P119 (Furn #2 Die B202)
No. 2 Die Preheat Furnace - Bldg 202

P121 (Furnance South H.T. and Age B150 (8001))
South Heat Treat & Age Ovens- Bldg 150 (8001)

P122 (Furnance North H.T. and Age B150 (8002))
North Heat Treat & Age Ovens - Bldg 150 (8002)

P125 (Furn T-9 B206)
Titanium Reheat Furnace T-9 - Bldg 206

P126 (Blast-Rm Pangborn)
Blast Room A Plant

P129 (2503 Mechanical Press)
2503 Mechanical Press - water based lubes

P146 (Press 3005)
3005 Hydraulic Press Complex - Bldg 101

P152 (Furn Heat Treat Line #3 B150)
Heat Treat Line #3 - Bldg 150

P154 (Furn T-12 Titanium Preheat B210)
T-12 Titanium Preheat Furnace - Bldg 210

P155 (X-Plant 4001 Hydraulic Press)
X-Plant 4001 Hydraulic Press

P156 (X-Plant 4002 Hydraulic Press)
X-Plant 4002 Hydraulic Press

P157 (Y-Plant 5001 Hydraulic Press)
Y-Plant 5001 Hydraulic Press

P158 (Y-Plant 5002 Hydraulic Press)
Y-Plant 5002 Hydraulic Press

P159 (Furn 4601 B114)
4601 Preheat Furnace - Bldg 114

P162 (Inconel preheat furnace)
27 mmBtu/hr direct gas-fired Inconel preheat furnace - Bldg. 206

P163 (Small Wheelabrator Shotblaster)
Small Wheelabrator Shotblaster - Bldg. 206

P164 (5082 Blocking Press)
5082 Blocking Press - Bldg. 112

P165 (5083 Blocking Press)
5083 Blocking Press - Bldg. 112

P402 (Furn #13 Soaker)
No. 13 Soaker Furnace - Bldg 150 (part of P102)

P429 (2504 Mechanical Press)
2504 Mechanical Press - water based lubes

P432 (Torch Pit #2)
Acetylene Arc System - Torch Pit No. 2 (West) - Bldg 206 (part of P032)

Z007 (Furn 1004 B101)
1004 Furnace - Bldg 101

Z008 (Furn 2007 B101)
2007 Furnace - Bldg 101

Z009 (Furn 2502 B101)
2502 Furnace - Bldg 101

Z012 (Furn 4502 B101)
4502 Furnace - Bldg 101

Z013 (Furn 4504 B101)
4504 Furnace - Bldg 101

Z014 (Furn 4505 B101)
4505 Furnace - Bldg 101

Z015 (Furn 4506 B111)
4506 Furnace - Bldg 101

Z020 (Furn 6002 B101)
6002 Furnace - Bldg 101

Z022 (Furn 12001 B111)
12001 Furnace - Bldg 111

Z023 (Furn 12002 B111)
12002 Furnace - Bldg 111

Z024 (Furn 12003 B111)
12003 Furnace - Bldg 111

Z025 (Furn 6003 B111)
6003 Furnace - Bldg 111

Z026 (Furn 6004 B111)
6004 Furnace - Bldg 111

Z027 (Furn G-1 B111)
12,000 Lb Reheat Furnace G-1 - Bldg 111

Z028 (Furn G-2 B111)
12,000 Lb Reheat Furnace G-2 - Bldg 111

Z031 (Furn 2002 B114)
2002 Preheat Furnace - Bldg 114

Z033 (Furn 2503 B150)
2503 Preheat Furnace - Bldg 150

Z034 (Furn 4509 B114)
4509 Reheat Furnace - Bldg 114

Z035 (Furn 4513 B114)
4513 Reheat Furnace - Bldg 114

Z036 (Furn 4518 B114)
4518 Reheat Furnace - Bldg 114

Z037 (Furn 4519 B114)
4519 Reheat Furnace - Bldg 114

Z041 (Furn R&S #1 B206)
R&S Reheat Furnace No. 1 - Bldg 206

Z043 (Furn R&S #3 B206)
R&S Reheat Furnace No. 3 - Bldg 206

Z044 (Furn #4 Salem)
No. 4 Salem Furnace - Bldg 206

Z045 (Furn #5 Salem)
No. 5 Salem Furnace - Bldg 206

Z051 (Furn T-10 B206)
T-10 Furnace - Bldg 206

Z079 (Road Dust - Fug.)
Vehicle Fugitive Dust - Plantwide

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 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Record Keeping and Reporting Requirements

a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

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

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

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

ii. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

(a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (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. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii)

pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) ,(ii) and (iii))

(b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(iii))

iii. **For monitoring, record keeping, and reporting requirements:**
Written reports that identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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, record keeping, 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.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

iv. Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in

the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

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 of any emissions unit(s) 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 OAC rule 3745-15-06, 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).
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iii))

3. Risk Management Plans

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

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

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

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

4. Title IV Provisions

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

5. Severability Clause

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

6. General Requirements

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

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

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

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

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

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

7. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

8. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

9. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

10. Reopening for Cause

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

a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is

later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

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

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

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

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

11. Federal and State Enforceability

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

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

12. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

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

13. Permit Shield

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

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

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is

not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).
(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

15. Emergencies

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

16. Off-Permit Changes

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

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

b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, 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.

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 purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)
(Authority for term: OAC rule 3745-77-07(I))

17. Compliance Method Requirements

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

18. Insignificant Activities

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

19. Permit to Install Requirement

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

20. Air Pollution Nuisance

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

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

4. Scheduled Maintenance/Malfunction Reporting

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

scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

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

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

If no 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 Enforcable Section

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

2. A final permit to install PTI #13-3174 for two gas/oil 98.8 mm Btu/hr heat input steam generating boilers was issued to Aluminum Company of America's Cleveland Works by Ohio Environmental Protection Agency on June 20, 1997. This permit to install covers emissions units B008 and B009. See Part III for individual emissions unit special terms and conditions.

The sources described in this Permit to Install are subject to the applicable provisions of the Emission Offset Policy as promulgated by the United States Environmental Protection Agency, 40 CFR 51, and as delegated to the Ohio Environmental Protection Agency and are federally enforceable. Pursuant to the above, the source owner/operator is hereby advised of the following:

In order to "net out" of the Federal Prevention of Significant Deterioration and non-attainment requirements, the applicant shall permanently shut down the following emissions units located at the Aluminum Company of America's Cleveland Works:
B001, B002, B003, B004, and B005 by March 31, 1998, or upon startup (i.e., beginning of normal operation) of the replacement boilers (B008 and B009), and the new emissions units, P157 and P158. The netting calculations are presented in Ohio EPA Permit to Install PTI #13-3149 for emissions units P157 and P158. The shake down period for the replacement emissions units shall not exceed one hundred eighty days. The following record keeping shall be maintained and quarterly summary reported to the Cleveland Division of Air Quality (Cleveland DAQ) showing the following:

1. in all cases, for the operation of the coal fired boilers, the replacement boilers, and the new emissions units (P157 and P158), the actual PM10 emission increases shall not exceed a 15 ton per year increase based upon a rolling, 12-month summation of the monthly emissions; and,

2. for months of combined operation prior to shutdown of B001 - B005, the actual PM10 emission increasing during the first 12 months of operation from the aforementioned sources shall not exceed the emission levels specified in the following table:

.	month	maximum allowable cumulative PM10 emissions (tons)
.	6	7.5
.	7	8.75
.	8	10
.	9	11.25
.	10	12.5
.	11	13.75
.	12	15

After the first 12 calendar months of combined operation prior to shutdown of B001 - B005, compliance with the annual emission limitation for PM10 shall be based upon a rolling, 12-month summation of the monthly emissions.

B. State Only Enforceable Section

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

B001 - No. 1 coal fired boiler permanently shut down (used for emission offset)
B002 - No. 2 coal fired boiler permanently shut down (used for emission offset)
B003 - No. 3 coal fired boiler permanently shut down (used for emission offset)
B004 - No. 4 coal fired boiler permanently shut down (used for emission offset)
B005 - No. 5 coal fired boiler permanently shut down (used for emission offset)
K001 - Wheel Clear Coating Line
K003 - Paint Booths in Building 157 - permanently shut down
P001 - 18,000 Heat Treat Furnace in Building 120 - permanently shut down
P002 - 4.6 mmBtu/hr heat treat furnace (Aging Oven in Building 120) - removed from service
P005 - 18,000 Age Oven Furnace in Building 120 - permanently shut down
P006 - Automatic Etch Line in Building 114b
P015 - Mechanical 2500 Ton Ajax - permanently shut down
P016 - Mechanical 2503 Ton Erie Press in Building 101 - Now under OEPA number P129
P020 - Press 10 inch Upset - permanently shut down
P021 - 7 Inch Upsetting Press in Building 101
P022 - 3001 hydraulic press complex, Building 101
P023 - 3002 hydraulic press complex, Building 101
P025 - Furnace 758 KW - permanently shut down
P026 - Furnace 752 KW - permanently shut down
P027 - 6000 lbs/hr Furnace Lindberg in Building 107 - permanently shut down
P028 - Furnace 753 KW - permanently shut down
P031 - Furnace Titanium 4 Heat Treat - permanently shut down
P033 - Titanium Etch Tanks in Building 206
P034 - 0.9 mmBtu/hr Heat Input Furnace 12001 (Aging Oven #1) in Building 206

P035 - 0.9 mmBtu/hr Heat Input Furnace 12002 (Aging Oven #2) in Building 206
P036 - 0.9 mmBtu/hr Heat Input Furnace 12003 (Aging Oven #3) in Building 206
P037 - 0.9 mmBtu/hr Heat Input Furnace 12004 (Aging Oven #4) in Building 206
P038 - 0.9 mmBtu/hr Heat Input Furnace 12005 (Aging Oven #5) in Building 206
P039 - 0.9 mmBtu/hr Heat Input Furnace 12006 (Aging Oven #6) in Building 206
P040 - A.F. (Aluminum Forging) Etch System West Two Water Rinse Tanks in Building 206
P041 - Etch System West Nitric Acid Tank in Building 206
P042 - Etch System West Caustic Tank in Building 206
P043 - Etch System East Two Water Rinse Tanks in Building 206
P044 - Etch System East Nitric Tank in Building 206
P045 - Etch System East Caustic Tank in Building 206
P050 - 2.0 mmBtu/hr Heat Input Furnace 20001 Aging Oven #7 (25000) in Building 206
P051 - 2.0 mmBtu/hr Heat Input Furnace 20001 Aging Oven #8 (25000) in Building 206
P052 - 3.5 mmBtu/hr Heat Input Aging Oven #9 (30000) in Building 206
P053 - 3.5 mmBtu/hr Heat Input Furnace 30001 Aging Oven #10 (30000) in Building 206
P056 - Vapo-Blast Company Die Cleaning Booth in Building 202
P057 - P082 Old equipment removed from service
P084 - Molten Aluminum Furnace - permanently shut down
P085 - No. 14 Dipwell Furnace - permanently shut down
P088 - No. 11 Dipwell Furnace - permanently shut down
P089 - No. 6 Dipwell Furnace - permanently shut down
P090 - Etch Magnesium Pickle Tanks in Building 116
P095 - Grind Booth T- 5 - permanently shut down
P098 - No equipment - permanently shut down
P099 - No equipment - permanently shut down

B. State Only Enforceable Section (continued)

P101 - 5.0 mmBtu/hr Heat Input 12 foot #1 Steel Die Heating Furnace #3 in Building # 112a
P103 - No. 5 Dipwell Furnace - permanently shut down
P106 - 3000 Ton Preforming Hydraulic Forging Press 3006
P109 - Etch Line for Aluminum Forgings in Building 101
P110 - Etch Line for Aluminum Forgings in Building 116
P111 - Etch Line for Aluminum Forgings in Building 120
P112 - Die Cleaning And Grinding / Polishing Benches in Building 106
P113 - West Grinder - permanently shut down
P114 - East Grinder - permanently shut down
P120 - No. 4 Die Preheat Furnace #4 in Building 202
P123 - N-tech Systems Inc. Saw with Mist Collector for Sizing Aluminum Ingots in Building 112
P124 - 6.4 mmBtu/hr Heat Input Gas-fired Vertical Die Preheat Furnace #6 in Building 206, A-Plant
P126 - Pangborn Blast Room A Plant - permanently shut down
P127 - No equipment - permanently shut down
P128 - No equipment - permanently shut down
P130 - 20-inch Belt, 258-84 14-inch, 258087 24-inch Three Grinding Wheels and Die Polishing Benches in Building 116
P131 - 1500 lb, 2000lb, 4000lb Steam Hammers in Building 114, No Lube Used
P132 - Aluminum Etch Line in Building 112
P133 - P142 - No equipment - permanently shut down

P143 - Titanium Reheat Furnace T-2 in Building 101 - permanent shut down
P144 - No equipment - permanent shut down
P145 - No equipment - permanent shut down
P147 - Rapid Fire Reheat Furnace 3005
P148 - P151 - No equipment - permanent shut down
P153 - No. Wheelabrator Grit Blast Cabinet in Building 114A - not installed as of 4/7/98
P901 - Input in error - permanently shut down

T001 - SP-75 Tank - removed
T002 - Hydrofluoric acid tank - removed
T003 - Tank - 12000 Gallon Cylindrical Outdoor Nitric Acid Storage Tank-DR #5
T004 - Tank - 15000 Gallon Cylindrical Outdoor Caustic Storage Tank-DR #5
T005 - Tanks T005 - T010 removed from service
T011 - Tank - 1000 Gallon above Ground Diesel Fuel Storage Tank - #576145
T012 - Tank - 500 Gallon above Ground Gasoline Storage Tank - # 576144
T013 - Tank - 1500 Gallon Cylindrical Outdoor Diesel Fuel Storage Tank-SW in Building #206 (Diesel Fuel AGST)
T014 - Diesel Tank - removed from service
T015 - 12,000 gallon above ground fuel oil storage tank #1
T016 - 12,000 gallon above ground fuel oil storage tank #2

X222 - Titanium grinding booths grouped for emissions inventory

Z001 - 1.8 mmBtu/hr Heat Input Age Oven Furnace 16001 in Building 114
Z002 - 1.8 mmBtu/hr Heat Input Age Oven Furnace 16002 in Building 114
Z003 - 0.6 mmBtu/hr Heat Input Age Oven Furnace 9003 in Building 114
Z004 - 0.6 mmBtu/hr Heat Input Age Oven Furnace 9004 in Building 114
Z005 - 0.6 mmBtu/hr Heat Input Age Oven Furnace 9005 in Building 114
Z006 - Number not used - permanently shut down
Z010 - No equipment - permanently shut down

B. State Only Enforceable Section (continued)

Z011 - 1.0 mmBtu/hr Heat Input Furnace 4501 in Building 101 - permanently shut down
Z016 - 1.0 mmBtu/hr Heat Input Furnace 4514 in Building 101 - permanently shut down
Z017 - No equipment - permanently shut down
Z018 - No equipment - permanently shut down
Z019 - 1.7 mmBtu/hr Heat Input Furnace 6001 in Building 101 - permanently shut down
Z021 - 0.95 mmBtu/hr Heat Input Furnace 9001 in Building 101 - permanently shut down
Z029 - 9.84 mmBtu/hr Heat Input Furnace 8001 in Building 111 - permanently shut down
Z030 - 0.25 mmBtu/hr Heat Input Furnace 1207 in Building 114 - permanently shut down
Z032 - No equipment - permanently shut down
Z038 - 14.4 mmBtu/hr Heat Input Furnace 4520 in Building 114 - permanently shut down
Z039 - 1.2 mmBtu/hr Heat Input Furnace 4522 in Building 114 - permanently shut down
Z040 - 1.2 mmBtu/hr Heat Input Furnace 4523 in Building 114 - permanently shut down

Z042 - 1.6 mmBtu/hr Heat Input R&S Reheat Furnace #2 in Building 206 - permanently shut down
Z046 - No equipment - permanently shut down
Z047 - No equipment - permanently shut down
Z048 - 9.1 mmBtu/hr Heat Input Die Furnace 101 in Building 101
Z049 - No equipment - permanently shut down
Z050 - No equipment - permanently shut down
Z052 - 0.4 mmBtu/hr Heat Input Furnace Blacksmith, A-Plant
Z053 - 9.1 mmBtu/hr Heat Input Die Heating Furnace S-1 in Building 111
Z054 - 9.1 mmBtu/hr Heat Input Die Heating Furnace S-2 in Building 111
Z055 - 55 Inch Newton Saw in Building 202
Z056 - 108 Inch M&M Saw in Building 202
Z057 - Russell Saw #1
Z058 - Russell Saw #2
Z059 - Titanium Saw in Building 118
Z060 - M&M Circular Saw in Building 118

B. State Only Enforceable Section (continued)

Z061 - Oil Spray in Building 206
Z062 - Die Grinding Bench Booth #1 in Building 202
Z063 - Die Grinding Bench Booth #2 in Building 202
Z064 - Die Grinding Bench Booth #3 in Building 202
Z065 - Die Grinding Bench Booth #4 in Building 202
Z066 - Die Grinding Bench Booth #5 in Building 202
Z067 - Die Grinding Bench Booth #6 in Building 202
Z068 - Die Grinding Bench Booth #7 in Building 202
Z069 - No equipment - permanently shut down
Z070 - Grinding / Polishing Bench in Building 120
Z071 - Grinding / Polishing Bench in Building 116
Z072 - Magnesium Grinding Bench in Building 116
Z073 - No equipment - permanently shut down
Z074 - No equipment - permanently shut down
Z075 - Tool Grinding Area in Building 202
Z076 - Die Welding Operations in Building 202
Z077 - Miscellaneous -Plaster Area in Building 202
Z078 - Miscellaneous -Tycote-G Spray Area in Building 206
(Z079 - Road Dust - Vehicle Fugitive Dust - Plantwide)
Z080 - Coal material handling in Building 44 - permanently shut down
Z081 - Flyash material handling in Building 44 - permanently shut down
Z082 - Bottom Ash material handling in Building 44 - permanently shut down
Z083 - Scrap and Chip Handling in Building 150
Z084 - No equipment - permanently shut down
Z085 - Zyglo Inspection Area in Building 206
Z086 - Zyglo Inspection Area in Building 116
Z087 - Two 500 Ton Franc Presses in Building 206
Z088 - Lake Erie Straight Presses #44, 45, 46, & 55 in Building 206
Z089 - Clearing 2000 Ton Press in Building 206
Z090 - 50 Ton Ring Roller in Building 111

Z091 - 2503 Heat Treat Quench Line in Building 120
Z092 - 2502 Heat Treat Quench Line in Building 120
Z093 - No equipment - permanently shut down
Z096 - Swing Table Wheelabrator Blast in Building 206
Z097 - Carpenter Shop Woodworking Operations
Z098 - Aerosol Can Puncturer
Z099 - Y-Plant Metal Saw
Z100 - Y-Plant 7.5 mmBtu/hr Heat Input Preheat Furnace

Z101 - Y-Plant 150 Ton Press
Z102 - Y-Plant 8.0 mmBtu/hr Heat Input Heat Treat Furnace
Z103 - Y-Plant Spinners
Z104 - Y-Plant 4.5 mmBtu/hr Heat Input Age Oven
Z105 - X-Plant Russell Saw
Z106 - X-Plant Radius Machine
Z107 - X-Plant 6.0 mmBtu/hr Heat Input Preheat Furnace
Z108 - X-Plant 150 Ton Press
Z109 - X-Plant 8.0 mmBtu/hr Heat Input Heat Treat Furnace
Z110 - X-Plant Spinners

B. State Only Enforceable Section (continued)

Z111 - X-Plant 4.5 mmBtu/hr Heat Input Age Oven
Z112 - X-Plant Etch - Inspect
Z113 - X-Plant Machining
Z114 - Miscellaneous (Y-Plant) 8.4 mmBtu/hr Heat Input Boiler
Z115 - Miscellaneous Material Handling consists of baghouse coating silo, boiler house salt, gravel load and unload. X, Y, Building 108 gas boilers.
Z116 - Preheat Furnace 6006 in Building 114
Z117 - #7 Die Heater in Building 206
Z300 - Small Abrasive Blasting Units Operations Facility Wide
Z301 - Small Burners Facility Wide
Z302 - Small Degreasers Facility Wide
Z303 - Miscellaneous Fuel Dispensing Facility Wide
Z304 - Small Grinding Operations Facility Wide
Z305 - Machining Machines Facility Wide
Z306 - Small Miscellaneous Sawing Operations Facility Wide
Z307 - Small Tanks Facility Wide
Z308 - Maintenance Welding Facility Wide
Z309 - Open burning by permission
Z310 - Asbestos renovation and demolition activities

Z311 - Activities associated with chlorofluorocarbons (CFCs)
Z312 - Landfill activities
Z501 - Furnaces Grouped for emissions statement

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Gas Boiler #8 (B008)

Activity Description: One of 2 - 98.8 MMBtu/hr gas fired boilers replacing the coal fired boilers

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
B008 - Nebraska Boiler Company model NS-F-73SH: 98.8 mmBtu/hr natural gas-fired (#2 fuel oil as backup) boiler	OAC rule 3745-31-05(A)(3) OAC rule 3745-31-05(D) (PTI #13-3174)	Low NOx burners and pollutant specific emission limits Visible particulate emissions (PE) from any exhaust stack shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity when burning #2 fuel oil. See A.I.2.a through A.I.2.f below.
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC 3745-31-05(A)(3).
	40 CFR, Part 60, Subpart Dc	The #2 fuel oil shall contain no greater than 0.5 weight percent of sulfur.
	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR, Part 60, Subpart Dc. No sulfur dioxide (SO2) emission standard requirements when burning natural gas.

2. Additional Terms and Conditions

2.a Allowable mass emissions:
When burning natural gas:
NOx: 16.32 lbs/hr
CO: 8.14 lbs/hr

When burning #2 fuel oil:
NOx: 19.63 lbs/hr
CO: 3.68 lbs/hr
SO2: 23.8 lbs/hr

2.b The total annual PE from boilers B008 and B009 combined shall be limited to 7.0 tons per year.

PE limit = (1.9* lbs PE/mm cu. ft.) X (W mm cu. ft of NG/yr) X (1 ton/2000 lbs) + (0.278* lb PE/1000 lbs of fuel oil) X (7.2 lbs/gallon of fuel oil) X (Y gallons of fuel oil/yr) X (1 ton/2000 lbs) = 7.0 TPY

where:
mm = million
cu. ft. = cubic feet
NG = natural gas
W = number of mm cu. ft. of natural gas used in B008 and B009
Y = number of gallons of #2 fuel oil used in B008 and B009
* - Basis for emission factors (e.g. USEPA reference document Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition.)

2.c The total annual SO2 emissions from boilers B008 and B009 combined shall be limited to 112 tons per year.

2.d The total annual NOx emissions from boilers B008 and B009 combined shall be limited to 150 tons per year.

2.e The total annual CO emissions from boilers B008 and B009 combined shall be limited to 17.9 tons per year.

2.f The permittee shall notify the Cleveland Division of Air Quality just before any fuel oil is used in this boiler. The notification shall be in writing.

II. Operational Restrictions

1. The permittee shall use #2 fuel oil that contains no greater than 0.5 weight % of sulfur in this emissions unit.

The #2 fuel oil sulfur content limits apply at all times, including periods of startup, shutdown and malfunction.

2. The maximum annual #2 fuel oil usage for this emissions unit shall not exceed 1,400,000 gallons per rolling, 12-month period.

3. The maximum annual natural gas usage of boilers B008 and B009 shall not exceed 1,974.3 mm cu. ft., based on a rolling, 12-month summation of the natural gas usage.

4. The permittee shall burn only natural gas or #2 fuel oil in this emissions unit.

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 the monitoring and record keeping requirements contained in Permit to Install #13-3174, issued on June 20, 1997: A.III.2., A.III.3., and A.III.4. 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 collect and record the following information:

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

2.a #2 Fuel Oil:

i. the name of the oil supplier;
ii. the statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c;
iii. monthly records of gallons of fuel oil used; and
iv. rolling, 12-month summation of the #2 fuel oil gallon usage figures.

2.b Natural Gas:

i. monthly records of cu. ft. of natural gas used; and
ii. rolling, 12-month summation of cu. ft. of natural gas used.

3. For each day during which the permittee burns a fuel other than natural gas or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as the reporting requirements contained in Permit to Install #13-3174, issued on June 20, 1997: A.IV.2., A.IV.3., and A.IV.4. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month usage restriction for natural gas and #2 fuel oil and each shipment of fuel oil that contains greater than 0.5%, by weight, sulfur.

Each quarterly fuel usage report shall address the deviations (excursions) of the previous calendar quarter. Include the reporting period and reporting items in a report. (For example, January 1 to March 31, 2001 quarterly report on deviation of fuel usage.)

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements specified in the General Terms and Conditions of this permit.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any exhaust stack shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity when burning natural gas and/or #2 fuel oil.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance may be determined by dividing the emission factor of 1.9 lbs PE/mm cu. ft. for natural gas by the natural gas gross heating value of 1020 Btu/cu. ft. This emission factor is specified in the USEPA's Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (7/98).

Actual PE rate = (1.9 lbs PE/mm cu. ft.)/(1000 Btu/cu. ft.) = 0.0019 lb PE/mmBtu

Compliance may be determined by dividing the emission factor of 2.0 lbs PE/1000 gallon for #2 fuel oil by the fuel oil gross heating value of 142,300 Btu/gallon. This emission factor is specified in the USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

Actual PE rate = (2.0 lbs PE/1000 gallons)/(142300 Btu/gallon) = 0.014 lb PE/mmBtu

1.c Emission Limitation:
The #2 fuel oil shall contain no greater than 0.5 weight % of sulfur.

Applicable Compliance Method:
Compliance may be based on the records for sulfur content for each shipment of #2 fuel oil received specified in Section A.III. of these terms and conditions.

V. Testing Requirements (continued)

1.d Emission Limitation:
23.8 lbs/hr SO2 emissions when burning #2 fuel oil

Applicable Compliance Method:
Compliance may be determined by multiplying the emission factor of 142 lbs SO2/1000 gallons of #2 fuel oil by sulfur content in weight percent and by boiler heat input in Btu/hr and the resultant product is divided by the fuel oil gross heating value in Btu/gallon. This emission factor is specified in the USEPA's Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (9/98).

Actual hourly SO2 emission rate = (142 lbs SO2/1000 gallons) X (0.241) X (98.8 mmBtu/hr)/(142300 Btu/gallon) = 23.76 lbs SO2/hr

1.e Emission Limitation:
16.32 lbs/hr NOx emissions when burning natural gas
8.14 lbs/hr CO emissions when burning natural gas

Applicable Compliance Method:
Compliance may be determined by multiplying the appropriate emission factor for natural gas from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (7/98) and the maximum boiler heat input in Btu/hr and the resultant product is divided by the natural gas gross heating value of 1020 Btu/cu. ft.

Actual hourly NOx emission rate = (100 lbs NOx/mm cu. ft.) X (98.8 mmBtu/hr)/(1020 Btu/cu. ft.) = 9.69 lbs NOx/hr

Actual hourly CO emission rate = (84 lbs CO/mm cu. ft.) X (98.8 mmBtu/hr)/(1020 Btu/cu. ft.) = 8.14 lbs CO/hr

1.f Emission Limitation:
19.63 lbs/hr NOx emissions when burning #2 fuel oil
3.68 lbs/hr CO emissions when burning #2 fuel oil

Applicable Compliance Method:
Compliance may be determined by multiplying the appropriate emission factor for fuel oil from USEPA's Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (9/98) and boiler heat input in Btu/hr and the resultant product is divided by the fuel oil gross heating value of 142,300 Btu/gallon.

Actual hourly NOx emission rate = (20 lbs NOx/1000 gallons) X (98.8 mmBtu/hr)/(142300 Btu/gallon) = 13.89 lbs NOx/hr

Actual hourly CO emission rate = (5 lbs CO/1000 gallons) X (98.8 mmBtu/hr)/(142300 Btu/gallon) = 3.47 lbs CO/hr

1.g Emission Limitation:
The total annual PE from B008 and B009 shall be limited to 7.0 tons per year.
The total annual SO2 emissions from B008 and B009 shall be limited to 112 tons per year.
The total annual NOx emissions from B008 and B009 shall be limited to 150 tons per year.
The total annual CO emissions from B008 and B009 shall be limited to 17.9 tons per year.

Applicable Compliance Method:
Compliance with the total annual emission limitations may be determined by combining the annual emission rates in tons per year for B008 and B009 when burning natural gas and/or burning #2 fuel oil.

V. Testing Requirements (continued)

The total annual emission rates in tons per year for B008 and B009 when burning natural gas may be determined by multiplying the appropriate emission factor in lbs/million cu. ft. by natural gas usage in cubic feet per year and the resultant product is divided by a factor of 2000 lbs/ton.

The total annual emission rates in tons per year for B008 and B009 when burning #2 fuel oil may be determined by multiplying the appropriate emission factor in lbs/1000 gallons by #2 fuel oil usage in gallons per year and the resultant product is divided by a factor of 2000 lbs/ton.

The emission factors for burning natural gas are specified in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Tables 1.4-1 and 1.4-2 (7/98).

The emission factors for burning fuel oil are specified in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Table 1.3-1 (9/98).

Total actual annual emission rate, tons/yr = (lbs emissions/mm cu. ft.) X (W mm cu. ft. NG/yr)/(2000 lbs/ton) + (lbs emissions/1000 gallons fuel oil) X (Y gallons of #2 fuel oil/yr)/(2000 lbs/ton)

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as the testing requirements contained in Permit to Install #13-3174, issued on June 20, 1997: A.V.1. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

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: Gas Boiler #9 (B009)

Activity Description: One of 2 - 98.8 MMBtu/hr gas fired boilers replacing the coal fired boilers

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
B009 - Nebraska Boiler Company model NS-F-73SH: 98.8 mmBtu/hr natural gas-fired (#2 fuel oil as backup) boiler	OAC rule 3745-31-05(A)(3) OAC rule 3745-31-05(D) (PTI #13-3174)	Low NOx burners and pollutant specific emission limits Visible particulate emissions (PE) from any exhaust stack shall not exceed 20% opacity, as a 6-minute average, except for one 6-minute period per hour of not more than 27% opacity when burning #2 fuel oil. See A.I.2.a through A.I.2.f below.
	OAC rule 3745-17-10(B)(1)	0.020 lb PE/mmBtu of actual heat input
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC 3745-31-05(A)(3).
	40 CFR, Part 60, Subpart Dc	The #2 fuel oil shall contain no greater than 0.5 weight percent of sulfur.
	OAC rule 3745-18-06(D)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR, Part 60, Subpart Dc. No sulfur dioxide (SO2) emission standard requirements when burning natural gas.

2. Additional Terms and Conditions

2.a Allowable mass emissions:
When burning natural gas:
NOx: 16.32 lbs/hr
CO: 8.14 lbs/hr

When burning #2 fuel oil:
NOx: 19.63 lbs/hr
CO: 3.68 lbs/hr
SO2: 23.8 lbs/hr

2.b The total annual PE from boilers B008 and B009 combined shall be limited to 7.0 tons per year.

PE limit = (1.9* lbs PE/mm cu. ft.) X (W mm cu. ft of NG/yr) X (1 ton/2000 lbs) + (0.278* lb PE/1000 lbs of fuel oil) X (7.2 lbs/gallon of fuel oil) X (Y gallons of fuel oil/yr) X (1 ton/2000 lbs) = 7.0 TPY

where:
mm = million
cu. ft. = cubic feet
NG = natural gas
W = number of mm cu. ft. of natural gas used in B008 and B009
Y = number of gallons of #2 fuel oil used in B008 and B009
* - Basis for emission factors (e.g. USEPA reference document Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition.)

2.c The total annual SO2 emissions from boilers B008 and B009 combined shall be limited to 112 tons per year.

2.d The total annual NOx emissions from boilers B008 and B009 combined shall be limited to 150 tons per year.

2.e The total annual CO emissions from boilers B008 and B009 combined shall be limited to 17.9 tons per year.

2.f The permittee shall notify the Cleveland Division of Air Quality before any fuel oil is used in this boiler. The notification shall be in writing.

II. Operational Restrictions

1. The permittee shall use #2 fuel oil that contains no greater than 0.5 weight % of sulfur in this emissions unit.

The #2 fuel oil sulfur content limits apply at all times, including periods of startup, shutdown and malfunction.

2. The maximum annual #2 fuel oil usage for this emissions unit shall not exceed 1,400,000 gallons per rolling, 12-month period.

3. The maximum annual natural gas usage of boilers B008 and B009 shall not exceed 1,974.3 mm cu. ft., based on a rolling, 12-month summation of the natural gas usage.

4. The permittee shall burn only natural gas or #2 fuel oil in this emissions unit.

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 the monitoring and record keeping requirements contained in Permit to Install #13-3174, issued on June 20, 1997: A.III.2., A.III.3., and A.III.4. 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 collect and record the following information:

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

2.a #2 Fuel Oil:

i. the name of the oil supplier;
ii. the statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c;
iii. monthly records of gallons of fuel oil used; and
iv. rolling, 12-month summation of the #2 fuel oil gallon usage figures.

2.b Natural Gas:

i. monthly records of cu. ft. of natural gas used; and
ii. rolling, 12-month summation of cu. ft. of natural gas used.

3. For each day during which the permittee burns a fuel other than natural gas or #2 fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as the reporting requirements contained in Permit to Install #13-3174, issued on June 20, 1997: A.IV.2., A.IV.3., and A.IV.4. The reporting requirements contained in the above-referenced Permit to Install are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the Permit to Install.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the rolling, 12-month usage restriction for natural gas and #2 fuel oil and each shipment of fuel oil that contains greater than 0.5%, by weight, sulfur.

Each quarterly fuel usage report shall address the deviations (excursions) of the previous calendar quarter. Include the reporting period and reporting items in a report. (For example, January 1 to March 31, 2001 quarterly report on deviation of fuel usage.)

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements specified in the General Terms and Conditions of this permit.

3. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any exhaust stack shall not exceed 20% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity when burning natural gas and/or #2 fuel oil.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method:
Compliance may be determined by dividing the emission factor of 1.9 lbs PE/mm cu. ft. for natural gas by the natural gas gross heating value of 1020 Btu/cu. ft. This emission factor is specified in the USEPA's Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition, Section 1.4, Table 1.4-2 (7/98).

Actual PE rate = (1.9 lbs PE/mm cu. ft.)/(1000 Btu/cu. ft.) = 0.0019 lb PE/mmBtu

Compliance may be determined by dividing the emission factor of 2.0 lbs PE/1000 gallon for #2 fuel oil by the fuel oil gross heating value of 142,300 Btu/gallon. This emission factor is specified in the USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.3, Table 1.3-1 (9/98).

Actual PE rate = (2.0 lbs PE/1000 gallons)/(142300 Btu/gallon) = 0.014 lb PE/mmBtu

1.c Emission Limitation:
The #2 fuel oil shall contain no greater than 0.5 weight % of sulfur.

Applicable Compliance Method:
Compliance may be based on the records for sulfur content for each shipment of #2 fuel oil received specified in Section A.III. of these terms and conditions.

V. Testing Requirements (continued)

1.d Emission Limitation:
23.8 lbs/hr SO2 emissions when burning #2 fuel oil

Applicable Compliance Method:
Compliance may be determined by multiplying the emission factor of 142 lbs SO2/1000 gallons of #2 fuel oil by sulfur content in weight percent and by boiler heat input in Btu/hr and the resultant product is divided by the fuel oil gross heating value in Btu/gallon. This emission factor is specified in the USEPA's Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (9/98).

Actual hourly SO2 emission rate = (142 lbs SO2/1000 gallons) X (0.241) X (98.8 mmBtu/hr)/(142300 Btu/gallon) = 23.76 lbs SO2/hr

1.e Emission Limitation:
16.32 lbs/hr NOx emissions when burning natural gas
8.14 lbs/hr CO emissions when burning natural gas

Applicable Compliance Method:
Compliance may be determined by multiplying the appropriate emission factor for natural gas from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Section 1.4, Table 1.4-1 (7/98) and the maximum boiler heat input in Btu/hr and the resultant product is divided by the natural gas gross heating value of 1020 Btu/cu. ft.

Actual hourly NOx emission rate = (100 lbs NOx/mm cu. ft.) X (98.8 mmBtu/hr)/(1020 Btu/cu. ft.) = 9.69 lbs NOx/hr

Actual hourly CO emission rate = (84 lbs CO/mm cu. ft.) X (98.8 mmBtu/hr)/(1020 Btu/cu. ft.) = 8.14 lbs CO/hr

1.f Emission Limitation:
19.63 lbs/hr NOx emissions when burning #2 fuel oil
3.68 lbs/hr CO emissions when burning #2 fuel oil

Applicable Compliance Method:
Compliance may be determined by multiplying the appropriate emission factor for fuel oil from USEPA's Compilation of Air Pollution Emission Factors, AP-42, Fifth Edition, Section 1.3, Table 1.3-1 (9/98) and boiler heat input in Btu/hr and the resultant product is divided by the fuel oil gross heating value of 142,300 Btu/gallon.

Actual hourly NOx emission rate = (20 lbs NOx/1000 gallons) X (98.8 mmBtu/hr)/(142300 Btu/gallon) = 13.89 lbs NOx/hr

Actual hourly CO emission rate = (5 lbs CO/1000 gallons) X (98.8 mmBtu/hr)/(142300 Btu/gallon) = 3.47 lbs CO/hr

1.g Emission Limitation:
The total annual PE from B008 and B009 shall be limited to 7.0 tons per year.
The total annual SO2 emissions from B008 and B009 shall be limited to 112 tons per year.
The total annual NOx emissions from B008 and B009 shall be limited to 150 tons per year.
The total annual CO emissions from B008 and B009 shall be limited to 17.9 tons per year.

Applicable Compliance Method:
Compliance with the total annual emission limitations may be determined by combining the annual emission rates in tons per year for B008 and B009 when burning natural gas and/or burning #2 fuel oil.

V. Testing Requirements (continued)

The total annual emission rates in tons per year for B008 and B009 when burning natural gas may be determined by multiplying the appropriate emission factor in lbs/million cu. ft. by natural gas usage in cubic feet per year and the resultant product is divided by a factor of 2000 lbs/ton.

The total annual emission rates in tons per year for B008 and B009 when burning #2 fuel oil may be determined by multiplying the appropriate emission factor in lbs/1000 gallons by #2 fuel oil usage in gallons per year and the resultant product is divided by a factor of 2000 lbs/ton.

The emission factors for burning natural gas are specified in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Tables 1.4-1 and 1.4-2 (7/98).

The emission factors for burning fuel oil are specified in USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Table 1.3-1 (9/98).

Total actual annual emission rate, tons/yr = (lbs emissions/mm cu. ft.) X (W mm cu. ft. NG/yr)/(2000 lbs/ton) + (lbs emissions/1000 gallons fuel oil) X (Y gallons of #2 fuel oil/yr)/(2000 lbs/ton)

2. Pursuant to OAC rule 3745-77-07(A)(3)(a)(ii), the following testing requirements are as stringent as the testing requirements contained in Permit to Install #13-3174, issued on June 20, 1997: A.V.1. The testing requirements contained in the above-referenced Permit to Install are subsumed into the testing requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying testing requirements in the Permit to Install.

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: Coating - B53 (K002)

Activity Description: Carpenter Shop Spray Paint Booth - Bldg 53

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
K002 - Building 53 - Carpenter shop paint spray booth followed by an air drying area to coat miscellaneous metal parts controlled by a fiberglass filtration system	OAC rule 3745-31-05(A)(3) (PTI #13-2153)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(U)(1)(d), 3745-17-07(A) and 3745-17-11(B). See A.I.2.a below.
The EU and the fiberglass filtration system were installed in 1990.	OAC rule 3745-21-09(U)(1)(d)	Any coating employed in this coating line shall not exceed 3.5 pounds VOC (volatile organic compounds) per gallon of coating, excluding water and exempt solvents, as applied.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from the fiberglass filtration system exhaust stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B) Table I	PE shall not exceed 0.551 lbs/hr.

2. Additional Terms and Conditions

2.a The maximum daily average capacity of this coating line shall be 10 gallons of applied coatings per hour. The VOC emissions shall not exceed 2333 pounds of VOC per month (including cleanup material).

Written approval should only be required from Cleveland Division of Air Quality (CDAQ) for coating formulations that exceed the limitation of the 3.5 pounds per gallon, excluding water and exempt solvent, as applied in this coating line. Any other coatings that are at and/or below the 3.5 pounds per gallon, excluding water and exempt solvent, as applied limitation should be allowed in this coating line.

II. Operational Restrictions

1. The permittee shall operate the fiberglass filtration system whenever this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain daily records which list the following information for each surface coating employed in this emissions unit:

a. the company identification for each coating employed;

b. the number of gallons of each coating employed;

c. the total number of hours the emissions unit was in operation; and

d. the average hourly volume usage rate for all coatings, calculated as (b)/(c), in gallons per hour (average).

2. The permittee shall collect and record the following information each month for the purpose of determining monthly VOC emissions:

a. the company identification for each coating and cleanup material employed;

b. the number of gallons of each coating and cleanup material employed;

c. the VOC content of each coating and cleanup material, in pounds per gallon;

d. the total VOC emission rate for all coatings and cleanup materials, in pounds per month, calculated as the sum of (b) x (c) for each coating and cleanup material; and

e. the VOC content of each coating, in pounds/gallon excluding water and exempt solvents, as applied.

3. The permittee shall maintain daily records that document any time periods when the fiberglass filtration system was not in service when the emissions unit was in operation.

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate Ohio EPA District or local air agency) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District or local air agency) within 30 days following the end of the calendar month.

2. The permittee shall submit quarterly deviation (excursion) reports for any deviation of the average hourly coating usage restriction. Each report shall include a copy of the record of the actual coating usage. These deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit an annual report by February 15 of each year which includes the monthly VOC emissions from coatings and cleanup materials for each month and an annual VOC emissions for the previous calendar year.

The annual reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency).

4. The permittee shall notify the Director (the appropriate Ohio EPA District Office or local air agency) in writing of any daily record showing that the fiberglass filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the event occurs.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. The reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:
3.5 pounds VOC per gallon of coating, excluding water and exempt solvents, as applied

Applicable Compliance Method:
Compliance with the emissions limitation may be based on the record keeping in A.III. The VOC content of the coatings may be determined using USEPA Method 24 or 24A in 40 CFR, Part 60, Appendix A.

1.b Emissions Limitation:
The maximum daily average capacity of this coating line shall be 10 gallons of applied coatings per hour. The VOC emissions shall not exceed 2333 pounds of VOC per month (including cleanup material).

Applicable Compliance Method:
Compliance may be based on the record keeping in Sections A.III.1 and A.III.2, respectively.

V. Testing Requirements (continued)

1.c Emission Limitation:
PE shall not exceed 0.551 lbs/hr.

Applicable Compliance Method:
To determine the actual worst case particulate emission rate, the following equation shall be used for the paint spraying operation:

Actual hourly PE rate, lbs PE/hr = maximum coating solids usage rate, in lbs/hr X (1-TE) X (1-CE)

Where:
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 (40 CFR 60.313 or 40 CFR 60.453), expressed as a fraction

CE = control efficiency of the control equipment (assumed to be 90%), expressed as a fraction

If required, the permittee shall determine compliance with this emission limitation through emission tests performed in accordance with 40 CFR, Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10).

1.d Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the 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: Furnaces 2502 Heat Treat and Age B120 (P003)

Activity Description: 2502 Heat Treat and Age Oven - Bldg 120

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
P003 - Building 120 - 2.97 mmBtu/hr indirect heat natural gas-fired heat treat furnace (number 2502) operating at a maximum process weight rate of 2,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
4.56 mmBtu/hr direct heat natural gas-fired age oven (number 2502) with a maximum process weight rate of 2,500 lbs/hr of metal	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
Both furnaces were installed in 1952 and are fugitive emission sources.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3). For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.b Emission Limitation:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb PE/mmBtu

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: Furnaces 2503 Heat Treat and Age B120 (P004)

Activity Description: 2503 Heat Treat and Age Oven - Bldg 120

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
P004 - Building 120 - 2.97 mmBtu/hr indirect heat natural gas-fired heat treat furnace (number 2503) operating at a maximum process weight rate of 2,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
4.56 mmBtu/hr direct heat natural gas-fired age oven (number 2503) with a maximum process weight rate of 2,500 lbs/hr of metal	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
Both furnaces were installed in 1952 and are fugitive emission sources.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3). For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.b Emission Limitation:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb PE/mmBtu

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: 35001 Hammer (P007)

Activity Description: 35001 Steam Hammer - Bldg 114

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
P007 - Building 114 - number 35001 steam hammer for the production of metal forgings operating at a maximum batch process weight rate of 20,400 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1950.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.0164 lb OC/lb lubricant was developed by the permittee from two sets of stack test emission data. An OC emission factor is 0.0279 lb OC/lb lubricant based on the November 16, 1995 stack test emission data. Another OC emission factor is 0.0048 lb OC/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two OC emission factors is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.190 lb PE/lb lubricant was developed by the permittee from two sets of stack test emission data. A PE factor is 0.3561 lb PE/lb lubricant based on the November 16, 1995 stack test emission data. Another PE factor is 0.0279 lb PE/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two PE factors is 0.190 lb PE/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: 35002 Hammer (P008)

Activity Description: 35002 Steam Hammer - Bldg 114

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
P008 - Building 114 - number 35002 steam hammer for the production of metal forgings operating at a maximum batch process weight rate of 20,400 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1950.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.0164 lb OC/lb lubricant was developed by the permittee from two sets of stack test emission data. An OC emission factor is 0.0279 lb OC/lb lubricant based on the November 16, 1995 stack test emission data. Another OC emission factor is 0.0048 lb OC/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two OC emission factors is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.190 lb PE/lb lubricant was developed by the permittee from two sets of stack test emission data. A PE factor is 0.3561 lb PE/lb lubricant based on the November 16, 1995 stack test emission data. Another PE factor is 0.0279 lb PE/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two PE factors is 0.190 lb PE/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: 25001 Hammer (P009)

Activity Description: 25001 Steam Hammer - Bldg 114

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
P009 - Building 114 - number 25001 steam hammer for the production of metal forgings operating at a maximum batch process weight rate of 20,400 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1941.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.0164 lb OC/lb lubricant was developed by the permittee from two sets of stack test emission data. An OC emission factor is 0.0279 lb OC/lb lubricant based on the November 16, 1995 stack test emission data. Another OC emission factor is 0.0048 lb OC/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two OC emission factors is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.190 lb PE/lb lubricant was developed by the permittee from two sets of stack test emission data. A PE factor is 0.3561 lb PE/lb lubricant based on the November 16, 1995 stack test emission data. Another PE factor is 0.0279 lb PE/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two PE factors is 0.190 lb PE/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: 8001 Hammer (P010)

Activity Description: 8001 Steam Hammer - Bldg 114

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
P010 - Building 114 - number 8001, steam hammer for the production of metal forgings operating at a maximum batch process weight rate of 20,400 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1941.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.0164 lb OC/lb lubricant was developed by the permittee from two sets of stack test emission data. An OC emission factor is 0.0279 lb OC/lb lubricant based on the November 16, 1995 stack test emission data. Another OC emission factor is 0.0048 lb OC/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two OC emission factors is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.190 lb PE/lb lubricant was developed by the permittee from two sets of stack test emission data. A PE factor is 0.3561 lb PE/lb lubricant based on the November 16, 1995 stack test emission data. Another PE factor is 0.0279 lb PE/lb lubricant based on the November 8, 1996 stack test emission data. The arithmetic average of the two PE factors is 0.190 lb PE/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 15000 (P011)

Activity Description: 15000 Hydraulic Press Complex - Bldg 112A

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
P011 - Building 112A - number 15000 (ton) hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 20,400 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack at a nominal exit gas flow rate of 38,900 ACFM	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1952.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.081 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 8001 (P012)

Activity Description: 8001 Hydraulic Press Complex - Bldg 112A

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
P012 - Building 112A - number 8001 hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 28,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack at a nominal exit gas flow rate of 38,900 ACFM	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1953.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.081 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 8002/2500 (P013)

Activity Description: 8002 & 2500 Ton Hydraulic Press Complex - Bldg 112A

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
P013 - Building 112A - number 8002 and number 2500 hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 28,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack at a nominal exit gas flow rate of 60,000 ACFM	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1971.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.0011 lb OC/lb lubricant was developed by the permittee from emission data of stack test conducted on December 8, 2000. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.0099 lb PE/lb lubricant was developed by the permittee from emission data of stack test conducted on December 8, 2000. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 3004 (P014)

Activity Description: 3004 Hydraulic Press Complex - Bldg 112A

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
P014 - Building 112A - number 3004 hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 13,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a stack at a nominal exit gas flow rate of 36,000 ACFM	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1969.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.081 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Mech 1300 T Ajax (P017)

Activity Description: 1300 Ton Ajax Press - Bldg 101

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
P017 - Building 101 - 1,300 ton Ajax mechanical press complex for the production of metal forgings operating at a maximum batch process weight rate of 1,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1957.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.c and A.I.2.d below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2. Additional Terms and Conditions (continued)

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.d Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a the company identification for each lubricant employed;

b an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c the amount of each photochemically reactive material lubricant employed, in pounds;

d the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

e for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

f for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emission unit was in operation using photochemically reactive material lubricant; and

g for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (e)/(f), in lbs/hr (average).

h. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor is established from the solids content of lubricant by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC factor is established from the OC content of lubricant by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Mech 1600 T Erie (P018)

Activity Description: 1600 Ton Erie Press - Bldg 101

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
P018 - Building 101 - 1,600 ton Erie mechanical press complex for the production of metal forgings operating at a maximum batch process weight rate of 2,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1957.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.c and A.I.2.d below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2. Additional Terms and Conditions (continued)

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.d Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a the company identification for each lubricant employed;

b an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c the amount of each photochemically reactive material lubricant employed, in pounds;

d the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

e for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

f for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emission unit was in operation using photochemically reactive material lubricant; and

g for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (e)/(f), in lbs/hr (average).

h. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor is established from the solids content of lubricant by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC factor is established from the OC content of lubricant by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Mech 4000 T Ajax (P019)

Activity Description: 4000 Ton Ajax Press - Bldg 101

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
P019 - Building 101 - 1,600 ton Ajax mechanical press complex for the production of metal forgings operating at a maximum batch process weight rate of 7,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1957.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.c and A.I.2.d below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2. Additional Terms and Conditions (continued)

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.d Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a the company identification for each lubricant employed;

b an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c the amount of each photochemically reactive material lubricant employed, in pounds;

d the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

e for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

f for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emission unit was in operation using photochemically reactive material lubricant; and

g for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (e)/(f), in lbs/hr (average).

h. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor is established from the solids content of lubricant by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC factor is established from the OC content of lubricant by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 3003 (P024)

Activity Description: 3003 Hydraulic Press Complex - Bldg 101

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
P024 - Building 101 - number 3003 hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 13,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a stack at a nominal exit gas flow rate of 56,687 ACFM	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1953. See P146.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.081 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 35000 (P029)

Activity Description: 35000 Hydraulic Press Complex - Bldg 206

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
P029 - Building 206 - number 35000 hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 50,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a stack at a nominal exit gas flow rate of 50,800 ACFM	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1955.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.081 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 50000 (P030)

Activity Description: 50000 Hydraulic Press Complex - Bldg 206

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
P030 - Building 206 - number 50000 hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 50,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 700 and 1700 degrees Fahrenheit and air emissions are exhausted through a stack at a nominal exit gas flow rate of 68,319 ACFM	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a water spray tunnel stack were installed in 1955.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h. the amount of each photochemically reactive material lubricant employed, in pounds;

i. the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j. for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k. for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l. for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The PE factor of 0.081 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Torch Pit #1 (P032)

Activity Description: Acetylene Arc System - Torch Pit No. 1 (East) - Bldg 206

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
P032 - Building 206 - acetylene arc system - torch pit number 1 (east) and emissions are controlled by a reverse air baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The emissions unit and a scrubber were installed in 1967. A baghouse replaced the scrubber in 1981.	OAC rule 3745-17-11(B) Table I	PE shall not exceed 0.551 lbs/hr.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

3. Material collected by the baghouse shall be handled in such a way there shall be no emission of fugitive dust. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

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

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100%/(90% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 0.551 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit may be determined using the following equation:

Actual hourly PE rate, lbs PE/hr = (100/BCE - 1) X DUST/(hrs of operation/month)

Where:
BCE = baghouse control efficiency, 90%
DUST = dust collected from baghouse per month, lbs/month

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1.

The following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn HT - #1 Swindell (P046)

Activity Description: No. 1 Swindell Heat Treat Furnace - Bldg 206

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
P046 - Building 206 - Swindell electric heat treat furnace (number 1) operating at a maximum process weight rate of 7,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in June 1955 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn HT - #2 Swindell (P047)

Activity Description: No. 2 Swindell Heat Treat Furnace - Bldg 206

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
P047 - Building 206 - Swindell electric heat treat furnace (number 2) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
installed in June 1955 and is fugitive particulate emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn HT - #3 Swindell (P048)

Activity Description: No. 3 Swindell Heat Treat Furnace - Bldg 206

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
P048 - Building 206 - Swindell electric heat treat furnace (number 3) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in June 1955 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn HT - #4 Swindell (P049)

Activity Description: No. 4 Swindell Heat Treat Furnace - Bldg 206

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
P049 - Building 206 - Swindell electric heat treat furnace (number 4) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in June 1955 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn HT - #5 Dispatch (30000) (P054)

Activity Description: No. 5 H.T. Despatch 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
P054 - Building 206 - 8.20 mmBtu/hr indirect heat natural gas-fired heat treat Despatch furnace (number 5) operating at a maximum process weight rate of 7,500 lbs/hr of metal and hydrogen scavenger usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data and air emissions generated by internal furnace chamber are exhausted through a vertical stack	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/MMBtu of actual heat input.
The EU was installed in 1967. Three stacks were indicated in the 8/15/1972 permit to operate application.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B) Table I	PE from the exhaust stack of the reverse air baghouse controlling emissions generated by the internal furnace chamber shall not exceed 0.551 lb/hr.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

2. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

3. The permittee shall collect, record and maintain the following information each month when this emissions unit was in operation:

a. the scavenger usage of this emissions unit, in lbs;

b. the PE generated by this emissions unit, i.e., (a) x 0.175 lb of PE/lb scavenger, in lbs of PE;

c. the operating hours of this emissions unit ; and

d. the average hourly PE rate generated by this emissions unit, i.e., (b)/(c), in lbs of PE/hr.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Cleveland DAQ within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.c Emission Limitation:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

1.d Emission Limitation:
PE from the exhaust stack of the reverse air baghouse controlling emissions generated by the internal furnace chamber shall not exceed 0.551 lb/hr.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit may be determined using the following equations:

Actual hourly PE rate, lbs PE/hr = lbs of scavenger/hr X lb PE/lb scavenger

The emission factor of 0.175 lb PE/lb scavenger was developed by the permittee from 1996 stack test emission data and scavenger usage of 6006 preheat furnace. In a four hour test, 3.5 lbs PE were generated when 20 lbs of scavenger were used or 0.175 lb PE/lb scavenger. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current scavenger emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

The following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn #15 Soaker (P055)

Activity Description: 120,000 lb Ignot Soaking Furnace (No. 15) - Bldg 206

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
P055 - Building 206 - 8.00 mmBtu/hr indirect heat natural gas-fired ingot soaking furnace (number 15) operating at a maximum process weight rate of 25,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger and emissions generated from the internal furnace chamber are controlled by a reverse air baghouse.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/MMBtu of actual heat input.
The EU and a stack were installed in 1955. A baghouse and a stack were installed in 1977.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B) Table I	PE from the exhaust stack of the reverse air baghouse controlling emissoins generated by the internal furnace chamber shall not exceed 0.551 lb/hr.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

II. Operational Restrictions (continued)

2. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

3. The permittee shall collect, record and maintain the following information each month when this emissions unit was in operation:

a. the scavenger usage of this emissions unit, in lbs;

b. the PE generated by this emissions unit, i.e., (a) x 0.175 lb of PE/lb scavenger, in lbs of PE;

c. the operating hours of this emissions unit ; and

d. the average hourly PE rate generated by this emissions unit, i.e., (b)/(c), in lbs of PE/hr.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Cleveland DAQ within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.b Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.c Emission Limitation:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

1.d Emission Limitation:
PE from the exhaust stack of the reverse air baghouse controlling emissions generated by the internal furnace chamber shall not exceed 0.551 lb/hr.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit may be determined using the following equations:

Actual hourly PE rate, lbs PE/hr = lbs of scavenger/hr X lb PE/lb scavenger

The emission factor of 0.175 lb PE/lb scavenger was developed by the permittee from 1996 stack test emission data and scavenger usage of 6006 preheat furnace. In a four hour test, 3.5 lbs PE were generated when 20 lbs of scavenger were used or 0.175 lb PE/lb scavenger. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current scavenger emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

The following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn T-1 B101 (P083)

Activity Description: Titanium Reheat Furnaces T-1 - Bldg 101

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
P083 - Building 101 - 8.00 mmBtu/hr direct heat natural gas-fired titanium preheat furnace (number T-1) without hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
The furnace was installed in October 1967 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

2.a The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Cleveland DAQ within 30 days after the deviation occurs.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Blast-T Whl B206 (P086)

Activity Description: Wheelabrator - Titanium - Bldg 206

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
P086 - Building 206 - titanium grit blasting machine and emissions are controlled by a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone scrubber were installed in 1966. A baghouse replaced the Rotoclone in 1976.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 2.20 lbs/hr.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland Bureau of Air Pollution Control for approval within six months.

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100/(% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by the calculation in the Testing Section V.I.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 2.20 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equation:

ACTPE86 = (100/ECEB - 1) X DUST/(hrs of operation/month)

UNCPE86 = (100/ECEB) X DUST/(hrs of operation/month)

Where:
ACTPE86 = Actual hourly PE rate, lbs PE/hr
UNCPE86 = Uncontrolled hourly PE rate, lbs PE/hr
ECEB = emission control efficiency of the baghouse, %
DUST = dust collected from the baghouse of this emissions unit per month, lbs/month

Uncontrolled PE Rate:
In the May 8, 1974 stack test, 11.0 lbs/hr of PE were generated at the inlet to the Rotoclone scrubber when titanium castings were cleaned by shot blasting. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn T-7 B206 (P087)

Activity Description: Titanium Reheat Furnace T-7

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
P087 - Building 206 - 18.64 mmBtu/hr direct heat natural gas-fired titanium reheat furnaces (number T-7) without hydrogen scavenger and air emissions are exhausted through two vertical stacks	OAC rule 3745-31-05(A) (PTI #13-016) (Issued under Chapter EP-30)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-11(B) and 3745-17-07(A)(1).
The EU and a stack were installed in May 1974.	OAC rule 3745-17-11(B)	See A.I.2.a below.
	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

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: Grind Booth T-1 (P091)

Activity Description: Titanium Grinding Booth #1 - Bldg 206

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
P091 - Building 206 - titanium grinding booth (number T-1) for grinding metal parts with grinding wheel and emissions are controlled by a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone scrubber were installed in 1969. A baghouse replaced the Rotoclone in 1979.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule. See A.I.2.a below.

2. Additional Terms and Conditions

2.a This emissions unit is located in close proximity to P092, P093, P094, P096, and P097. The allowable hourly PE rate from the six baghouse stacks was determined by using Figure II and a calculated combined uncontrolled emission rate of 76.2 lbs/hr of PE. The uncontrolled hourly PE rate was calculated from the calculated combined process weight rate of 3048 lbs/hr of metal parts ground and an uncontrolled emission factor that had been determined from a March 18, 1982 stack emission test on P095, which has since shut down.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100%/(90% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by calculation in Testing Section V.1.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

For determining actual hourly PE rate:
ACTPE91, lbs/hr = (100/ECEB91 - 1) X (DUST91, lbs/month)/(hrs of operation/month)
ACTPE92, lbs/hr = (100/ECEB92 - 1) X (DUST92, lbs/month)/(hrs of operation/month)
ACTPE93, lbs/hr = (100/ECEB93 - 1) X (DUST93, lbs/month)/(hrs of operation/month)
ACTPE94, lbs/hr = (100/ECEB94 - 1) X (DUST94, lbs/month)/(hrs of operation/month)
ACTPE96, lbs/hr = (100/ECEB96 - 1) X (DUST96, lbs/month)/(hrs of operation/month)
ACTPE97, lbs/hr = (100/ECEB97 - 1) X (DUST97, lbs/month)/(hrs of operation/month)

COMBACTPE, lbs/hr = ACTPE91, lbs/hr + ACTPE92, lbs/hr + ACTPE93, lbs/hr + ACTPE94, lbs/hr + ACTPE96, lbs/hr + ACTPE97, lbs/hr

V. Testing Requirements (continued)

For determining uncontrolled hourly PE rate:
UNCPE91, lbs/hr = (100/ECEB91) X (DUST91, lbs/month)/(hrs of operation/month)
UNCPE92, lbs/hr = (100/ECEB92) X (DUST92, lbs/month)/(hrs of operation/month)
UNCPE93, lbs/hr = (100/ECEB93) X (DUST93, lbs/month)/(hrs of operation/month)
UNCPE94, lbs/hr = (100/ECEB94) X (DUST94, lbs/month)/(hrs of operation/month)
UNCPE96, lbs/hr = (100/ECEB96) X (DUST96, lbs/month)/(hrs of operation/month)
UNCPE97, lbs/hr = (100/ECEB97) X (DUST97, lbs/month)/(hrs of operation/month)

COMBUNCPE, lbs/hr = UNCPE91, lbs/hr + UNCPE92, lbs/hr + UNCPE93, lbs/hr + UNCPE94, lbs/hr + UNCPE96, lbs/hr + UNCPE97, lbs/hr

Uncontrolled PE Factor:
The uncontrolled PE factor of 0.025 lb PE/lb of metal parts ground was developed by the permittee based on the data of the March 18, 1982 stack emission test on P095, which has since shut down. In the 1982 stack test, 12.7 lbs of PE/hr were generated at the inlet to the baghouse when 508 lbs/hr metal parts were ground with a grinding wheel. Other emission factors that had been generated from stack test emission data may be used.

Where:
ACTPE91 = actual hourly PE rate of P091, lbs/hr
ACTPE92 = actual hourly PE rate of P092, lbs/hr
ACTPE93 = actual hourly PE rate of P093, lbs/hr
ACTPE94 = actual hourly PE rate of P094, lbs/hr
ACTPE96 = actual hourly PE rate of P096, lbs/hr
ACTPE97 = actual hourly PE rate of P097, lbs/hr
COMBACTPE = Combined actual hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr
ECEB91 = 90% emission control efficiency of the baghouse of P091,
ECEB92 = 90% emission control efficiency of the baghouse of P092,
ECEB93 = 90% emission control efficiency of the baghouse of P093,
ECEB94 = 90% emission control efficiency of the baghouse of P094,
ECEB96 = 90% emission control efficiency of the baghouse of P096,
ECEB97 = 90% emission control efficiency of the baghouse of P097,
DUST91 = dust collected from the baghouse of P091 per month, lbs/month
DUST92 = dust collected from the baghouse of P092 per month, lbs/month
DUST93 = dust collected from the baghouse of P093 per month, lbs/month
DUST94 = dust collected from the baghouse of P094 per month, lbs/month
DUST96 = dust collected from the baghouse of P096 per month, lbs/month
DUST97 = dust collected from the baghouse of P097 per month, lbs/month
UNCPE91 = uncontrolled hourly PE rate of P091, lbs/hr
UNCPE92 = uncontrolled hourly PE rate of P092, lbs/hr
UNCPE93 = uncontrolled hourly PE rate of P093, lbs/hr
UNCPE94 = uncontrolled hourly PE rate of P094, lbs/hr
UNCPE96 = uncontrolled hourly PE rate of P096, lbs/hr
UNCPE97 = uncontrolled hourly PE rate of P097, lbs/hr
COMBUNCPE = Combined uncontrolled hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Grind Booth T-2 (P092)

Activity Description: Titanium Grinding Booth #2 - Bldg 206

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
P092 - Building 206 - titanium grinding booth (number T-1) for grinding metal parts with grinding wheel and emissions are controlled by a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone scrubber were installed in 1969. A baghouse replaced the Rotoclone in 1979.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule. See A.I.2.a below.

2. Additional Terms and Conditions

2.a This emissions unit is located in close proximity to P091, P093, P094, P096, and P097. The allowable hourly PE rate from the six baghouse stacks was determined by using Figure II and a calculated combined uncontrolled emission rate of 76.2 lbs/hr of PE. The uncontrolled hourly PE rate was calculated from the calculated combined process weight rate of 3048 lbs/hr of metal parts ground and an uncontrolled emission factor that had been determined from a March 18, 1982 stack emission test on P095, which has since shut down.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100%/(90% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by calculation in Testing Section V.1.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

For determining actual hourly PE rate:
ACTPE91, lbs/hr = (100/ECEB91 - 1) X (DUST91, lbs/month)/(hrs of operation/month)
ACTPE92, lbs/hr = (100/ECEB92 - 1) X (DUST92, lbs/month)/(hrs of operation/month)
ACTPE93, lbs/hr = (100/ECEB93 - 1) X (DUST93, lbs/month)/(hrs of operation/month)
ACTPE94, lbs/hr = (100/ECEB94 - 1) X (DUST94, lbs/month)/(hrs of operation/month)
ACTPE96, lbs/hr = (100/ECEB96 - 1) X (DUST96, lbs/month)/(hrs of operation/month)
ACTPE97, lbs/hr = (100/ECEB97 - 1) X (DUST97, lbs/month)/(hrs of operation/month)

COMBACTPE, lbs/hr = ACTPE91, lbs/hr + ACTPE92, lbs/hr + ACTPE93, lbs/hr + ACTPE94, lbs/hr + ACTPE96, lbs/hr + ACTPE97, lbs/hr

V. Testing Requirements (continued)

For determining uncontrolled hourly PE rate:
UNCPE91, lbs/hr = (100/ECEB91) X (DUST91, lbs/month)/(hrs of operation/month)
UNCPE92, lbs/hr = (100/ECEB92) X (DUST92, lbs/month)/(hrs of operation/month)
UNCPE93, lbs/hr = (100/ECEB93) X (DUST93, lbs/month)/(hrs of operation/month)
UNCPE94, lbs/hr = (100/ECEB94) X (DUST94, lbs/month)/(hrs of operation/month)
UNCPE96, lbs/hr = (100/ECEB96) X (DUST96, lbs/month)/(hrs of operation/month)
UNCPE97, lbs/hr = (100/ECEB97) X (DUST97, lbs/month)/(hrs of operation/month)

COMBUNCPE, lbs/hr = UNCPE91, lbs/hr + UNCPE92, lbs/hr + UNCPE93, lbs/hr + UNCPE94, lbs/hr + UNCPE96, lbs/hr + UNCPE97, lbs/hr

Uncontrolled PE Factor:
The uncontrolled PE factor of 0.025 lb PE/lb of metal parts ground was developed by the permittee based on the data of the March 18, 1982 stack emission test on P095, which has since shut down. In the 1982 stack test, 12.7 lbs of PE/hr were generated at the inlet to the baghouse when 508 lbs/hr metal parts were ground with a grinding wheel. Other emission factors that had been generated from stack test emission data may be used.

Where:
ACTPE91 = actual hourly PE rate of P091, lbs/hr
ACTPE92 = actual hourly PE rate of P092, lbs/hr
ACTPE93 = actual hourly PE rate of P093, lbs/hr
ACTPE94 = actual hourly PE rate of P094, lbs/hr
ACTPE96 = actual hourly PE rate of P096, lbs/hr
ACTPE97 = actual hourly PE rate of P097, lbs/hr
COMBACTPE = Combined actual hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr
ECEB91 = 90% emission control efficiency of the baghouse of P091,
ECEB92 = 90% emission control efficiency of the baghouse of P092,
ECEB93 = 90% emission control efficiency of the baghouse of P093,
ECEB94 = 90% emission control efficiency of the baghouse of P094,
ECEB96 = 90% emission control efficiency of the baghouse of P096,
ECEB97 = 90% emission control efficiency of the baghouse of P097,
DUST91 = dust collected from the baghouse of P091 per month, lbs/month
DUST92 = dust collected from the baghouse of P092 per month, lbs/month
DUST93 = dust collected from the baghouse of P093 per month, lbs/month
DUST94 = dust collected from the baghouse of P094 per month, lbs/month
DUST96 = dust collected from the baghouse of P096 per month, lbs/month
DUST97 = dust collected from the baghouse of P097 per month, lbs/month
UNCPE91 = uncontrolled hourly PE rate of P091, lbs/hr
UNCPE92 = uncontrolled hourly PE rate of P092, lbs/hr
UNCPE93 = uncontrolled hourly PE rate of P093, lbs/hr
UNCPE94 = uncontrolled hourly PE rate of P094, lbs/hr
UNCPE96 = uncontrolled hourly PE rate of P096, lbs/hr
UNCPE97 = uncontrolled hourly PE rate of P097, lbs/hr
COMBUNCPE = Combined uncontrolled hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Grind Booth T-3 (P093)

Activity Description: Titanium Grinding Booth #3 - Bldg 206

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
P093 - Building 206 - titanium grinding booth (number T-1) for grinding metal parts with grinding wheel and emissions are controlled by a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone scrubber were installed in 1969. A baghouse replaced the Rotoclone in 1979.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule. See A.I.2.a below.

2. Additional Terms and Conditions

2.a This emissions unit is located in close proximity to P091, P092, P094, P096, and P097. The allowable hourly PE rate from the six baghouse stacks was determined by using Figure II and a calculated combined uncontrolled emission rate of 76.2 lbs/hr of PE. The uncontrolled hourly PE rate was calculated from the calculated combined process weight rate of 3048 lbs/hr of metal parts ground and an uncontrolled emission factor that had been determined from a March 18, 1982 stack emission test on P095, which has since shut down.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100%/(90% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by calculation in Testing Section V.1.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

For determining actual hourly PE rate:
ACTPE91, lbs/hr = (100/ECEB91 - 1) X (DUST91, lbs/month)/(hrs of operation/month)
ACTPE92, lbs/hr = (100/ECEB92 - 1) X (DUST92, lbs/month)/(hrs of operation/month)
ACTPE93, lbs/hr = (100/ECEB93 - 1) X (DUST93, lbs/month)/(hrs of operation/month)
ACTPE94, lbs/hr = (100/ECEB94 - 1) X (DUST94, lbs/month)/(hrs of operation/month)
ACTPE96, lbs/hr = (100/ECEB96 - 1) X (DUST96, lbs/month)/(hrs of operation/month)
ACTPE97, lbs/hr = (100/ECEB97 - 1) X (DUST97, lbs/month)/(hrs of operation/month)

COMBACTPE, lbs/hr = ACTPE91, lbs/hr + ACTPE92, lbs/hr + ACTPE93, lbs/hr + ACTPE94, lbs/hr + ACTPE96, lbs/hr + ACTPE97, lbs/hr

V. Testing Requirements (continued)

For determining uncontrolled hourly PE rate:
UNCPE91, lbs/hr = (100/ECEB91) X (DUST91, lbs/month)/(hrs of operation/month)
UNCPE92, lbs/hr = (100/ECEB92) X (DUST92, lbs/month)/(hrs of operation/month)
UNCPE93, lbs/hr = (100/ECEB93) X (DUST93, lbs/month)/(hrs of operation/month)
UNCPE94, lbs/hr = (100/ECEB94) X (DUST94, lbs/month)/(hrs of operation/month)
UNCPE96, lbs/hr = (100/ECEB96) X (DUST96, lbs/month)/(hrs of operation/month)
UNCPE97, lbs/hr = (100/ECEB97) X (DUST97, lbs/month)/(hrs of operation/month)

COMBUNCPE, lbs/hr = UNCPE91, lbs/hr + UNCPE92, lbs/hr + UNCPE93, lbs/hr + UNCPE94, lbs/hr + UNCPE96, lbs/hr + UNCPE97, lbs/hr

Uncontrolled PE Factor:
The uncontrolled PE factor of 0.025 lb PE/lb of metal parts ground was developed by the permittee based on the data of the March 18, 1982 stack emission test on P095, which has since shut down. In the 1982 stack test, 12.7 lbs of PE/hr were generated at the inlet to the baghouse when 508 lbs/hr metal parts were ground with a grinding wheel. Other emission factors that had been generated from stack test emission data may be used.

Where:
ACTPE91 = actual hourly PE rate of P091, lbs/hr
ACTPE92 = actual hourly PE rate of P092, lbs/hr
ACTPE93 = actual hourly PE rate of P093, lbs/hr
ACTPE94 = actual hourly PE rate of P094, lbs/hr
ACTPE96 = actual hourly PE rate of P096, lbs/hr
ACTPE97 = actual hourly PE rate of P097, lbs/hr
COMBACTPE = Combined actual hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr
ECEB91 = 90% emission control efficiency of the baghouse of P091,
ECEB92 = 90% emission control efficiency of the baghouse of P092,
ECEB93 = 90% emission control efficiency of the baghouse of P093,
ECEB94 = 90% emission control efficiency of the baghouse of P094,
ECEB96 = 90% emission control efficiency of the baghouse of P096,
ECEB97 = 90% emission control efficiency of the baghouse of P097,
DUST91 = dust collected from the baghouse of P091 per month, lbs/month
DUST92 = dust collected from the baghouse of P092 per month, lbs/month
DUST93 = dust collected from the baghouse of P093 per month, lbs/month
DUST94 = dust collected from the baghouse of P094 per month, lbs/month
DUST96 = dust collected from the baghouse of P096 per month, lbs/month
DUST97 = dust collected from the baghouse of P097 per month, lbs/month
UNCPE91 = uncontrolled hourly PE rate of P091, lbs/hr
UNCPE92 = uncontrolled hourly PE rate of P092, lbs/hr
UNCPE93 = uncontrolled hourly PE rate of P093, lbs/hr
UNCPE94 = uncontrolled hourly PE rate of P094, lbs/hr
UNCPE96 = uncontrolled hourly PE rate of P096, lbs/hr
UNCPE97 = uncontrolled hourly PE rate of P097, lbs/hr
COMBUNCPE = Combined uncontrolled hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Grind Booth T-4 (P094)

Activity Description: Titanium Grinding Booth #4 - Bldg 206

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
P094 - Building 206 - titanium grinding booth (number T-1) for grinding metal parts with grinding wheel and emissions are controlled by a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone scrubber were installed in 1969. A baghouse replaced the Rotoclone in 1979.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule. See A.I.2.a below.

2. Additional Terms and Conditions

2.a This emissions unit is located in close proximity to P091, P092, P093, P096, and P097. The allowable hourly PE rate from the six baghouse stacks was determined by using Figure II and a calculated combined uncontrolled emission rate of 76.2 lbs/hr of PE. The uncontrolled hourly PE rate was calculated from the calculated combined process weight rate of 3048 lbs/hr of metal parts ground and an uncontrolled emission factor that had been determined from a March 18, 1982 stack emission test on P095, which has since shut down.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100%/(90% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by calculation in Testing Section V.1.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

For determining actual hourly PE rate:
ACTPE91, lbs/hr = (100/ECEB91 - 1) X (DUST91, lbs/month)/(hrs of operation/month)
ACTPE92, lbs/hr = (100/ECEB92 - 1) X (DUST92, lbs/month)/(hrs of operation/month)
ACTPE93, lbs/hr = (100/ECEB93 - 1) X (DUST93, lbs/month)/(hrs of operation/month)
ACTPE94, lbs/hr = (100/ECEB94 - 1) X (DUST94, lbs/month)/(hrs of operation/month)
ACTPE96, lbs/hr = (100/ECEB96 - 1) X (DUST96, lbs/month)/(hrs of operation/month)
ACTPE97, lbs/hr = (100/ECEB97 - 1) X (DUST97, lbs/month)/(hrs of operation/month)

COMBACTPE, lbs/hr = ACTPE91, lbs/hr + ACTPE92, lbs/hr + ACTPE93, lbs/hr + ACTPE94, lbs/hr + ACTPE96, lbs/hr + ACTPE97, lbs/hr

V. Testing Requirements (continued)

For determining uncontrolled hourly PE rate:
UNCPE91, lbs/hr = (100/ECEB91) X (DUST91, lbs/month)/(hrs of operation/month)
UNCPE92, lbs/hr = (100/ECEB92) X (DUST92, lbs/month)/(hrs of operation/month)
UNCPE93, lbs/hr = (100/ECEB93) X (DUST93, lbs/month)/(hrs of operation/month)
UNCPE94, lbs/hr = (100/ECEB94) X (DUST94, lbs/month)/(hrs of operation/month)
UNCPE96, lbs/hr = (100/ECEB96) X (DUST96, lbs/month)/(hrs of operation/month)
UNCPE97, lbs/hr = (100/ECEB97) X (DUST97, lbs/month)/(hrs of operation/month)

COMBUNCPE, lbs/hr = UNCPE91, lbs/hr + UNCPE92, lbs/hr + UNCPE93, lbs/hr + UNCPE94, lbs/hr + UNCPE96, lbs/hr + UNCPE97, lbs/hr

Uncontrolled PE Factor:
The uncontrolled PE factor of 0.025 lb PE/lb of metal parts ground was developed by the permittee based on the data of the March 18, 1982 stack emission test on P095, which has since shut down. In the 1982 stack test, 12.7 lbs of PE/hr were generated at the inlet to the baghouse when 508 lbs/hr metal parts were ground with a grinding wheel. Other emission factors that had been generated from stack test emission data may be used.

Where:
ACTPE91 = actual hourly PE rate of P091, lbs/hr
ACTPE92 = actual hourly PE rate of P092, lbs/hr
ACTPE93 = actual hourly PE rate of P093, lbs/hr
ACTPE94 = actual hourly PE rate of P094, lbs/hr
ACTPE96 = actual hourly PE rate of P096, lbs/hr
ACTPE97 = actual hourly PE rate of P097, lbs/hr
COMBACTPE = Combined actual hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr
ECEB91 = 90% emission control efficiency of the baghouse of P091,
ECEB92 = 90% emission control efficiency of the baghouse of P092,
ECEB93 = 90% emission control efficiency of the baghouse of P093,
ECEB94 = 90% emission control efficiency of the baghouse of P094,
ECEB96 = 90% emission control efficiency of the baghouse of P096,
ECEB97 = 90% emission control efficiency of the baghouse of P097,
DUST91 = dust collected from the baghouse of P091 per month, lbs/month
DUST92 = dust collected from the baghouse of P092 per month, lbs/month
DUST93 = dust collected from the baghouse of P093 per month, lbs/month
DUST94 = dust collected from the baghouse of P094 per month, lbs/month
DUST96 = dust collected from the baghouse of P096 per month, lbs/month
DUST97 = dust collected from the baghouse of P097 per month, lbs/month
UNCPE91 = uncontrolled hourly PE rate of P091, lbs/hr
UNCPE92 = uncontrolled hourly PE rate of P092, lbs/hr
UNCPE93 = uncontrolled hourly PE rate of P093, lbs/hr
UNCPE94 = uncontrolled hourly PE rate of P094, lbs/hr
UNCPE96 = uncontrolled hourly PE rate of P096, lbs/hr
UNCPE97 = uncontrolled hourly PE rate of P097, lbs/hr
COMBUNCPE = Combined uncontrolled hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Grind Booth T-6 (P096)

Activity Description: Titanium Grinding Booth #6 - Bldg 206

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
P096 - Building 206 - titanium grinding booth (number T-1) for grinding metal parts with grinding wheel and emissions are controlled by a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone scrubber were installed in 1969. A baghouse replaced the Rotoclone in 1979.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule. See A.I.2.a below.

2. Additional Terms and Conditions

2.a This emissions unit is located in close proximity to P091, P092, P093, P094, and P097. The allowable hourly PE rate from the six baghouse stacks was determined by using Figure II and a calculated combined uncontrolled emission rate of 76.2 lbs/hr of PE. The uncontrolled hourly PE rate was calculated from the calculated combined process weight rate of 3048 lbs/hr of metal parts ground and an uncontrolled emission factor that had been determined from a March 18, 1982 stack emission test on P095, which has since shut down.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100%/(90% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by calculation in Testing Section V.1.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

For determining actual hourly PE rate:
ACTPE91, lbs/hr = (100/ECEB91 - 1) X (DUST91, lbs/month)/(hrs of operation/month)
ACTPE92, lbs/hr = (100/ECEB92 - 1) X (DUST92, lbs/month)/(hrs of operation/month)
ACTPE93, lbs/hr = (100/ECEB93 - 1) X (DUST93, lbs/month)/(hrs of operation/month)
ACTPE94, lbs/hr = (100/ECEB94 - 1) X (DUST94, lbs/month)/(hrs of operation/month)
ACTPE96, lbs/hr = (100/ECEB96 - 1) X (DUST96, lbs/month)/(hrs of operation/month)
ACTPE97, lbs/hr = (100/ECEB97 - 1) X (DUST97, lbs/month)/(hrs of operation/month)

COMBACTPE, lbs/hr = ACTPE91, lbs/hr + ACTPE92, lbs/hr + ACTPE93, lbs/hr + ACTPE94, lbs/hr + ACTPE96, lbs/hr + ACTPE97, lbs/hr

V. Testing Requirements (continued)

For determining uncontrolled hourly PE rate:
UNCPE91, lbs/hr = (100/ECEB91) X (DUST91, lbs/month)/(hrs of operation/month)
UNCPE92, lbs/hr = (100/ECEB92) X (DUST92, lbs/month)/(hrs of operation/month)
UNCPE93, lbs/hr = (100/ECEB93) X (DUST93, lbs/month)/(hrs of operation/month)
UNCPE94, lbs/hr = (100/ECEB94) X (DUST94, lbs/month)/(hrs of operation/month)
UNCPE96, lbs/hr = (100/ECEB96) X (DUST96, lbs/month)/(hrs of operation/month)
UNCPE97, lbs/hr = (100/ECEB97) X (DUST97, lbs/month)/(hrs of operation/month)

COMBUNCPE, lbs/hr = UNCPE91, lbs/hr + UNCPE92, lbs/hr + UNCPE93, lbs/hr + UNCPE94, lbs/hr + UNCPE96, lbs/hr + UNCPE97, lbs/hr

Uncontrolled PE Factor:
The uncontrolled PE factor of 0.025 lb PE/lb of metal parts ground was developed by the permittee based on the data of the March 18, 1982 stack emission test on P095, which has since shut down. In the 1982 stack test, 12.7 lbs of PE/hr were generated at the inlet to the baghouse when 508 lbs/hr metal parts were ground with a grinding wheel. Other emission factors that had been generated from stack test emission data may be used.

Where:
ACTPE91 = actual hourly PE rate of P091, lbs/hr
ACTPE92 = actual hourly PE rate of P092, lbs/hr
ACTPE93 = actual hourly PE rate of P093, lbs/hr
ACTPE94 = actual hourly PE rate of P094, lbs/hr
ACTPE96 = actual hourly PE rate of P096, lbs/hr
ACTPE97 = actual hourly PE rate of P097, lbs/hr
COMBACTPE = Combined actual hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr
ECEB91 = 90% emission control efficiency of the baghouse of P091,
ECEB92 = 90% emission control efficiency of the baghouse of P092,
ECEB93 = 90% emission control efficiency of the baghouse of P093,
ECEB94 = 90% emission control efficiency of the baghouse of P094,
ECEB96 = 90% emission control efficiency of the baghouse of P096,
ECEB97 = 90% emission control efficiency of the baghouse of P097,
DUST91 = dust collected from the baghouse of P091 per month, lbs/month
DUST92 = dust collected from the baghouse of P092 per month, lbs/month
DUST93 = dust collected from the baghouse of P093 per month, lbs/month
DUST94 = dust collected from the baghouse of P094 per month, lbs/month
DUST96 = dust collected from the baghouse of P096 per month, lbs/month
DUST97 = dust collected from the baghouse of P097 per month, lbs/month
UNCPE91 = uncontrolled hourly PE rate of P091, lbs/hr
UNCPE92 = uncontrolled hourly PE rate of P092, lbs/hr
UNCPE93 = uncontrolled hourly PE rate of P093, lbs/hr
UNCPE94 = uncontrolled hourly PE rate of P094, lbs/hr
UNCPE96 = uncontrolled hourly PE rate of P096, lbs/hr
UNCPE97 = uncontrolled hourly PE rate of P097, lbs/hr
COMBUNCPE = Combined uncontrolled hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Grind Booth T-7 (P097)

Activity Description: Titanium Grinding Booth #7 - Bldg 206

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
P097 - Building 206 - titanium grinding booth (number T-1) for grinding metal parts with grinding wheel and emissions are controlled by a baghouse	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone scrubber were installed in 1969. A baghouse replaced the Rotoclone in 1979.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule. See A.I.2.a below.

2. Additional Terms and Conditions

2.a This emissions unit is located in close proximity to P091, P092, P093, P094, and P096. The allowable hourly PE rate from the six baghouse stacks was determined by using Figure II and a calculated combined uncontrolled emission rate of 76.2 lbs/hr of PE. The uncontrolled hourly PE rate was calculated from the calculated combined process weight rate of 3048 lbs/hr of metal parts ground and an uncontrolled emission factor that had been determined from a March 18, 1982 stack emission test on P095, which has since shut down.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100%/(90% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by calculation in Testing Section V.1.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 9.48 lbs/hr from all six baghouse stacks of P091, P092, P093, P094, P096, and P097 combined, except as provided by rule.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

For determining actual hourly PE rate:
ACTPE91, lbs/hr = (100/ECEB91 - 1) X (DUST91, lbs/month)/(hrs of operation/month)
ACTPE92, lbs/hr = (100/ECEB92 - 1) X (DUST92, lbs/month)/(hrs of operation/month)
ACTPE93, lbs/hr = (100/ECEB93 - 1) X (DUST93, lbs/month)/(hrs of operation/month)
ACTPE94, lbs/hr = (100/ECEB94 - 1) X (DUST94, lbs/month)/(hrs of operation/month)
ACTPE96, lbs/hr = (100/ECEB96 - 1) X (DUST96, lbs/month)/(hrs of operation/month)
ACTPE97, lbs/hr = (100/ECEB97 - 1) X (DUST97, lbs/month)/(hrs of operation/month)

COMBACTPE, lbs/hr = ACTPE91, lbs/hr + ACTPE92, lbs/hr + ACTPE93, lbs/hr + ACTPE94, lbs/hr + ACTPE96, lbs/hr + ACTPE97, lbs/hr

V. Testing Requirements (continued)

For determining uncontrolled hourly PE rate:
UNCPE91, lbs/hr = (100/ECEB91) X (DUST91, lbs/month)/(hrs of operation/month)
UNCPE92, lbs/hr = (100/ECEB92) X (DUST92, lbs/month)/(hrs of operation/month)
UNCPE93, lbs/hr = (100/ECEB93) X (DUST93, lbs/month)/(hrs of operation/month)
UNCPE94, lbs/hr = (100/ECEB94) X (DUST94, lbs/month)/(hrs of operation/month)
UNCPE96, lbs/hr = (100/ECEB96) X (DUST96, lbs/month)/(hrs of operation/month)
UNCPE97, lbs/hr = (100/ECEB97) X (DUST97, lbs/month)/(hrs of operation/month)

COMBUNCPE, lbs/hr = UNCPE91, lbs/hr + UNCPE92, lbs/hr + UNCPE93, lbs/hr + UNCPE94, lbs/hr + UNCPE96, lbs/hr + UNCPE97, lbs/hr

Uncontrolled PE Factor:
The uncontrolled PE factor of 0.025 lb PE/lb of metal parts ground was developed by the permittee based on the data of the March 18, 1982 stack emission test on P095, which has since shut down. In the 1982 stack test, 12.7 lbs of PE/hr were generated at the inlet to the baghouse when 508 lbs/hr metal parts were ground with a grinding wheel. Other emission factors that had been generated from stack test emission data may be used.

Where:
ACTPE91 = actual hourly PE rate of P091, lbs/hr
ACTPE92 = actual hourly PE rate of P092, lbs/hr
ACTPE93 = actual hourly PE rate of P093, lbs/hr
ACTPE94 = actual hourly PE rate of P094, lbs/hr
ACTPE96 = actual hourly PE rate of P096, lbs/hr
ACTPE97 = actual hourly PE rate of P097, lbs/hr
COMBACTPE = Combined actual hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr
ECEB91 = 90% emission control efficiency of the baghouse of P091,
ECEB92 = 90% emission control efficiency of the baghouse of P092,
ECEB93 = 90% emission control efficiency of the baghouse of P093,
ECEB94 = 90% emission control efficiency of the baghouse of P094,
ECEB96 = 90% emission control efficiency of the baghouse of P096,
ECEB97 = 90% emission control efficiency of the baghouse of P097,
DUST91 = dust collected from the baghouse of P091 per month, lbs/month
DUST92 = dust collected from the baghouse of P092 per month, lbs/month
DUST93 = dust collected from the baghouse of P093 per month, lbs/month
DUST94 = dust collected from the baghouse of P094 per month, lbs/month
DUST96 = dust collected from the baghouse of P096 per month, lbs/month
DUST97 = dust collected from the baghouse of P097 per month, lbs/month
UNCPE91 = uncontrolled hourly PE rate of P091, lbs/hr
UNCPE92 = uncontrolled hourly PE rate of P092, lbs/hr
UNCPE93 = uncontrolled hourly PE rate of P093, lbs/hr
UNCPE94 = uncontrolled hourly PE rate of P094, lbs/hr
UNCPE96 = uncontrolled hourly PE rate of P096, lbs/hr
UNCPE97 = uncontrolled hourly PE rate of P097, lbs/hr
COMBUNCPE = Combined uncontrolled hourly PE rate of P091, P092, P093, P094, P096, and P097, lbs/hr

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn T-8 Anneal B206 (P100)

Activity Description: Titanium Annealing Furnace T-8 - Bldg 206

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
P100 - Building 206 - 22.20 mmBtu/hr direct heat natural gas-fired titanium annealing furnace (number T-8) without hydrogen scavenger, operating at a maximum process weight rate of 1,390 lbs/hr of metal and air emissions are exhausted through a vertical stack	OAC rule 3745-31-05(A)(3) (PTI #13-425)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-11(B) and 3745-17-07(A)(1).
The EU and the stack were installed in 1978.	OAC rule 3745-17-11(B)	See A.I.2.a below.
	OAC rule 3745-17-07(A)(1)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

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: Furn #12 Soaker (P102)

Activity Description: No. 12 Soaker Furnace - Bldg 150

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
P102 - Building 150 - 9.00 mmBtu/hr indirect heat natural gas-fired soaker furnace (number 12) operating at a maximum process weight rate of 44,250 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger and emissions are controlled by a reverse air baghouse	OAC rule 3745-31-05(A)(3) (PTI #13-763)	The requirements of this rule are equivalent to the requirments of OAC rules 3745-17-10(B)(1), 3745-17-07(A)(1), 3745-17-07(B)(1) and 3745-17-08(B).
The EU was installed in May 1963 apparently without a stack. A baghouse was installed in 1980. See P402.	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/MMBtu of actual heat input.
	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	See A.I.2.b below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2. Additional Terms and Conditions (continued)

2.b The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:

(i) The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

(ii) The control equipment achieves an outlet emission rate of not greater than .030 grain of particulate matter emissions per dry standard cubic foot of exhaust gases from the baghouse or there are no visible particulate emissions form the baghouse exhaust stack, whichever is less stringent.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

2. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

3. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland Bureau of Air Pollution Control for approval within six months.

4. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

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

3. The permittee shall collect, record and maintain the following information each month when this emissions unit was in operation:

a. the natural gas usage of this emissions unit, in cubic feet per hour, heating value of natural gas used and the average heat input in mmBtu/hr;

b. the scavenger usage of this emissions unit, in lbs;

c. the PE generated by this emissions unit, i.e., (b) x 0.175 lb of PE/lb scavenger, in lbs of PE;

d. the average baghouse gas flow rate, in dry standard cubic feet per minute (DSCFM);

e. the total hours of operation; and

f. the average baghouse exhaust gas grain loading generated by this emissions unit, i.e., (c)/(e) x (1hour/60min) x (7000 gr/lb) x 1/(d), in gr/DSCF of exhaust gases and visible PE from the baghouse exhaust stack.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation occurs.

2. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

V. Testing Requirements (continued)

1.c Emission Limitation:
PE from the burner flue gas stack shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by dividing the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

1.d Emission Limitation:
The control equipment achieves an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the baghouse exhaust stack, whichever is less stringent.

Applicable Compliance Method:
Compliance with the control equipment grain loading of .030 grain of PE per dry standard cubic foot of exhaust gases shall be based upon the results of the emission testing specified in section A.V.2 of this permit.

Compliance with the visible particulate emission limitation for the emissions unit identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits. However, if there are no visible particulate emissions from the exhaust stacks, then this emissions testing is not required.

The following test methods shall be employed to demonstrate compliance with the emission limitations:
Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics
Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE,
Test Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1) for visible PE, and
Test Method 22 of 40 CFR Part 60, Appendix A and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03 for visible PE of fugitive dust.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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 Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 8003/2583 (P104)

Activity Description: 8003 & 2583 Hydraulic Press Complex - Bldg 112A

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
P104 - Building 112A - number 8003, hydraulic finishing press complex consisting of 8,000 ton and a 2,500 ton hydraulic forming press for the production of metal forgings operating at a maximum batch process weight rate of 18,000 lbs/hr of metal, a lubricant usage of 250 lbs/hr, and a temperature range between 600 to 800 degrees Fahrenheit, and particulate emissions are controlled by an electrified filter bed (EFB) unit	OAC rule 3745-31-05(A)(3) (PTI #13-846)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-11(B), 3745-17-07(A)(1), 3745-17-07(B)(1), 3745-17-08(B), 3745-21-07(G)(1) and 3745-21-07(G)(2).
The EU and the EFB were installed in 1982.	OAC rule 3745-17-11(B)	See A.I.2.g below.
	OAC rule 3745-17-07(A)(1)	Visible Particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.b The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:

The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

2.g A permit to operate (PTO) for emissions unit P104 was issued on November 3, 1989. The special terms and conditions of the PTO set allowable PE limitations. The PE concentration shall be less than 0.002 dry standard cubic foot (dr/DSCF) from the EFB stack and the PE rate shall not exceed 1.7 lbs/hr (at 100000 acfm). ACFM is actual cubic feet per minute.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a the company identification for each lubricant employed;

b an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c the amount of each liquid organic material lubricant employed, in pounds;

d the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h the amount of each photochemically reactive material lubricant employed, in pounds;

i the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual hourly OC emission rate, lbs OC/hr = lbs/hr of lubricant X lbs OC/lb lubricant

Actual daily OC emission rate, lbs OC/day = lbs OC/hr X hrs/day

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.b Emission Limitation:
The PE concentration shall be less than 0.002 gr/DSCF from the EFB stack and the PE rate shall not exceed 1.7 lbs/hr (at 100000 acfm).

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors and using the following equations:

Actual hourly PE rate, lbs PE/hr = lbs/hr of lubricant X lbs PE/lb lubricant

The PE factor of 0.081 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Actual PE concentration, gr/DSCF = (Actual hourly PE rate, lbs PE/hr) x (7000 gr/lb) x (hr/60 minutes)/(air volume flow rate, DSCFM)

Air volume flow rate, DSCFM = ACFM x (1 - moisture in air) x TCF

TCF = (460 + 70 degrees Fahrenheit)/(460 + air temperature, degrees Fahrenheit)

Where:
DSCF = dry standard cubic feet
DSCFM = dry standard cubic feet per minute
ACFM = actual cubic feet per minute
gr = grain
TCF = temperature correction factor

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn RH 17001 B111 (P105)

Activity Description: 17001 Furnace - Bldg

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
P105 - Building 111 - 16.80 mmBtu/hr direct heat natural gas-fired preheat furnace (number 17001) operating at a maximum process weight rate of 17,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-31-05(A)(3) (PTI #13-846)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(B)(1) and 3745-17-08(B).
The furnace was installed in November 1981 and is a fugitive emission source.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn RH 6005 B210 (P107)

Activity Description: 6005 Reheat Furnace - Bldg 210

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
P107 - Building 210 - 5.36 mmBtu/hr direct natural gas-fired preheat furnace (number 6005) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-31-05(A)(3) (PTI #13-1216)	The requirements of this rule are equivalent to the requirements of OAC rules 3745-17-07(B) and 3745-17-08(B).
The furnace was installed in June 1955 and is a fugitive emission source.	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

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 fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Blast #1 Whl B114 (P108)

Activity Description: No. 1 Wheelabrator Cabinet - Bldg 114A

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
P108 - Building 114A - number 1 Wheelabrator shot blast cabinet and emissions are controlled by a Rotoclone impaction scrubber	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
The EU and a Rotoclone impaction scrubber were installed in 1962.	OAC rule 3745-17-11(B) Figure II	PE shall not exceed 2.91 lbs/hr.

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The scrubber water flow rate shall be continuously maintained at a value of not less than 50 gallons per minute at all times while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland Bureau of Air Pollution Control for approval within six months.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the scrubber water through the wet type Rotoclone impaction scrubber 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 scrubber water flow rate through the wet type Rotoclone impaction scrubber once a shift when this emissions unit is in operation.

The unit of scrubber water flow rate is gallons per minute.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

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

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the scrubber in dry basis, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100/(% emission control efficiency of the scrubber) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the scrubber water flow rate did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above as determined by the calculation in the Testing Section V.I.b.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 2.91 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equation:

ACTPE86 = (100/ECEB - 1) X DUST/(hrs of operation/month)

UNCPE86 = (100/SCE) X DUST/(hrs of operation/month)

Where:
ACTPE86 = Actual hourly PE rate, lbs PE/hr
UNCPE86 = Uncontrolled hourly PE rate, lbs PE/hr
SCE = emission control efficiency of the scrubber, %
DUST = dust collected from the scrubber of this emissions unit per month, lbs/month

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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 Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn #2 Die B206 (P115)

Activity Description: No. 2 Die Preheat Furnace - Bldg 206

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
P115 - Building 206 - 10.91 mmBtu/hr direct heat natural gas-fired die preheat furnace (number 2) without hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The EU was installed in February 1995 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn #3 Die B206 (P116)

Activity Description: No. 3 Die Preheat Furnace - Bldg 206

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
P116 - Building 206 - 10.91 mmBtu/hr direct heat natural gas-fired die preheat furnace (number 3) without hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The EU was installed in February 1995 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn #4 Die B206 (P117)

Activity Description: No. 4 Die Preheat Furnace - Bldg 206

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
P117 - Building 206 - 10.91 mmBtu/hr direct heat natural gas-fired die preheat furnace (number 4) without hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The EU was installed in October 1954 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn #5 Die B206 (P118)

Activity Description: No. 5 Die Preheat Furnace - Bldg 206

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
P118 - Building 206 - 10.91 mmBtu/hr direct heat natural gas-fired die preheat furnace (number 5) without hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The EU was installed in February 1995 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn #2 Die B202 (P119)

Activity Description: No. 2 Die Preheat Furnace - Bldg 202

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
P119 - Building 202 - 16.36 mm Btu/hr direct heat natural gas-fired die preheat furnace (number 2) without hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The EU was installed in October 1994 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furnance South H.T. and Age B150 (8001) (P121)

Activity Description: South Heat Treat & Age Ovens- Bldg 150 (8001)

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
P121 -Building 150 - 10.66 mmBtu/hr indirect heat natural gas-fired heat treat furnace (number 8001, south heat treat) operating at a maximum process weight rate of 8,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger and	OAC rule 3745-31-05(A)(3) (PTI #13-1687)	Particulate emissions (PE) shall be less than 1.0 ton/year.
a 13.50 mmBtu/hr direct heat natural gas-fired age oven (number 8001, south heat treat) with a hydrogen scavenger, maximum process weight rate of 8,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-10(B)(1)	PE from the burner flue gas stack of the indirect heat natural gas-fired heat treat furnace shall not exceed 0.020 lb/mmBtu of actual heat input.
Both the furnace and the oven were installed in February 1974 and are fugitive emission sources.	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

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

2. The permittee shall collect, record and maintain the following information each calendar year when this emissions unit was in operation:

a. the scavenger usage of this emissions unit heat treat furnace, in lbs;

b. the PE generated by this emissions unit heat treat furnace, i.e., (a) x 0.175 lb of PE/lb scavenger, in lbs of PE;

c. the scavenger usage of this emissions unit age oven, in lbs;

d. the PE generated by this emissions unit age oven, i.e., (c) x 0.175 lb of PE/lb scavenger, in lbs of PE;

e. the total PE generated by this emissions unit heat treat furnace and age oven, i.e., (b) + (d), in lbs of PE; an

f. the total PE generated by this emissions unit heat treat furnace and age oven, i.e., (e) X (1 ton/2000 lbs), in tons of PE.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation occurs.

2. The permittee shall submit an annual reports that identify each calendar year during which the actual PE rate which exceeded the limit in A.I.1. The annual reports shall be submitted by every January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.b Emission Limitation:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

V. Testing Requirements (continued)

1.c Emission Limitation:
PE shall be less than 1.0 ton/year.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

Actual annual PE rate, lbs PE/yr = lbs of scavenger/yr X lb PE/lb scavenger

Actual annual PE rate, tons PE/yr = (Actual annual PE rate, lbs PE/yr) X (1 ton/2000 lbs)

The emission factor of 0.175 lb PE/lb scavenger was developed by the permittee from 1996 stack test emission data and scavenger usage of 6006 preheat furnace. In a four hour test, 3.5 lbs PE were generated when 20 lbs of scavenger were used or 0.175 lb PE/lb scavenger. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current scavenger emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furnance North H.T. and Age B150 (8002) (P122)

Activity Description: North Heat Treat & Age Ovens - Bldg 150 (8002)

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
P122 - Building 150 - 3.78 mmBtu/hr direct heat natural gas-fired heat treat furnace (number 8002, north heat treat) operating at a maximum process weight rate of 8,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger and	OAC rule 3745-31-05(A)(3) (PTI #13-1687)	Particulate emissions (PE) shall be less than 1.0 ton/year.
a 7.48 mmBtu/hr direct heat natural gas-fired age oven (number 8002, north heat treat) with a hydrogen scavenger, maximum process weight rate of 8,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-10(B)(1)	PE from the burner flue gas stack of the indirect heat natural gas-fired heat treat furnace shall not exceed 0.020 lb/mmBtu of actual heat input.
Both the furnace and the oven were installed in February 1974 and are fugitive emission sources.	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

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

2. The permittee shall collect, record and maintain the following information each calendar year when this emissions unit was in operation:

a. the scavenger usage of this emissions unit heat treat furnace, in lbs;

b. the PE generated by this emissions unit heat treat furnace, i.e., (a) x 0.175 lb of PE/lb scavenger, in lbs of PE;

c. the scavenger usage of this emissions unit age oven, in lbs;

d. the PE generated by this emissions unit age oven, i.e., (c) x 0.175 lb of PE/lb scavenger, in lbs of PE;

e. the total PE generated by this emissions unit heat treat furnace and age oven, i.e., (b) + (d), in lbs of PE; an

f. the total PE generated by this emissions unit heat treat furnace and age oven, i.e., (e) X (1 ton/2000 lbs), in tons of PE.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation occurs.

2. The permittee shall submit an annual reports that identify each calendar year during which the actual PE rate which exceeded the limit in A.I.1. The annual reports shall be submitted by every January 31 of each year and shall cover the previous calendar year.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.b Emission Limitation:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

V. Testing Requirements (continued)

1.c Emission Limitation:
PE shall be less than 1.0 ton/year.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

Actual annual PE rate, lbs PE/yr = lbs of scavenger/yr X lb PE/lb scavenger

Actual annual PE rate, tons PE/yr = (Actual annual PE rate, lbs PE/yr) X (1 ton/2000 lbs)

The emission factor of 0.175 lb PE/lb scavenger was developed by the permittee from 1996 stack test emission data and scavenger usage of 6006 preheat furnace. In a four hour test, 3.5 lbs PE were generated when 20 lbs of scavenger were used or 0.175 lb PE/lb scavenger. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current scavenger emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn T-9 B206 (P125)

Activity Description: Titanium Reheat Furnace T-9 - Bldg 206

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
P125 - Building 206 - 18.64 mmBtu/hr direct heat natural gas-fired titanium and steel preheat furnace (number T-9) without hydrogen scavenger, operating at a maximum process weight rate of 100,000 lbs/load and emissions are exhausted through a vertical stack	OAC rule 3745-31-05(A)(3) (PTI #13-1922)	Visible particulate emissions (PE) from any stack shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 0.020 lb/mmBtu of actual heat input.
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
The EU was installed in 1988. A stack was installed (no date was given).	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Particulate emissions shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

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: Blast-Rm Pangborn (P126)

Activity Description: Blast Room A Plant

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
P126 - A Plant - shot blast room and emissions are controlled by a 12,000 ACFM baghouse	OAC rule 3745-31-05(A)(3) (PTI #13-2204)	Visible particulate emissions (PE) from any stack shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 0.01 grain/dry standard cubic foot (gr/DSCF) and 1.11 lbs/hr.
The EU and the baghouse were installed in 1990.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland Bureau of Air Pollution Control for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100/(% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the dust collector did not comply with the allowable range specified above. These quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate or grain loading did not comply with the allowable PE limit specified above. The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 5 % opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 1.11 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equation:

Actual hourly PE, lbs PE/hr = (100/BCE - 1) X DUST/(hrs of operation/month)

Where:
BCE = baghouse control efficiency, %
DUST = dust collected from baghouse per month, lbs/month

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

1.c Emission Limitation:
PE shall not exceed 0.01 gr/DSCF.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

Actual hourly PE, lbs PE/hr determined from V.I.b above.

Actual PE concentration, gr/DSCF = (Actual PE, lbs/hr) x (7000 gr/lb) x (hr/60 minutes)/(air volume flow rate, DSCFM)

Gas stream volume flow rate, DSCFM = ACFM x (1 - moisture in air) x TCF

TCF = (460 + 70 degrees Fahrenheit)/(460 + gas stream temperature, degrees Fahrenheit)

Where:
DSCF = dry standard cubic foot
DSCFM = dry standard cubic feet per minute
ACFM = actual cubic feet per minute
gr = grain
TCF = temperature correction factor

Compliance shall be based upon the results of the emission testing specified in Section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: 2503 Mechanical Press (P129)

Activity Description: 2503 Mechanical Press - water based lubes

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
P129 - Building 101 - number 2503, 2,500 ton mechanical press complex for the production of metal forgings operating at a maximum batch process weight rate of 4,500 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a stack were installed in 1963.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.c and A.I.2.d below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.d Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a the company identification for each lubricant employed;

b an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c the amount of each photochemically reactive material lubricant employed, in pounds;

d the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

e for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

f for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emission unit was in operation using photochemically reactive material lubricant;

g for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (e)/(f), in lbs/hr (average); and

h. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

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

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The emission factor of 0.0164 lb OC/lb lubricant was developed by the permittee from data of two stack tests. The OC emission factor is 0.0279 lb OC/lb lubricant based on the November 16, 1995 stack test data. The OC emission factor is 0.0048 lb OC/lb lubricant based on the November 8, 1996 stack test data. The arithmetic average of the OC emission factor is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The emission factor of 0.190 lb PE/lb lubricant was developed by the permittee from emission data of two stack tests. The PE factor is 0.3561 lb PE/lb lubricant based on the November 16, 1995 stack test. The PE factor is 0.0279 lb PE/lb lubricant based on the November 8, 1996 stack test. The arithmetic average of the PE factor is 0.190 lb PE/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio EPA through the CBAPC and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Press 3005 (P146)

Activity Description: 3005 Hydraulic Press Complex - Bldg 101

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
P146 - Building 101 - number 3005, a 3,000 ton hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 13,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack testing, an operating temperature range between 600 to 800 degrees Fahrenheit and air emissions are exhausted through a stack at a nominal exit gas flow rate of 56,687 ACFM	OAC rule 3745-17-11(B)	See A.I.2.g below.
The EU and the water spray tunnel stack were installed in 1953.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
	OAC rule 3745-21-07(G)(1)	Organic compound (OC) emissions shall not exceed 3 lbs/hr and 15 lbs/day. See A.I.2.c, A.I.2.e and A.I.2.f below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.d through A.I.2.f below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.b The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:

The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

2.g The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a the company identification for each lubricant employed;

b an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

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

c the amount of each liquid organic material lubricant employed, in pounds;

d the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h the amount of each photochemically reactive material lubricant employed, in pounds;

i the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

5. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

6. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

7. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(1) OC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual hourly OC emission rate, lbs OC/hr = lbs/hr of lubricant X lbs OC/lb lubricant

Actual daily OC emission rate, lbs OC/day = lbs OC/hr X hrs/day

The OC emission factor of 0.011 lb OC/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = lbs/hr of lubricant X lbs PE/lb lubricant

The PE factor of 0.121 lb PE/lb lubricant was developed by the permittee from stack test emission data. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn Heat Treat Line #3 B150 (P152)

Activity Description: Heat Treat Line #3 - Bldg 150

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
P152 - Building 150 - 13.00 mmBtu/hr direct heat natural gas-fired heat treat furnace and 4.10 mmBtu/hr direct heat natural gas-fired age furnace (heat treat line number 3) without hydrogen scavenger, operating at a maximum process weight rate of 30,000 lbs/hr of metal	OAC rule 3745-31-05(A)(3) (PTI #13-3008)	Visible particulate emissions (PE) from any stack shall not exceed 5% opacity, as a 6-minute average, PE shall not exceed .020 lb/mmBtu of actual heat input and 0.342 lb/hr; NOx emissions shall not exceed 0.20 lb/mmBtu of actual heat input and 3.42 lbs/hr.
The fugitive EU was installed in 1996.	OAC rule 3745-17-07(B)(1)	The equivalent tons per year emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE 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:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

1.c Emission Limitation:
PE emissions shall not exceed 0.342 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the following calculation.
Actual hourly PE rate, lbs PE/hr = 0.02 lb/mmBtu X Total mmBtu/hr
Therefore, provided compliance is demonstrated with the lb/mmBtu limitation, compliance will also be shown with the lb/hr limitation.

V. Testing Requirements (continued)

1.d Emission Limitation:
NOx emissions shall not exceed 0.20 lb /mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for NOx in natural gas combustion (100 lbs of NOx/mm cu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual NOx, lbs/mmBtu = (100 lbs of NOx/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.10 lb of NOx/mmBtu

1.e Emission Limitation:
NOx emissions shall not exceed 3.42 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the following calculation.
Actual hourly NOx rate, lbs NOx/hr = 0.10 lb/mmBtu X Total mmBtu/hr
Therefore, provided compliance is demonstrated with the lb/mmBtu limitation, compliance will also be shown with the lb/hr 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: Furn T-12 Titanium Preheat B210 (P154)

Activity Description: T-12 Titanium Preheat Furnace - Bldg 210

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
P154 - Building 210 - 18.60 mmBtu/hr direct heat natural gas-fired titanium and steel preheat furnace (number T-12) without hydrogen scavenger, operating at a maximum process weight rate of 200 lbs/hr of metal The fugitive EU was installed in 1996.	OAC rule 3745-31-05(A)(3) (PTI #13-3010)	Visible particulate emissions (PE) in any exhaust gases shall not exceed 5% opacity, as a 6-minute average, PE shall not exceed 0.020 lb/mmBtu of actual heat input, 0.372 lb/hr and 1.63 tons/yr, sulfur dioxide (SO2) emissions shall not exceed 0.05 ton/yr, nitrogen oxides (NOx) emissions shall not exceed 11.4 tons/yr, carbon monoxide (CO) emissions shall not exceed 2.9 tons/yr, and total organic compound (TOC) emissions shall not exceed 0.23 ton/yr. See A.I.2.b below.
	OAC rule 3745-17-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.b One pound of TOC emissions is equivalent to one pound of VOC emissions.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE in any exhaust gases shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE 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:
PE shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When burning natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmcu. ft.) divided by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

1.c Emission Limitation:
PE emissions shall not exceed 0.372 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon
Actual hourly PE rate, lbs PE/hr = 0.02 lb/mmBtu X Total mmBtu/hr
Therefore, provided compliance is demonstrated with the lb/mmBtu limitation, compliance will also be shown with the lb/hr limitation.

V. Testing Requirements (continued)

1.d Emission Limitation:
PE shall not exceed 1.63 tons/yr.

Applicable Compliance Method:
The annual limit is based on operating 8760 hours per year. Therefore, provided compliance is demonstrated with the hourly limit compliance will also be shown with the annual limit.

1.e Emission Limitation:
SO2 emissions shall not exceed 0.05 ton/yr.

Applicable Compliance Method:
Compliance with the SO2 emission limit for this source shall be demonstrated using engineering calculations. The USEPA reference document, AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for sulfur dioxide in natural gas combustion (0.6 lb of SO2/mm cu. ft.)
Actual SO2 emissions = (Emission factor) X (Natural gas usage rate)
Actual hourly SO2 emissions, lbs SO2/hr = 0.6 lb SO2/mm cu. ft. X cu. ft./hr
Actual annual SO2 emissions, tons SO2/yr = actual SO2, lbs/hr X hours of operation/yr X ton/2000 lbs

1.f Emission Limitation:
NOx emissions shall not exceed 11.4 tons/yr.

Applicable Compliance Method:
Compliance with the NOx emission limit for this source shall be demonstrated using engineering calculations. The USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for NOx in natural gas combustion (100 lbs of Nox/mm cu. ft.)
Actual NOx emissions = (Emission factor) X (Natural gas usage rate)
Actual hourly NOx emissions, lbs/hr = 100 lbs NOx/mm cu. ft. X cu. ft./hr
Actual annual NOx emissions, tons/yr = actual NOx, lbs/hr X hours of operation/yr X ton/2000 lbs

1.g Emission Limitation:
CO emissions shall not exceed 2.9 tons/yr.

Applicable Compliance Method:
Compliance with the CO emission limit for this source shall be demonstrated using engineering calculations. The USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for CO in natural gas combustion (84 lbs of CO/mm cu. ft.)
Actual CO emissions = (Emission factor) X (Natural gas usage rate)
Actual hourly CO emissions, lbs CO/hr = 84 lbs CO/mm cu. ft. X cu. ft./hr
Actual annual CO emissions, tons CO/yr = actual CO, lbs/hr X hours of operation/yr X ton/2000 lbs

1.h Emission Limitation:
TOC emissions shall not exceed 0.23 ton/yr.

One pound of TOC emissions is equivalent to one pound of VOC emissions.

Applicable Compliance Method:
Compliance with the TOC emission limit for this source shall be demonstrated using engineering calculations. The USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for TOC in natural gas combustion (11 lbs of TOC/mm cu. ft.)
Actual VOC emissions = (Emission factor) X (Natural gas usage rate)
Actual hourly VOC emissions, lbs VOC/hr = 11 lbs VOC/mm cu. ft. X cu. ft./hr
Actual annual VOC emissions, tons VOC/yr = actual VOC, lbs/hr X hours of operation/yr X ton/2000 lbs

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: X-Plant 4001 Hydraulic Press (P155)

Activity Description: X-Plant 4001 Hydraulic Press

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
P155 - X Plant - number 4001, a 4,000 ton hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 8,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emission limitations/control measures and emission factors that had been generated from stack testing and an operating temperature range between 600 to 800 degrees Fahrenheit and emissions are controlled by coated baghouse with a nominal gas flow rate of 40,000 ACFM	OAC rule 3745-31-05(A)(3) (PTI #13-3067)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average. Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 1.3 lbs/hr and 0.01 grain/dry standard cubic foot (gr/DSCF) outlet emission rate. Volatile organic compounds (VOC) emissions shall not exceed 3 lbs/hr and 15 lbs/day.
The EU and the baghouse were installed in January 1996.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-21-07(G)(1)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d, A.I.2.f through A.I.2.h below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d through A.I.2.h below.

2. Additional Terms and Conditions

2.a When water-based lubricants are utilized, exhaust from this source may be vented inside the building or directly to the atmosphere. When oil-based lubricants are utilized, exhaust from this source shall be captured by a negative pressure hood and vented through a baghouse.

2.b When utilizing oil-based lubricants, the exhaust hood shall have at least 90% capture efficiency and the baghouse shall have at least 98% control efficiency.

2.c The permittee's employment of Reasonable Available Control Measures (RACM), at a minimum, for the hydraulic press complex shall consist of the capture of the fugitive PE using a negative pressure hood.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.g Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

2.h One pound of VOC emissions is equivalent to one pound of OC emissions.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 8.0 inches of water column 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 recommendation, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.

The unit for pressure drop is inches of water column.

2. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h the amount of each photochemically reactive material lubricant employed, in pounds;

i the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

3. The permittee shall collect and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

4. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit 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 for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1). For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.c Emission Limitation:
PE shall not exceed 1.3 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors that had been generated from stack testing.

Actual hourly PE rate = Actual scavenger usage X PE factor

Actual hourly PE rate, lbs PE/hr = lbs/hr of lubricant x lb PE/lb lubricant

The emission factor of 0.00394 lb PE/lb lubricant was developed from stack test emission data by the permittee . Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in A.V.2.

1.d Emission Limitation:
Outlet PE rate shall not exceed 0.01 gr/DSCF.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in A.V.2.

V. Testing Requirements (continued)

1.e Emission Limitation:
VOC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual hourly OC emission rate, lbs OC/hr = lbs/hr of lubricant X lbs OC/lb lubricant

Actual daily OC emission rate, lbs OC/day = lbs OC/hr X hrs/day

One pound of VOC emissions is equivalent to one pound of OC emissions.

The OC emission factor of 0.015 lb OC/lb lubricant was developed from stack test emission data by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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 Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: X-Plant 4002 Hydraulic Press (P156)

Activity Description: X-Plant 4002 Hydraulic Press

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
P156 - X Plant - number 4002, a 4,000 ton hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 8,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emission limitations/control measures and emission factors that had been generated from stack testing and an operating temperature range between 600 to 800 degrees Fahrenheit and emissions are controlled by coated baghouse with a nominal gas flow rate of 40,000 ACFM	OAC rule 3745-31-05(A)(3) (PTI #13-3067)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average. Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 1.3 lbs/hr and 0.01 grain/dry standard cubic foot (gr/DSCF) outlet emission rate. Volatile organic compounds (VOC) emissions shall not exceed 3 lbs/hr and 15 lbs/day.
The EU and the baghouse were installed in January 1996.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-21-07(G)(1)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d, A.I.2.f through A.I.2.h below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d through A.I.2.h below.

2. Additional Terms and Conditions

2.a When water-based lubricants are utilized, exhaust from this source may be vented inside the building or directly to the atmosphere. When oil-based lubricants are utilized, exhaust from this source shall be captured by a negative pressure hood and vented through a baghouse.

2.b When utilizing oil-based lubricants, the exhaust hood shall have at least 90% capture efficiency and the baghouse shall have at least 98% control efficiency.

2.c The permittee's employment of Reasonable Available Control Measures (RACM), at a minimum, for the hydraulic press complex shall consist of the capture of the fugitive PE using a negative pressure hood.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.g Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

2.h One pound of VOC emissions is equivalent to one pound of OC emissions.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 8.0 inches of water column 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 recommendation, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.

The unit for pressure drop is inches of water column.

2. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h the amount of each photochemically reactive material lubricant employed, in pounds;

i the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

3. The permittee shall collect and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

4. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit 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 for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1). For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.c Emission Limitation:
PE shall not exceed 1.3 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors that had been generated from stack testing.

Actual hourly PE rate = Actual scavenger usage X PE factor

Actual hourly PE rate, lbs PE/hr = lbs/hr of lubricant x lb PE/lb lubricant

The emission factor of 0.00394 lb PE/lb lubricant was developed from stack test emission data by the permittee . Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in A.V.2.

1.d Emission Limitation:
Outlet PE rate shall not exceed 0.01 gr/DSCF.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in A.V.2.

V. Testing Requirements (continued)

1.e Emission Limitation:
VOC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual hourly OC emission rate, lbs OC/hr = lbs/hr of lubricant X lbs OC/lb lubricant

Actual daily OC emission rate, lbs OC/day = lbs OC/hr X hrs/day

One pound of VOC emissions is equivalent to one pound of OC emissions.

The OC emission factor of 0.015 lb OC/lb lubricant was developed from stack test emission data by the permittee. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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 Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Y-Plant 5001 Hydraulic Press (P157)

Activity Description: Y-Plant 5001 Hydraulic Press

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
P157 - Y Plant - number 5001, a 5,000 ton hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 8,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emission limitations/control measures and emission factors that had been generated from stack testing and an operating temperature range between 600 to 800 degrees Fahrenheit and emissions are controlled by coated baghouse with a nominal gas flow rate of 40,000 ACFM	OAC rule 3745-31-05(A)(3) (PTI #13-3149)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average. Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 1.4 lbs/hr and 0.01 grain/dry standard cubic foot (gr/DSCF) outlet emission rate. Volatile organic compounds (VOC) emissions shall not exceed 3 lbs/hr and 15 lbs/day.
The EU and the baghouse were installed in September 1996.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-21-07(G)(1)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d, A.I.2.f through A.I.2.h below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d through A.I.2.h below.

2. Additional Terms and Conditions

2.a When water-based lubricants are utilized, exhaust from this source may be vented inside the building or directly to the atmosphere. When oil-based lubricants are utilized, exhaust from this source shall be captured by a negative pressure hood and vented through a baghouse.

2.b When utilizing oil-based lubricants, the exhaust hood shall have at least 90% capture efficiency and the baghouse shall have at least 98% control efficiency.

2.c The permittee's employment of Reasonable Available Control Measures (RACM), at a minimum, for the hydraulic press complex shall consist of the capture of the fugitive PE using a negative pressure hood.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.g Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

2.h One pound of VOC emissions is equivalent to one pound of OC emissions.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 8.0 inches of water column 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 recommendation, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.

The unit for pressure drop is inches of water column.

2. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h the amount of each photochemically reactive material lubricant employed, in pounds;

i the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

3. The permittee shall collect and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

4. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit 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 for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1). For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.c Emission Limitation:
PE shall not exceed 1.4 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors that had been generated from stack testing.

Actual hourly PE rate = Actual scavenger usage X PE factor

Actual hourly PE rate, lbs PE/hr = lbs/hr of lubricant x lb PE/lb lubricant

The emission factor of 0.00394 lb PE/lb lubricant was developed from stack test emission data by the permittee . Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in A.V.2.

1.d Emission Limitation:
Outlet PE rate shall not exceed 0.01 gr/DSCF.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in A.V.2.

V. Testing Requirements (continued)

1.e Emission Limitation:
VOC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual hourly OC emission rate, lbs OC/hr = lbs/hr of lubricant X lbs OC/lb lubricant

Actual daily OC emission rate, lbs OC/day = lbs OC/hr X hrs/day

One pound of VOC emissions is equivalent to one pound of OC emissions.

The OC emission factor of 0.0164 lb OC/lb lubricant was developed from two stack test emission data by the permittee. The OC emission factor is 0.0279 lb OC/lb lubricant based on November 16, 1995 stack test data. The OC emission factor is 0.0048 lb OC/lb lubricant based on November 8, 1996 stack test data. The arithmetic average of the OC emission factor is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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 Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Y-Plant 5002 Hydraulic Press (P158)

Activity Description: Y-Plant 5002 Hydraulic Press

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
P158 - Y Plant - number 5002, a 5,000 ton hydraulic press complex for the production of metal forgings operating at a maximum batch process weight rate of 8,000 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emission limitations/control measures and emission factors that had been generated from stack testing and an operating temperature range between 600 to 800 degrees Fahrenheit and emissions are controlled by coated baghouse with a nominal gas flow rate of 40,000 ACFM	OAC rule 3745-31-05(A)(3) (PTI #13-3149)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average. Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 1.4 lbs/hr and 0.01 grain/dry standard cubic foot (gr/DSCF) outlet emission rate. Volatile organic compounds (VOC) emissions shall not exceed 3 lbs/hr and 15 lbs/day.
The EU and the baghouse were installed in September 1996.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-08(B)	See A.I.2.c below.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-21-07(G)(1)	The emission limitation specified by this rule is equivalent to the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d, A.I.2.f through A.I.2.h below.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3). See A.I.2.d through A.I.2.h below.

2. Additional Terms and Conditions

2.a When water-based lubricants are utilized, exhaust from this source may be vented inside the building or directly to the atmosphere. When oil-based lubricants are utilized, exhaust from this source shall be captured by a negative pressure hood and vented through a baghouse.

2.b When utilizing oil-based lubricants, the exhaust hood shall have at least 90% capture efficiency and the baghouse shall have at least 98% control efficiency.

2.c The permittee's employment of Reasonable Available Control Measures (RACM), at a minimum, for the hydraulic press complex shall consist of the capture of the fugitive PE using a negative pressure hood.

2.d This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen.

2.e This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.f This emissions unit becomes subject to OAC rule 3745-21-07(G)(1) on any day when any article, machine, equipment, or other contrivance in which any liquid organic material or substance containing liquid organic material comes into contact with flame or is baked, heat-cured, or heat-polymerized, in the presence of oxygen and when the same article, machine, equipment, or contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.g Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

2.h One pound of VOC emissions is equivalent to one pound of OC emissions.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4.0 to 8.0 inches of water column 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 recommendation, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.

The unit for pressure drop is inches of water column.

2. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a. the company identification for each lubricant employed;

b. an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c. the amount of each liquid organic material lubricant employed, in pounds;

d. the OC emission factor of each liquid organic material lubricant, in pounds OC emissions per pound of liquid organic material lubricant used;

e. for each day during which a liquid organic material lubricant is employed, the total OC emission rate for all liquid organic material lubricants, in pounds OC emissions per day;

f. for each day during which a liquid organic material lubricant is employed, the total number of hours the emissions unit was in operation using liquid organic material lubricant;

g. for each day during which a liquid organic material lubricant is employed, the average hourly OC emission rate for all liquid organic material lubricants, i.e., (e)/(f), in lbs/hr (average);

h the amount of each photochemically reactive material lubricant employed, in pounds;

i the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

j for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

k for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emissions unit was in operation using photochemically reactive material lubricant;

l for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (j)/(k), in lbs/hr (average); and

m. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

3. The permittee shall collect and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

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

4. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit 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 for each day during which a liquid organic material lubricant was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 3 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (excursion) reports for each day during which a liquid organic material lubricant was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 15 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Visible PE from fugitive dust shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1). For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.c Emission Limitation:
PE shall not exceed 1.4 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors that had been generated from stack testing.

Actual hourly PE rate = Actual scavenger usage X PE factor

Actual hourly PE rate, lbs PE/hr = lbs/hr of lubricant x lb PE/lb lubricant

The emission factor of 0.00394 lb PE/lb lubricant was developed from stack test emission data by the permittee . Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in A.V.2.

1.d Emission Limitation:
Outlet PE rate shall not exceed 0.01 gr/DSCF.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in A.V.2.

V. Testing Requirements (continued)

1.e Emission Limitation:
VOC emissions shall not exceed 3 lbs/hr and 15 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual hourly OC emission rate, lbs OC/hr = lbs/hr of lubricant X lbs OC/lb lubricant

Actual daily OC emission rate, lbs OC/day = lbs OC/hr X hrs/day

One pound of VOC emissions is equivalent to one pound of OC emissions.

The OC emission factor of 0.0164 lb OC/lb lubricant was developed from two stack test emission data by the permittee. The OC emission factor is 0.0279 lb OC/lb lubricant based on November 16, 1995 stack test data. The OC emission factor is 0.0048 lb OC/lb lubricant based on November 8, 1996 stack test data. The arithmetic average of the OC emission factor is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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 Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn 4601 B114 (P159)

Activity Description: 4601 Preheat Furnace - Bldg 114

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
P159 - Building 114 - 3.60 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4601) operating at a maximum process weight rate of 4,600 lbs/hr of metal and 1.4 lbs/hr of hydrogen scavenger	OAC rule 3745-31-05(A)(3) (PTI #13-3180)	Visible particulate emissions (PE) from any stack shall not exceed 5% opacity, as a 6-minute average, PE shall not exceed 0.29 lb/hr, hydrogen fluoride (HF) emissions shall not exceed 0.251 lb/hr, and nitrogen oxides (NOx) emissions shall not exceed 0.51 lb/hr.
The Fugitive EU was installed in 1997. A replacement roof and 9 new stacks were installed in 2000.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3- minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE 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:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3- minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE 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.c Emission Limitation:
PE shall not exceed 0.29 lb/hr.

Applicable Compliance Method:
Compliance shall be based upon the following calculation.
The USEPA reference document, AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs PE/mmcu. ft.) and stack test emission factor for scavenger is 0.175 lb PE/lb scavenger
Actual PE rate = (Emission Factor) X (scavenger usage) + (Emission factor) X (Natural gas usage rate)
Actual hourly PE rate, lbs PE/hr = 0.175 lb PE/lb scavenger X 1.4 lbs scavenger/hr + 1.9 lbs PE/mm cu. ft. X 3600 cu. ft./hr = 0.245 lb PE/hr + 0.0068 lb PE/hr = 0.252 lb PE/hr

1.d Emission Limitation:
HF emissions shall not exceed 0.251 lb/hr.

Applicable Compliance Method:
Compliance shall be based upon the following calculation.
Stack test emission factor = 0.179 lb HF/lb scavenger
Actual emission rate = (Emission factor) x (scavenger usage)
Actual hourly HF emission rate, lbs HF/hr = 0.179 lb HF/lb scavenger x 1.4 lbs scavenger/hr = 0.251 lb HF/hr

V. Testing Requirements (continued)

1.e Emission Limitation:
NOx emissions shall not exceed 0.51 lb/hr.

Applicable Compliance Method:
Compliance shall be based upon the following calculation.
The USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42 "Compilation of Air Pollutant Emission Factors", Table 1.4-2 (7/98) for NOx in natural gas combustion (100 lbs NOx/mm cu. ft.)
Actual emission rate = (Emission factor) x (Natural gas usage rate)
Actual hourly NOx emission rate, lbs NOx/hr = 100 lbs NOx/mm cu. ft. x 3600 cu. ft./hr = 0.36 lb NOx/hr

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: Inconel preheat furnace (P162)

Activity Description: 27 mmBtu/hr direct gas-fired Inconel preheat furnace - Bldg. 206

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
P162 - Building 206 - 27.0 mmBtu/hr direct heat natural gas-fired Inconel preheat furnace without hydrogen scavenger, operating at a maximum process weight rate of 2,609 lbs/load and emissions are exhausted through a vertical stack	OAC rule 3745-31-05(A)(3) (PTI #13-3811)	Visible particulate emissions (PE) from any stack shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 0.41 lb/hr and 1.80 tons per year. VOC emissions shall not exceed 0.30 lb/hr and 1.31 tons per year.
The EU was installed in September 2001.	OAC rule 3745-17-07(A)	None. See A.I.2.a below.
	OAC rule 3745-17-11(A)	None. See A.I.2.a below.
	OAC rule 3745-21-08(B)	CO emissions shall not exceed 4.54 lbs/hr and 19.87 tons per year.
	OAC rule 3745-23-06(B)	NOx emissions shall not exceed 5.40 lbs/hr and 23.65 tons per year.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.

This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

2.b Since the process weight rate is zero, this emissions unit is not subject to OAC rule 3745-18-06(E)(1).

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

2. Reserved for
greater than 10 lbs/hr PE rate

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Cleveland DAQ within 30 days after the deviation occurs.

2. Reserved for
the greater than 10 lbs/hr PE rate reporting.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 5% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitations:
Emissions from the combustion of natural gas shall not exceed:
0.41 pound PE/hour, 1.80 ton PE/year
0.30 pound VOC/hour, 1.31 ton VOC/year
5.40 pounds NOx/hour; 23.65 tons NOx/year
4.54 pounds CO/hour, 19.87 tons CO/year

Applicable Compliance Methods:
Compliance with the hourly emission limitations may be determined by multiplying the emissions unit's maximum hourly natural gas usage (27,000 ft3/hour) by the appropriate emission factors for each pollutant from USEPA's Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition or the most recent edition of AP-42, Table 1.4-2 (7/98) for natural gas (pounds/MMft3).

The annual emission limitations were established by multiplying the maximum hourly emission limitations by 8760 hours per year and dividing by 2000 pounds per ton.

If required, the permittee shall demonstrate compliance with the hourly emission limitations through emission testing conducted in accordance with the appropriate methods found in 40 CFR Part 60, Appendix A.

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 Wheelabrator Shotblaster (P163)

Activity Description: Small Wheelabrator Shotblaster - Bldg. 206

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
P163 - Small Wheelabrator Shotblaster (with a baghouse) using steel shot to clean and de-bur aircraft metal parts, the maximum process weight rate is 10,000 lbs per hour.	OAC rule 3745-31-05(A)(3) (PTI #13-3890)	Visible particulate emissions (PE) from any stack shall not exceed 5% opacity, as a 6-minute average. PE shall not exceed 0.015 grain/dry standard cubic foot (gr/DSCF) of exhaust air, 0.437 lb/hr and 1.19 tons/yr.
The EU was installed in February 2002. The baghouse was installed in January 1960.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

None

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 1 to 8 inches of water while the emissions unit is in operation, except for the first hour of baghouse operation after start-up, in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland DAQ for approval within six months.

II. Operational Restrictions (continued)

3. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once a day when this emissions unit is in operation. The unit for pressure drop shall be inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100/(% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the dust collector did not comply with the allowable range specified above. The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Cleveland DAQ by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. **None**

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 5 % opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 0.015 grain per DSCF of exhaust air, 0.437 lb/hr and 1.91 tons/yr.

Applicable Compliance Method:
Compliance with the 0.015 gr/DSCF PE limit shall be assumed based upon the design criteria of the baghouse control equipment. Compliance with the 0.437 lb/hr PE limit shall be determined by multiplying the assumed outlet grain loading (0.015 gr/DSCF) by 3,400 DSCF/min and then multiplying that product by the conversion factors 60 min/hr and 1.0 lb/7,000 gr.

Compliance with the annual emission rate shall be determined by multiplying the calculated short term lbs/hr emission rate by 8,760 hours/year of the emissions unit and then multiplying by the conversion factor 1.0 ton/2,000 lbs.

If required, the permittee shall determine compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the 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:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits.

A particulate emissions test also shall be conducted at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11. For this testing, the following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

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 Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: 5082 Blocking Press (P164)

Activity Description: 5082 Blocking Press - Bldg. 112

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
P164 - Building 112 - 5000 ton blocking press 5082 for production of metal forgings with a maximum batch process weight rate of 12,500 lbs/hr and an emission factor dependent lubricant usage level of 47.28 lbs/hr, operating between 650 to 880 degrees Fahrenheit	OAC rule 3745-31-05(A)(3) (PTI 13-3882)	Organic compound (OC) emissions shall not exceed 7.3 tons/yr. PE shall not exceed 0.03 grain per dry standard cubic foot (DSCF) of exhaust air, 0.87 lb/hr which is based on 3363 DSCFM and 3.79 tons/yr. This rule also includes compliance with the requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-17-07(A)(1).
The EU was installed in September 2001.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day when this emissions unit was in operation:

a. the company identification for each lubricant employed;

b. the number of gallons of each lubricant employed;

c. the OC content of each lubricant, in pounds OC per gallon;

d. for each day during which a photochemically reactive material is employed, the total emission rate for all lubricants, in pounds OC per day;

e. for each day during which a photochemically reactive lubricant is employed, the total number of hours the emissions unit was in operation;

f. for each day during which a photochemically reactive lubricant is employed, the average hourly OC emission rate for all lubricants, i.e., (d)/(e), in lbs/hr (average); and

g. the lubricant usage, in pounds.

[Note: The lubricant information must be for the lubricants as employed, including any thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland DAQ, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the lubricants and the photochemically reactive lubricants exceed 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the lubricants and the photochemically reactive lubricants exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

3. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Term and Condition of this permit.

4. The permittee shall submit semi-annual lubricant and type of lubricant usage reports to the Cleveland DAQ.

The report shall be submitted semiannually by January 31 and July 31 of each year and shall cover the previous semiannual period (July through December, and January through June, respectively).

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
OC emissions shall not exceed 8 lbs/hr, 40 lbs/day and 7.3 tons/yr.

Applicable Compliance Method:
Compliance with the emission limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors generated from stack testing.

Actual hourly OC emissions = 56.23 lbs/hr of lubricant x 0.0296 lb OC/lb lubricant = 1.664 lb OC/hr

Actual daily OC emissions = 1.664 lb OC/hr x 24 hrs/day = 39.95 lbs OC/day

The tons/yr emission rate will be based on multiplying the short term lbs/hr emission rate by the annual operating hours of the emissions unit and then dividing by 2000 lbs/ton conversion factor.

A worst case emission factor is 0.0296 lb OC/lb lubricant. Should more accurate emission factors be developed in the future, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and ALCOA Cleveland Works.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 25, 25A or 25B and the procedures specified in OAC rule 3745-21-10. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

V. Testing Requirements (continued)

1.c Emission Limitation:
PE shall not exceed 0.03 grain per DSCF of exhaust air, 0.87 lb/hr and 3.79 tons/yr.

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors that have been generated from stack testing.

Actual PE rate, lbs/hr = GRLD x AVFR x TCF x MCF x (60 minutes/hr)/(7000 grains/lb)
TCF = (460 + 70 degrees, Fahrenheit)/(460 + air temperature, degrees Fahrenheit), deg. F/deg. F
MCF = (1 - moisture in air), ft^3 dry air/ft^3 air

AVFR = air volume flow rate, ACFM
ACFM = actual cubic foot per minute, ft^3/min
GRLD = grain loading concentration, grains/ft^3
MCF = moisture correction factor
TCF = temperature correction factor,

The tons/yr emission rate will be based on multiplying the short term lbs/hr emission rate by the annual operating hours of the emissions unit and then dividing by 2000 lbs/ton conversion factor.

Should more accurate emission factors be developed in the future, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and to the ALCOA Cleveland Works.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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
P164 - Building 112 - 5000 ton blocking press 5082 for production of metal forgings with a maximum batch process weight rate of 12,500 lbs/hr and an emission factor dependent lubricant usage level of 47.28 lbs/hr, operating between 650 to 880 degrees Fahrenheit The EU was installed in September 2001.		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Air Toxic Policy Clarifying Language

The permit to install for this emissions unit (P164) 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: Ethanol, 2-amino, C2H7NO, 141-43-5

TLV (mg/m3): 7.49

Maximum Hourly Emission Rate (lbs/hr): 2.67

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 100

MAGLC (ug/m3): 178

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.).

2. 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: 5083 Blocking Press (P165)

Activity Description: 5083 Blocking Press - Bldg. 112

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
P165 - Building 112 - 5000 ton blocking press 5083 for production of metal forgings with a maximum batch process weight rate of 12,500 lbs/hr and an emission factor dependent lubricant usage level of 47.28 lbs/hr, operating between 650 to 880 degrees Fahrenheit	OAC rule 3745-31-05(A)(3) (PTI 13-3882)	Organic compound (OC) emissions shall not exceed 7.3 tons/yr. PE shall not exceed 0.03 grain per dry standard cubic foot (DSCF) of exhaust air, 1.16 lbs/hr which is based on 4505 DSCFM and 5.07 tons/yr. This rule also includes compliance with the requirements of OAC rule 3745-21-07(G)(2) and OAC rule 3745-17-07(A)(1).
The EU was installed in September 2001.	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information for each day when this emissions unit was in operation:

a. the company identification for each lubricant employed;

b. the number of gallons of each lubricant employed;

c. the OC content of each lubricant, in pounds OC per gallon;

d. for each day during which a photochemically reactive material is employed, the total emission rate for all lubricants, in pounds OC per day;

e. for each day during which a photochemically reactive lubricant is employed, the total number of hours the emissions unit was in operation;

f. for each day during which a photochemically reactive lubricant is employed, the average hourly OC emission rate for all lubricants, i.e., (d)/(e), in lbs/hr (average); and

g. the lubricant usage, in pounds.

[Note: The lubricant information must be for the lubricants as employed, including any thinning solvents added at the emissions unit. Also, the definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland DAQ, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the lubricants and the photochemically reactive lubricants exceed 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the lubricants and the photochemically reactive lubricants exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

3. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Term and Condition of this permit.

4. The permittee shall submit semi-annual lubricant and type of lubricant usage reports to the Cleveland DAQ.

The report shall be submitted semiannually by January 31 and July 31 of each year and shall cover the previous semiannual period (July through December, and January through June, respectively).

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
OC emissions shall not exceed 8 lbs/hr, 40 lbs/day and 7.3 tons/yr.

Applicable Compliance Method:
Compliance with the emission limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors generated from stack testing.

Actual hourly OC emissions = 56.23 lbs/hr of lubricant x 0.0296 lb OC/lb lubricant = 1.664 lb OC/hr

Actual daily OC emissions = 1.664 lb OC/hr x 24 hrs/day = 39.95 lbs OC/day

The tons/yr emission rate will be based on multiplying the short term lbs/hr emission rate by the annual operating hours of the emissions unit and then dividing by 2000 lbs/ton conversion factor.

A worst case emission factor is 0.0296 lb OC/lb lubricant. Should more accurate emission factors be developed in the future, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and ALCOA Cleveland Works.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 25, 25A or 25B and the procedures specified in OAC rule 3745-21-10. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

V. Testing Requirements (continued)

1.c Emission Limitation:
PE shall not exceed 0.03 grain per DSCF of exhaust air, 1.16 lbs/hr and 5.07 tons/yr.

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and emission factors that have been generated from stack testing.

Actual PE rate, lbs/hr = GRLD x AVFR x TCF x MCF x (60 minutes/hr)/(7000 grains/lb)
TCF = (460 + 70 degrees, Fahrenheit)/(460 + air temperature, degrees Fahrenheit), deg. F/deg. F
MCF = (1 - moisture in air), ft^3 dry air/ft^3 air

AVFR = air volume flow rate, ACFM
ACFM = actual cubic foot per minute, ft^3/min
GRLD = grain loading concentration, grains/ft^3
MCF = moisture correction factor
TCF = temperature correction factor,

The tons/yr emission rate will be based on multiplying the short term lbs/hr emission rate by the annual operating hours of the emissions unit and then dividing by 2000 lbs/ton conversion factor.

Should more accurate emission factors be developed in the future, the permittee shall use them, provided the new emission factors are mutually agreeable to the Cleveland DAQ and to the ALCOA Cleveland Works.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5 and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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
P165 - Building 112 - 5000 ton blocking press 5083 for production of metal forgings with a maximum batch process weight rate of 12,500 lbs/hr and an emission factor dependent lubricant usage level of 47.28 lbs/hr, operating between 650 to 880 degrees Fahrenheit The EU was installed in September 2001.		

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Air Toxic Policy Clarifying Language

The permit to install for this emissions unit (P165) 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: Ethanol, 2-amino, C2H7NO, 141-43-5

TLV (mg/m3): 7.49

Maximum Hourly Emission Rate (lbs/hr): 2.67

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 84

MAGLC (ug/m3): 178

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.).

2. 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: Furn #13 Soaker (P402)

Activity Description: No. 13 Soaker Furnace - Bldg 150 (part of P102)

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
P402 - Building 150 - 16.75 mmbtu/hr indirect heat natural gas-fired soaker furnace (number 13) with a maximum process weight rate of 75,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger and air emissions are controlled by a reverse air baghouse	OAC rule 3745-17-10(B)(1)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/MMBtu of actual heat input.
The EU was installed in May 1963 apparently without a stack. A baghouse was installed in 1980. See P102.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.
	OAC rule 3745-17-08(B)(3)	See A.I.2.b below

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.b The installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:

(i) The collection efficiency is sufficient to minimize or eliminate visible particulate emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design; and

(ii) The control equipment achieves an outlet emission rate of not greater than .030 grain of particulate matter emissions per dry standard cubic foot of exhaust gases from the baghouse or there are no visible particulate emissions form the baghouse exhaust stack, whichever is less stringent.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

2. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

3. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland Bureau of Air Pollution Control for approval within six months.

4. The permittee shall employ procedures for unloading and disposal of the dust collected in the baghouses so that it does not become airborne and does not accumulate underneath the baghouse. Any accumulation of dust under the baghouse or on any part of the roof or floor near the baghouse shall be deemed a violation of this condition. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel in this emissions unit.

2. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

3. The permittee shall collect, record and maintain the following information each month when this emissions unit was in operation:

a. the natural gas usage of this emissions unit, in cubic feet per hour, heating value of natural gas used and the average heat input in mmBtu/hr;

b. the scavenger usage of this emissions unit, in lbs;

c. the PE generated by this emissions unit, i.e., (b) x 0.175 lb of PE/lb scavenger, in lbs of PE;

d. the average baghouse gas flow rate, in dry standard cubic feet per minute (DSCFM);

e. the total hours of operation; and

f. the average baghouse exhaust gas grain loading generated by this emissions unit, i.e., (c)/(e) x (1hour/60min) x (7000 gr/lb) x 1/(d), in gr/DSCF of exhaust gases and visible PE from the baghouse exhaust stack.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) within 30 days after the deviation occurs.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.c Emission Limitation:
PE from the burner flue gas stack shall not exceed 0.020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When firing natural gas, compliance with this emission limitation shall be demonstrated by dividing the emission factor from the USEPA reference document AP-42, Fifth Edition or the most recent edition of AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mm cu. ft.) by the gross heating value of natural gas (1,000 Btu/cu. ft.).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mm cu. ft.)/(1,000 Btu/cu. ft.) = 0.0019 lb of PE/mmBtu

V. Testing Requirements (continued)

1.d Emission Limitation:
The control equipment achieves an outlet emission rate of not greater than .030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there are no visible particulate emissions from the baghouse exhaust stack, whichever is less stringent.

Applicable Compliance Method:
Compliance with the control equipment grain loading of .030 grain of PE per dry standard cubic foot of exhaust gases shall be based upon the results of the emission testing specified in section A.V.2 of this permit.

Compliance with the visible particulate emission limitation for the emissions unit identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1. The secondary purpose of this testing is to verify the current particulate emission factors or establish new emission factors to be used to demonstrate compliance with the emission limits. However, if there are no visible particulate emissions from the exhaust stacks, then this emissions testing is not required.

The following test methods shall be employed to demonstrate compliance with the emission limitations:
Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics
Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE,
Test Method 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1) for visible PE, and
Test Method 22 of 40 CFR Part 60, Appendix A and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03 for visible PE of fugitive dust.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(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 Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: 2504 Mechanical Press (P429)

Activity Description: 2504 Mechanical Press - water based lubes

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
P429 - Building 101 - number 2504, a 2,500 ton mechanical press complex for the production of metal forgings operating at a maximum batch process weight rate of 4,500 lbs/hr of metal, a lubricant usage in lbs/hr restricted to level based on applicable emissions limitations/control measures and emission factors that had been generated from stack test emission data, an operating temperature range between 600 and 800 degrees Fahrenheit and air emissions are exhausted through a vertical stack	OAC rule 3745-17-11(B)	See A.I.2.a below.
The EU and a stack were installed in 1963.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.b below.
	OAC rule 3745-21-07(G)(2)	OC emissions shall not exceed 8 lbs/hr and 40 lbs/day. See A.I.2.c and A.I.2.d below.

2. Additional Terms and Conditions

2.a The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 pounds per hour. Therefore, to ensure that Figure II will not be applicable, the uncontrolled mass rate of PE is limited to less than 10 pounds per hour.

2.b No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

2.c This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any article, machine, equipment, or other contrivance used under conditions other than described in paragraph (G)(1) of this rule for employing, applying, evaporating or drying any photochemically reactive material, or substance containing such photochemically reactive material.

2.d Lubricant materials meeting the criteria specified in OAC rule 3745-21-07(G)(9)(c) are exempt from the provisions (emission limitations) of OAC rule 3745-21-07(G).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain and record the following information for each day when this emissions unit is in operation:

a the company identification for each lubricant employed;

b an identification of whether a lubricant used is a liquid organic material, a substance containing liquid organic material, a photochemically reactive material or a substance containing photochemically reactive material;

c the amount of each photochemically reactive material lubricant employed, in pounds;

d the OC emission factor of each photochemically reactive material lubricant, in pounds OC emissions per pound of photochemically reactive material lubricant used;

e for each day during which a photochemically reactive material lubricant is employed, the total OC emission rate for all photochemically reactive material lubricants, in pounds OC emissions per day;

f for each day during which a photochemically reactive material lubricant is employed, the total number of hours the emission unit was in operation using photochemically reactive material lubricant;

g for each day during which a photochemically reactive material lubricant is employed, the average hourly OC emission rate for all photochemically reactive material lubricants, i.e., (e)/(f), in lbs/hr (average); and

h. for each day during which a non-photochemically reactive material lubricant is employed, the amount of lubricant used, in pounds.

[Note: The information on lubricants must be for the lubricants as employed, including any thinning solvents added at the emission unit. Also, the definitions of "organic compound," "liquid organic material" and "photochemically reactive material" are based upon OAC rules 3745-21-01(B)(4) and 3745-21-01(C)(3) and 3745-21-01(C)(5) respectively.]

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

2. The permittee shall maintain and record stack testing results and emission factors that had been generated from this stack testing. Results of stack testing which has been observed by representatives of the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency, may be used in generating emission factors for compliance determination. The emission factors shall be accurate to two significant figures or as specified in the Ohio Environmental Protection Agency (Ohio EPA) Engineering Guide 23 issued on April 24, 1981.

3. 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 and for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the average hourly OC emissions from the use of lubricants exceeded 8 pounds per hour, and the actual average hourly OC emissions for each such day including the emission factor(s) used in the emission calculations.

2. The permittee shall submit quarterly deviation (excursion) reports for each day during which a photochemically reactive material was employed, an identification of each day during which the OC emissions from the use of lubricants exceeded 40 pounds per day, and the actual OC emissions for each such day including the emission factor(s) used in the emission calculations.

3. The permittee shall submit quarterly deviation (or excursion) reports that identify each month during which the actual PE rate exceeded the limit in A.I.1.

4. The permittee shall submit the above quarterly deviation (excursion) reports in accordance with the General Terms and Conditions of this permit.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, (b) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit, and (c) describe any corrective actions taken to minimize or eliminate the visible particulate and/or visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
OAC rule 3745-21-07(G)(2) OC emissions shall not exceed 8 lbs/hr and 40 lbs/day.

Applicable Compliance Method:
Compliance with the emissions limitation(s) shall be determined pursuant to the monitoring and record keeping in A.III. Also, compliance shall be demonstrated using engineering calculations based on the amount and type of lubricant used and OC emission factors.

Actual daily OC emission rate, lbs OC/day = (lbs lubricant/day X lbs OC/lb lubricant)

Actual hourly OC emission rate, lbs OC/hr = (lbs OC/day)/(hrs of operation/day)

The emission factor of 0.0164 lb OC/lb lubricant was developed by the permittee from data of two stack tests. The OC emission factor is 0.0279 lb OC/lb lubricant based on the November 16, 1995 stack test data. The OC emission factor is 0.0048 lb OC/lb lubricant based on the November 8, 1996 stack test data. The arithmetic average of the OC emission factor is 0.0164 lb OC/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Ohio Environmental Protection Agency (Ohio EPA) through the Cleveland Bureau of Air Pollution Control (CBAPC), a local air agency and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.b Emission Limitation:
Less than 10 lbs/hr of PE

Applicable Compliance Method:
Compliance with the PE limit for this source shall be demonstrated using engineering calculations based on the amount and type of lubricant used and PE factors.

Actual hourly PE rate, lbs PE/hr = (lbs lubricant/day X lbs PE/lb lubricant)/(hrs of operation/day)

The emission factor of 0.190 lb PE/lb lubricant was developed by the permittee from emission data of two stack tests. The PE factor is 0.3561 lb PE/lb lubricant based on the November 16, 1995 stack test. The PE factor is 0.0279 lb PE/lb lubricant based on the November 8, 1996 stack test. The arithmetic average of the PE factor is 0.190 lb PE/lb lubricant. Other emission factors that had been generated from stack test emission data may be used.

Should more accurate emission factors be developed during the current permit cycle, the permittee shall use them, provided the emission factors are mutually agreeable to the Cleveland DAQ and to ALCOA Cleveland Works.

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

V. Testing Requirements (continued)

1.d Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate and organic compound emissions in A.I.1. The secondary purpose of this testing is to verify the current lubricant emission factors or establish new emission factors to be used to demonstrate compliance with emission limits.

The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE and Test Methods 25, 25A or 25B of 40 CFR Part 60, Appendix A and procedures specified in OAC rule 3745-21-10 for OC emissions. An alternative modified Test Method 18 was approved in the November 19, 1984 letter from the Director of Air Management Division, USEPA Region V to the General Manager Environmental Control, Aluminum Company of America, Pittsburgh, PA 15219. This alternative modified Test Method 18 may be used in place of Test Methods 25, 25A or 25B.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Torch Pit #2 (P432)

Activity Description: Acetylene Arc System - Torch Pit No. 2 (West) - Bldg 206 (part of P032)

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
P432 - Building 206 - acetylene arc cutting system - torch pit number 2 (west) and particulate emissions are controlled by a positive pressure, pulse-jet, sonic baghouse	OAC rule 3745-31-05(A)(3) (PTI #13-2232)	See A.I.2.a below.
The EU pit #2 and the baghouse were installed in 1991. See P032 for pit #1.	OAC rule 3745-17-07(A)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-11(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The Best Available Technology determination for this emissions unit is PE shall not exceed 0.01 grains/DSCF and 3.43 lbs/hr, visible PE shall not exceed 5% opacity and there shall be no objectionable odors in any exhaust gases.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 14 inches of water column while the emissions unit is in operation except the first hour of baghouse operation after start-up in order to build up enough filter cake so that the baghouse will be operating within the recommended pressure drop range while the emissions unit is in operation.

2. A regular program of inspection and maintenance shall be performed on the baghouse and its associated ductwork and blower. The maintenance plan shall be prepared in accordance with Ohio EPA's "Operation and Maintenance Guidelines" and shall be submitted to Cleveland BAPC for approval within six months.

3. Material collected by the baghouse shall be handled in such a way there shall be no emission of fugitive dust. Material spilled from the baghouse hoppers or from screw conveyor(s) shall be cleaned up immediately.

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 once a day when this emissions unit is in operation.

The unit for pressure drop is inches of water column.

2. The permittee shall collect and record, for the control system, the downtime of the capture (collection) system, control device, and monitoring equipment and corrective actions for each day the emissions unit was in operation.

3. The permittee shall collect and record the following information on a monthly basis:

a. the amount of dust collected from the baghouse, in pounds;

b. the operating hours of this emissions unit; and

c. the average actual PE rate generated by this emissions unit, lbs/hr:
. = (100/(% emission control efficiency of the baghouse) - 1) X (a)/(b).

4. 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:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

d. the total duration of any visible emission incident; and

e. any corrective actions taken to eliminate the visible emissions.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the average hourly PE rate did not comply with the allowable PE limit specified above.

The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitation(s) in Section A.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE shall not exceed 5 % opacity, as a 6-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(1).

1.b Emission Limitation:
PE shall not exceed 3.43 lbs/hr.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equation:

Actual hourly PE rate, lbs PE/hr = (100/BCE - 1) X DUST/(hrs of operation/month)

Where:
BCE = baghouse control efficiency, %
DUST = dust collected from baghouse per month, lbs/month

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

1.c Emission Limitation:
PE shall not exceed 0.01 gr/DSCF.

Applicable Compliance Method:
Compliance with the PE limit for this emissions unit shall be determined using the following equations:

Actual PE concentration, gr/DSCF = (Actual hourly PE rate, lbs PE/hr) x (7000 gr/lb) x (hr/60 minutes)/(air volume flow rate, DSCFM)

Air volume flow rate, DSCFM = ACFM x (1 - moisture in air) x TCF

TCF = (460 + 70 degrees Fahrenheit)/(460 + air temperature, degrees Fahrenheit)

Where:
DSCF = dry standard cubic feet
DSCFM = dry standard cubic feet per minute
ACFM = actual cubic feet per minute
gr = grain
TCF = temperature correction factor

Compliance shall be based upon the results of the emission testing specified in section A.V.2.

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

The emission testing shall be conducted approximately within 2.5 years after permit issuance.

The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulate emissions in A.I.1.

The following test methods shall be employed to demonstrate compliance with the emission limitations: Test Methods 1 through 4 of 40 CFR Part 60, Appendix A for gas flow characteristics and Test Method 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for PE.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Cleveland DAQ.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Cleveland DAQ. 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 Cleveland DAQ's refusal to accept the results of the emission test(s).

Personnel from the Cleveland DAQ shall be permitted to witness the tests, examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions tests shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the tests.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

1. The specific 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: Furn 1004 B101 (Z007)

Activity Description: 1004 Furnace - Bldg 101

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
Z007 - Building 101 - 0.20 mmBtu/hr direct heat natural gas-fired preheat furnace (number 1004) operating at a maximum process weight rate of 1,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in April 1942 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 2007 B101 (Z008)

Activity Description: 2007 Furnace - Bldg 101

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
Z008 - Building 101 - 0.25 mmBtu/hr direct heat natural gas-fired preheat furnace (number 2007) operating at a maximum process weight rate of 2,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in March 1941 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 2502 B101 (Z009)

Activity Description: 2502 Furnace - Bldg 101

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
Z009 - Building 101 - 0.50 mmBtu/hr direct heat natural gas-fired preheat furnace (number 2502) operating at a maximum process weight rate of 2,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in January 1941 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4502 B101 (Z012)

Activity Description: 4502 Furnace - Bldg 101

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
Z012 - Building 101 - 1.00 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4502) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in June 1941 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4504 B101 (Z013)

Activity Description: 4504 Furnace - Bldg 101

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
Z013 - Building 101 - 1.86 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4504) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in September 1943 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4505 B101 (Z014)

Activity Description: 4505 Furnace - Bldg 101

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
Z014 - Building 101 - 0.45 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4505) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in April 1942 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4506 B111 (Z015)

Activity Description: 4506 Furnace - Bldg 101

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
Z015 - Building 101 - 1.00 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4506) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in January 1943 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 6002 B101 (Z020)

Activity Description: 6002 Furnace - Bldg 101

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
Z020 - Building 101 - 1.70 mmBtu/hr direct heat natural gas-fired preheat furnace (number 6002) operating at a maximum process weight rate of 6,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in November 1939 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 12001 B111 (Z022)

Activity Description: 12001 Furnace - Bldg 111

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
Z022 - Building 111 - 12.00 mmBtu/hr direct heat natural gas-fired preheat furnace (number 12001) operating at a maximum process weight rate of 12,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in September 1952 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 12002 B111 (Z023)

Activity Description: 12002 Furnace - Bldg 111

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
Z023 - Building 111 - 2.40 mmBtu/hr direct heat natural gas-fired preheat furnace (number 12002) operating at a maximum process weight rate of 12,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in September 1952 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 12003 B111 (Z024)

Activity Description: 12003 Furnace - Bldg 111

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
Z024 - Building 111 - 12.00 mmBtu/hr direct natural gas-fired preheat furnace (number 12003) operating at a maximum process weight rate of 12,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in September 1952 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 6003 B111 (Z025)

Activity Description: 6003 Furnace - Bldg 111

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
Z025 - Building 111 - 1.00 mmBtu/hr direct heat natural gas-fired preheat furnace (number 6003) operating at a maximum process weight rate of 6,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in December 1967 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 6004 B111 (Z026)

Activity Description: 6004 Furnace - Bldg 111

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
Z026 - Building 111 - 1.00 mmBtu/hr direct heat natural gas-fired preheat furnace (number 6004) operating at a maximum process weight rate of 6,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in December 1967 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn G-1 B111 (Z027)

Activity Description: 12,000 Lb Reheat Furnace G-1 - Bldg 111

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
Z027 - Building 111 - 3.20 mmBtu/hr direct heat natural gas-fired preheat furnace (number G-1) operating at a maximum process weight rate of 12,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in July 1953 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn G-2 B111 (Z028)

Activity Description: 12,000 Lb Reheat Furnace G-2 - Bldg 111

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
Z028 - Building 111 - 3.20 mmBtu/hr direct heat natural gas-fired preheat furnace (number G-2) operating at a maximum process weight rate of 12,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in July 1953 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 2002 B114 (Z031)

Activity Description: 2002 Preheat Furnace - Bldg 114

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
Z031 - Building 114 - 0.80 mmBtu/hr direct heat natural gas-fired preheat furnace (number 2002) operating at a maximum process weight rate of 2,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in February 1941 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 2503 B150 (Z033)

Activity Description: 2503 Preheat Furnace - Bldg 150

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
Z033 - Building 150 - 0.25 mmBtu/hr direct heat natural gas-fired preheat furnace (number 2503) operating at a maximum process weight rate of 2,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in February 1941 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4509 B114 (Z034)

Activity Description: 4509 Reheat Furnace - Bldg 114

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
Z034 - Building 114 - 8.00 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4509) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in September 1942 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4513 B114 (Z035)

Activity Description: 4513 Reheat Furnace - Bldg 114

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
Z035 - Building 114 - 1.50 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4513) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in January 1943 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4518 B114 (Z036)

Activity Description: 4518 Reheat Furnace - Bldg 114

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
Z036 - Building 114 - 14.40 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4518) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in October 1941 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn 4519 B114 (Z037)

Activity Description: 4519 Reheat Furnace - Bldg 114

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
Z037 - Building 114 - 14.40 mmBtu/hr direct heat natural gas-fired preheat furnace (number 4519) operating at a maximum process weight rate of 4,500 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in October 1941 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn R&S #1 B206 (Z041)

Activity Description: R&S Reheat Furnace No. 1 - Bldg 206

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
Z041 - Building 206 - 2.32 mmBtu/hr direct heat natural gas-fired preheat furnace (R & S reheat furnace number 1) operating at a maximum process weight rate of 12,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in February 1955 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn R&S #3 B206 (Z043)

Activity Description: R&S Reheat Furnace No. 3 - Bldg 206

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
Z043 - Building 206 - 1.20 mmBtu/hr direct heat natural gas-fired preheat furnace (R & S reheat furnace number 3) operating at a maximum process weight rate of 12,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in February 1955 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Furn #4 Salem (Z044)

Activity Description: No. 4 Salem Furnace - Bldg 206

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
Z044 - Building 206 - 15.00 mmBtu/hr indirect heat natural gas-fired preheat furnace (number 4 Salem) operating at a maximum process weight rate of 16,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-10(B)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/MMBtu of actual heat input.
The furnace was installed in September 1969 and is a fugitive emission source.	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.b Emission Limitation:
PE from the burner flue gas stack shall not exceed .020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When firing natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Fifth Edition or the most recent edition of AP-42, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmCF) divided by the gross heating value of natural gas (1,000 Btu/CF).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mmCF)/(1,000 Btu/CF) = 0.0019 lb of PE/mmBtu

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: Furn #5 Salem (Z045)

Activity Description: No. 5 Salem Furnace - Bldg 206

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
Z045 - Building 206 - 13.80 mmBtu/hr indirect heat natural gas-fired preheat furnace (number 5 Salem) operating at a maximum process weight rate of 16,000 lbs/hr of metal and 8 lbs/hr of hydrogen scavenger	OAC rule 3745-17-10(B)	Particulate emissions (PE) from the burner flue gas stack shall not exceed 0.020 lb/MMBtu of actual heat input.
The furnace was installed in September 1969 and is a fugitive emission source.	OAC rule 3745-17-07(B)(1)	Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
	OAC rule 3745-17-08(B)	See A.I.2.a below.

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

1.a Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

1.b Emission Limitation:
PE from the burner flue gas stack shall not exceed .020 lb/mmBtu of actual heat input.

Applicable Compliance Method:
When firing natural gas, compliance with this emission limitation shall be demonstrated by multiplying the emission factor from AP-42 "Compilation of Air Pollutant Emission Factors", Fifth Edition or the most recent edition of AP-42, Table 1.4-2 (7/98) for filterable particulates in natural gas combustion (1.9 lbs of PE/mmCF) divided by the gross heating value of natural gas (1,000 Btu/CF).

Actual PE, lbs/mmBtu = (1.9 lbs of PE/mmCF)/(1,000 Btu/CF) = 0.0019 lb of PE/mmBtu

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: Furn T-10 B206 (Z051)

Activity Description: T-10 Furnace - Bldg 206

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
Z051 - Building 206 - 13.98 mmBtu/hr direct heat natural gas-fired titanium preheat furnaces (number T-10) without hydrogen scavenger	OAC rule 3745-17-07(B)(1)	Visible particulate emissions (PE) from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.
The furnace was installed in August 1989 and is a fugitive emission source.	OAC rule 3745-17-08(B)	See A.I.2.a below.
The EU furnace was installed in 19xx and is a fugitive emission source.		

2. Additional Terms and Conditions

2.a No person shall cause or permit any fugitive dust source to be operated; or any materials to be handled, transported, or stored; or a building or its appurtenances or a road to be used, constructed, altered, repaired, or demolished without taking or installing reasonably available control measures to prevent fugitive dust from becoming airborne.

II. Operational Restrictions

1. The permittee shall burn only natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

V. Testing Requirements

1. Compliance with the emissions limitation(s) in Sections A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

V. Testing Requirements (continued)

Emission Limitation:
Visible PE from any fugitive dust source shall not exceed 20% opacity, as a 3-minute average.

Applicable Compliance Method:
If required, compliance shall be determined through visible PE observations performed in accordance with USEPA Test Method 9 of 40 CFR, Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(3) shall be used to demonstrate compliance. For purposes of verifying compliance with this limitation, visible PE observations shall be performed at the non-stack egress points (e.g., windows, doors, roof monitors) serving this emissions unit.

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: Road Dust - Fug. (Z079)

Activity Description: Vehicle Fugitive Dust - Plantwide

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
Z079 - Vehicle fugitive dust - plantwide paved roadways and paved parking areas	OAC rule 3745-17-07(B)(4)	No visible particulate emissions (PE) except for 6 minutes during any 60-minute period
	OAC rule 3745-17-08(B), (B)(8) and (B)(9)	Reasonably available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust. See A.I.2.b through A.I.2.f below.

2. Additional Terms and Conditions

2.a The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

Paved roadways and parking areas:

Road segment ID	Z079
Surface type	asphalt
Road segment length	0.5 mile
Surface area	66,000 square feet

2.b The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by watering and/or sweeping at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.c The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2. Additional Terms and Conditions (continued)

2.d The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.e Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

2.f Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of the paved roadways and parking areas in accordance with the following frequencies:

paved roadways	minimum inspection frequency
all	daily from May 15 through September 14
all	weekly from September 15 through May 14

paved parking areas	minimum inspection frequency
all	daily from May 15 through September 14
all	weekly from September 15 through May 14

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

4.a the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

4.b the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

4.c the dates the control measures were implemented; and

4.d on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

5. The information required in 4.d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

IV. Reporting Requirements

1. The permittee shall submit deviation reports that identify any of the following occurrences:

1.a each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

1.b each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

2. The quarterly deviation (excursion) reports shall be submitted in accordance with the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance witht he emissions limitation(s) of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation:
No Visible PE except for 6 minutes during any 60-minute period.

Applicable Compliance Method:
Compliance with the emission limitation for the paved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03).

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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