Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

7/13/2011

Certified Mail

Kathy Gargasz
The Lincoln Electric Company
22801 St. Clair Avenue
Cleveland, OH 44117-1199

Facility ID: 1318202137
Permit Number: P0105640
County: Cuyahoga

RE: PRELIMINARY PROPOSED AIR POLLUTION TITLE V PERMIT
Permit Type: Renewal

Dear Permit Holder:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 5/24/2011. The comment period for the Draft permit has ended. We are now ready to submit this permit to U.S. EPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written, you now have the opportunity to raise your concerns. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the permit or in narrative format. Any comments must be sent to the following within 14 days of your receipt of this letter:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43216-1049

and

Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114

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

If comments are not submitted within 14 days of your receipt of this letter, we will forward the proposed permit to U.S. EPA for approval. All comments received will be carefully considered before proceeding with the proposed permit.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: Cleveland Division of Air Quality

Response to Comments

Response to comments for: Title V Permit

Facility ID:	1318202137
Facility Name:	The Lincoln Electric Company
Facility Description:	Welding equipment manufacturing company.
Facility Address:	22801 St. Clair Avenue Cleveland, OH 44117-1199 Cuyahoga County
Permit #:	P0105640, Renewal
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Plain Dealer on 05/26/2011. The comment period ended on 06/25/2011.	
Hearing date (if held)	
Hearing Public Notice Date (if different from draft public notice)	

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

1. Topic: **None**
    a. Comment: **None**
    b. Response: **None**
2. Topic: **None**
    a. Comment: **None**
    b. Response: **None**

Ohio | Environmental Protection Agency

PRELIMINARY PROPOSED

Division of Air Pollution Control
Title V Permit
for
The Lincoln Electric Company

Facility ID:	1318202137
Permit Number:	P0105640
Permit Type:	Renewal
Issued:	7/13/2011
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Title V Permit
for
The Lincoln Electric Company

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Authorization

Facility ID: 1318202137
Facility Description: Welding equipment manufacturing company.
Application Number(s): A0038202, A0040117, A0040699, A0041809
Permit Number: P0105640
Permit Description: Title V renewal permit for The Lincoln Electric Company. This is a welding equipment manufacturing company. This renewal permit is for a 3 natural gas boilers, rail car unloader, 10 varnish dip tanks, 5 paint spray booths, 2 bake ovens, 6 kilns, 9 dryers, 2 engine test stands, strip etch line, roll crusher line, ball mill, Sweco operation, and 2 paint dip tanks.
Permit Type: Renewal
Issue Date: 7/13/2011
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Superseded Permit Number: P0095366

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

The Lincoln Electric Company
22801 St. Clair Avenue
Cleveland, OH 44117-1199

Ohio EPA District Office or local air agency responsible for processing and administering your permit:
Cleveland Division of Air Quality
2nd Floor
75 Erieview Plaza
Cleveland, OH 44114
(216)664-2297

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. 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. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Cleveland Division of Air Quality. 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, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) 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:

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

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

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

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

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

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

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

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the

insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

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

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) 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))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Cleveland Division of Air Quality.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. 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))

5. 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))

6. 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))

7. 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 Standard Term and Condition A.11 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.Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; orthe permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(2) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminent sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. 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))

9. 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))

10. 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 standard terms and conditions shall apply to all operating scenarios authorized in this permit.

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

11. 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))

12. 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))

13. 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:

(1) 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.

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

(3) 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:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

(2) 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:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) 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.

(3) 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))

14. 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))

15. 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))

16. 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))

17. 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 emissions 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.

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

18. 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.)

19. Insignificant Activities or Emissions Levels

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

(Authority for term: OAC rule 3745-77-07(A)(1))

20. 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))

21. 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))

22. Permanent Shutdown of an Emissions Unit

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

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

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

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only

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 (i.e., postmarked) quarterly, 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.)Records Retention Requirements Under State Law Only

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.

25. 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.

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

26. 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).

27. 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.

(Authority for term: OAC rule 3745-77-01(C))

28. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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

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

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

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

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

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

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

EU ID	Operations, Property and/or Equipment Description
B013	10.93 mmBtu/hr direct gas fired make up air heater for space heating EP4 Heater #7 OAC rule 3745-31-05(A)(3) (PTI#13-3746)
B014	10.93 mmBtu/hr direct gas fired make up air heater for space heating EP4 Heater #8 OAC rule 3745-31-05(A)(3) (PTI#13-3746)

   Each insignificant emissions unit at this facility must comply with all applicable State and Federal regulations, as well as any emissions limitations and/or control requirements contained within a permit-to-install for that emissions unit. Insignificant emissions units listed above that are not subject to specific permit-to-install requirements are subject to one or more applicable requirements contained in the federally-approved versions of OAC Chapters 3745-17, 3745-18, and/or 3745-21.

   [Authority for term: OAC rule 3745-77-07(A)(13)]

3. Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a compliance assurance monitoring (CAM) plan for particulate emissions for emissions units F001, P021, P022, P023, P025, P026, P037, P039, P040, P902, P904 and P910 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

   [Authority for term: 40 CFR Part 64]

4. Pursuant to 40 CFR Part 64, the permittee has submitted and the Ohio EPA has approved a compliance assurance monitoring (CAM) plan for VOC emissions for emissions units K060, K061 and K065 at this facility. The permittee shall comply with the provisions of the plan during any operation of the aforementioned emissions units.

   [Authority for term: 40 CFR Part 64]

C. Emissions Unit Terms and Conditions

1. B003, Boiler 02

Operations, Property and/or Equipment Description:

50 mmBtu/hr natural gas-fired boiler, equipped with a low NOx burner

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (Permit No. P0107746 issued March 25, 2011)	Nitrogen oxide emissions shall not exceed 2.5 lbs/hr and 10.95 tons/yr. Carbon monoxide emissions shall not exceed 4.2 lbs/hr and 18.40 tons/yr. Organic compound emissions shall not exceed 0.55 lb/hr and 2.41 tons/yr. Particulate emissions shall not exceed 1.0 lb/hr and 4.38 tons/yr. Volatile organic compound emissions shall not exceed 0.28 lb/hr and 1.23 tons/yr. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-10 (B)(1).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input.
d.	OAC rule 3745-17-12(N)(1)	The particulate emission limitation specified by this rule is less stringent than

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the particulate emission limitation established pursuant to OAC rules 3745-17-10(B)(1) and 31-05(A)(3).
e.	OAC rule 3745-110-03(B)	See d)(1) below.
f.	40 CFR Part 60, Subpart Dc	See b)(2)a. below.

(2) Additional Terms and Conditions

a. So long as only natural gas is burned, this emissions unit is not subject to the emission limits listed in 40 CFR Part 60, Subpart Dc.

c) Operational Restrictions

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

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) and PTI# P0107746]

d) Monitoring and/or Recordkeeping Requirements

(1) The owner or operator of a small boiler must annually perform a tune-up and maintain, in a permanently bound log book, or other format approved in writing by the director the following information:

a. the date of the last tune-up;

b. the name, title and affiliation of the person who performed the tune-up and made any adjustments; and

c. any other information which the Ohio Environmental Protection agency may require as a condition of approval of any permit for the boiler.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-03(C) and 3745-31-05(A)(3) and PTI# P0107746]

(2) 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
Nitrogen oxide emissions shall not exceed 2.5 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.050 mmcf/hr) by the AP-42 emission factor* for NOx (50 lbs NOx/mmcf for a low NOx burner).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-1

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

b. Emission Limitation:
Nitrogen oxide emissions shall not exceed 10.95 tons/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, if compliance is demonstrated with the hourly emission limitation, it is also in compliance with the annual limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

c. Emission Limitation:
Carbon monoxide emissions shall not exceed 4.2 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon multiplying the maximum hourly gas burning

capacity of the emissions unit (0.050 mmcf/hr) by the AP-42 emission factor* for CO (84 lbs CO/mmcf).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-1

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

d. Emission Limitation:
Carbon monoxide emissions shall not exceed 18.40 tons/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, if compliance is demonstrated with the hourly emission limitation, it is also in compliance with the annual limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

e. Emission Limitation:
Organic compound emissions shall not exceed 0.55 lb/hr.

Applicable Compliance Method:
Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.050 mmcf/hr) by the AP-42 emission factor* for OC (11 lbs OC/mmcf).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

f. Emission Limitation:
Organic compound emissions shall not exceed 2.41 tons/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton.

Therefore, if compliance is demonstrated with the hourly emission limitation, it is also in compliance with the annual limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

g. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 20% opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

h. Emission Limitation:
Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input.

Applicable Compliance Method:
For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.050 mmcf/hr) by the AP-42 emission factor* for natural gas (7.6 lbs particulate/mmcf), and dividing by the maximum hourly heat input capacity of the emissions unit (50 mmBtu/hr).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

i. Emission Limitation:
Particulate emissions shall not exceed 1.0 lb/hr.

Applicable Compliance Method:
For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.050 mmcf/hr) by the AP-42 emission factor* for natural gas (7.6 lbs particulate/mmcf).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

j. Emission Limitation:
Particulate emissions shall not exceed 4.38 tons/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the lb/mmBtu emission limitation by the maximum hourly heat input capacity of the emissions unit (50.0 mmBtu/hr) by 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, if compliance is demonstrated with the hourly emission limitation, it is also in compliance with the annual limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

k. Emission Limitation:
Volatile organic compound emissions shall not exceed 0.28 lb/hr.

Applicable Compliance Method:
Compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.050 mmcf/hr) by the AP-42 emission factor* for VOC (5.5 lbs VOC/million cubic feet).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

l. Emission Limitation:
Volatile organic compound emissions shall not exceed 1.23 tons/yr.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the hourly emission limitation by 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, if compliance is demonstrated with the hourly emission limitation, it is also in compliance with the annual limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) and PTI# P0107746]

g) Miscellaneous Requirements

(1) None.

2. F001, Unloader

Operations, Property and/or Equipment Description:

Rail car unloader material handling operation equipped with a fabric filter baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-07(B)	Visible emissions of fugitive dust from the railcar unloading shall not exceed 20% opacity as a 3-minute average.
c.	OAC rule 3745-17-08(B)(3)(b)	See b)(2)a.
d.	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 30.5 lbs/hr.
e.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2), d)(3) and e)(3) below.

(2) Additional Terms and Conditions

a. The permittee shall minimize or eliminate visible fugitive particulate emissions through the employment of reasonably available control measures (RACM). These measures shall include, but not be limited to, the following:

i. the use of enclosures vented to a baghouse; and

ii. the collection efficiency shall be sufficient to minimize or eliminate visible emissions of fugitive dust at the point(s) of capture to the extent possible with good engineering design.

b. The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

c) Operational Restrictions

(1) The permittee shall operate the baghouse while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for particulate emissions is the pressure drop range for the baghouse.

The CAM performance indicator range as measured by the baghouse pressure drop is specified in d)(2). When the pressure drops are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 7.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform weekly checks for visible emissions of fugitive dust from the non-stack egress points from the building housing this emissions unit. These egress points shall include, but not be limited to: doorways, windows, and roof monitors. 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify the following:

a. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse;

c. each incident of deviation described in a (above) where a prompt investigation was not conducted;

d. each incident of deviation described in a where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in a where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.

[OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C); and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports to the Cleveland DAQ that (a) identify all days during which any visible emissions of fugitive dust were observed from the non-stack egress points from the building housing this emissions unit and (b) describe any corrective actions taken to eliminate the visible 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as

practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emissions 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). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:
Visible emissions of fugitive dust from the railcar unloading shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for the visible emissions shall include any non-stack egress points from the building housing this emissions unit. Such egress points shall include, but are not limited to, doorways, windows, and roof monitors. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1)]

c. Emission Limitation:
Particulate emissions shall not exceed 30.5 lbs/hr.

Applicable Compliance Method:
Compliance may be determined by multiplying the emissions units maximum hourly material handling rate of 20 tons/hr and the combined uncontrolled Ohio EPA RACM emission factors in Table 2.9-1 for feed materials receiving and feed materials transfer to storage (1.5 lbs/ton) and then multiply by (1 - 0.999) where 99.9% is the baghouse removal efficiency.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

3. K012, Varnish Dip 05

Operations, Property and/or Equipment Description:

Varnish dip tank #5 for coating large armatures

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(U)(2)(e)(ii)	See c)(1).

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The maximum daily coating usage for this emissions unit shall not exceed 3 gallons.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-21-09(U)(2)(e)(ii)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for the dip tank:

a. the name and identification number of each coating employed;

b. the volume, in gallons, of each coating employed; and

c. the total volume, in gallons, of all of the coatings employed.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(d)]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any daily record showing that the dip tank employs more than the applicable

maximum daily usage limit. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(e)]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
The maximum daily coating usage for this emissions unit shall not exceed 3 gallons.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

4. K059, Paint Spray Booth 17

Operations, Property and/or Equipment Description:

Paint spray booth #17 for coating of miscellaneous metal parts

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-1767 issued November 25, 1987)	0.85 TPY of VOC emissions The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(C) and 3745-21-09(U).
b.	OAC rule 3745-17-11(C)	See b)(2)a below.
d.	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon, excluding water and exempt solvents.

(2) Additional Terms and Conditions

a. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry

particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(1)]

(2) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(2)(e)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for the coating line:

a. The name and identification number of each coating employed.

b. The VOC content (excluding water and exempt solvents) of each coating, as applied.

c. The number of gallons (excluding water and exempt solvents) of each coating, as applied.

d. The daily VOC emissions from all the coatings employed, in pounds, [i.e., the sum of d)(2)b. times d)(2)c. for each coating employed].

e. The daily volume-weighted average VOC content of all the coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2.

f. The total number of hours this emissions unit was in operation.

g. The average hourly VOC emissions from all coatings employed, in pounds [i.e., the quotient of d)(2)d. divided by d)(2)f.].

Note: If the VOC content of each of the coatings employed during a day is less than 3.5 lbs per gallon, as applied, excluding water and exempt solvents, the daily volume-weighted average VOC content record is not required for that day.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Cleveland Division of Air Quality (Cleveland DAQ) upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)(a)]

(3) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(c)]

(4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(c)]

(5) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

a. the date of the inspection;
b. a description of each/any problem identified and the date it was corrected;
c. a description of any maintenance and repairs performed; and
d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(d) and (f)]

(6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(e),(f), and (g)]

(7) The permittee shall maintain annual records of the total VOC emissions from this emission unit.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland DAQ in writing of any monthly record showing that the VOC content of any coating exceeded the applicable limitation. The notification

shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit annual reports that specify the total emissions of VOC from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C)]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
3.5 lbs of VOC per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirement in d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-1767]

b. Emission Limitation:
0.85 TPY of VOC emissions

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements in d)(1) and d)(3).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-1767]

(2) USEPA Method 24 shall be used to determine the VOC contents of the coatings.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

5. K065, Varnish Dip 12

Operations, Property and/or Equipment Description:

Varnish dip tank #12 for coating of electric motors, equipped with a thermal incinerator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-3133 issued October 9, 1996)	VOC emissions shall not exceed 2.08 lbs/hr and 9.12 TPY Visible particulate emissions shall not exceed 5% opacity, as a six-minute average. See b)(2)a. below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U).
b.	OAC rule 3745-21-09(U)(1)(a)	10.3 pounds of VOC per gallon of coating solids
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(5) e)(2) and e)(6) below.

(2) Additional Terms and Conditions

a. A thermal incinerator control system shall be operated so that a minimum of 93% overall reduction (by weight) of VOC emissions is achieved.

c) Operational Restrictions

(1) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees

Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) PTI# 13-3133 and 40 CFR Part 64]

(2) The permittee shall collect and record the following information for each day for the dip tank and control equipment:

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

b. the pounds of VOC per gallon of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating;

c. the maximum VOC content (in pounds of VOC per gallon of coating solids, as applied) or the daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings (this calculation may be performed at the end of each calendar month);

d. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied (the controlled VOC emission rate shall be calculated using (i) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance with d)(2)c. above and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance)- this calculation may be performed at the end of each calendar month;

e. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit;

f. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance;

g. the total volume of solids from all coatings employed, in gallons- this calculation may be performed at the end of each calendar month;

h. the total VOC emissions from all coatings employed (i.e., the calculated, controlled VOC emissions rate times the total volume of solids from all coatings employed in the line), in pounds per day- this calculation may be performed at the end of each calendar month;

i. the total hours of operation of this emissions unit; and

j. the average hourly VOC emission rate, in pounds per hour (h/i).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(j) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

(3) The permittee shall collect and record the total VOC emissions from all coatings employed, in tons per month, for this emissions unit for the purpose of determining annual VOC emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(4) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

(5) The CAM plan for this emissions unit has been developed for VOC emissions. The CAM performance indicators for VOC emissions is the record keeping program for the emissions unit and its control equipment.

The CAM performance indicator device to continuously monitor the combustion temperature within the thermal incinerator when the emissions unit is in operation is specified in c)(1). When the monitoring requirements are outside of any parameters specified in c)(1) and d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the VOC emission indicator parameters listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing

emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(k)]

(2) The permittee shall submit quarterly temperature deviation (excursion) reports to the Cleveland DAQ that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-31-05(A)(3) PTI# 13-3133 and 40 CFR Part 64]

(3) The permittee shall submit annual reports to the Cleveland DAQ that specify the total emissions of VOC from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(4) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ which include an identification of each day during which the average VOC emissions from the coatings exceeds 2.08 pounds per hour and the actual VOC emission rate for each such day.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

(5) The permittee shall submit semiannual written reports to the Cleveland DAQ 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(6) If the results of monitoring or record keeping data indicate that the VOC emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
10.3 lbs of VOC per gallon of coating solids

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirement in d)(2) and the emission testing specified in f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

b. Emission Limitations:
VOC emissions shall not exceed 2.08 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in d)(2) and the emission testing in specified in f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

c. Emission Limitations:
VOC emissions shall not exceed 9.12 TPY

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in d)(3).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

d. Emission Limitations:
93% overall reduction (by weight) of VOC emissions.

Applicable Compliance Method:
Compliance shall be based upon the emission testing in specified in f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

e. Emission Limitation:
Visible particulate emissions shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance with this emission limitation shall be determined through visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3133]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the allowable VOC emission limitations (lbs of VOC per gallon of solids and lbs of VOC per hour), and to determine the overall control efficiency.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by Cleveland DAQ.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated

January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) USEPA Method 24 shall be used to determine the VOC contents of the coatings.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-04(B)(5)]

g) Miscellaneous Requirements

(1) None.

6. K067, Varnish Dip 11

Operations, Property and/or Equipment Description:

Encapsulation process for coating of printed circuit boards

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-3135 issued August 21, 1996)	Volatile organic compound (VOC) emissions shall not exceed 14.58 TPY from any metal material from coatings and cleanup. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U).
b.	OAC rule 3745-21-09(U)(1)(a)	4.3 lbs VOC/gallon of coating, excluding water and exempt solvents when coating metal parts.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for the coating line when coating metal parts:

a. the name and identification number of each coating employed;

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

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

d. the daily VOC emissions from all the coatings employed, in pounds, [i.e., the sum of d)(1)b. times d)(1)c. for each coating employed];

e. the daily volume-weighted average VOC content of all the coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2;

f. the name of each cleanup material;

g. the VOC content of each cleanup material;

h. the number of gallons of each cleanup material;

i. the daily VOC emissions from all cleanup material (sum of g. x h.); and

j. the total VOC emissions from coating and cleanup (sum of d. + i.).

Note: If the VOC content of each of the coatings employed during a day is less than 4.3 lbs per gallon, as applied, excluding water and exempt solvents, the daily volume-weighted average VOC content record is not required for that day.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(f) and OAC rule 3745-21-09(B)(3)(h)]

(2) The permittee shall calculate and record the total annual VOC emissions from coatings and cleanup materials, [i.e., the sum of the daily VOC emission rates from the coating and clean up materials for the calendar year in d)(1)].

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland DAQ in writing of any daily record showing that the daily volume-weighted average VOC content exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(i) and OAC rule 3745-31-05(A)(3) PTI# 13-3135]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
4.3 lbs VOC/gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirement in d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3135]

b. Emission Limitation:
VOC emissions shall not exceed 14.85 TPY.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirement in d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3135]

(2) USEPA Method 24 or formulation data shall be used to determine the VOC contents of the coatings and cleanup materials.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-04(B)(5)]

g) Miscellaneous Requirements

(1) None.

7. K069, Paint Spray Booth 20

Operations, Property and/or Equipment Description:

Paint spray booth #20 for maintenance dept

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-3470 issued December 29, 1998)	Volatile organic compound (VOC) emissions shall not exceed 79.5 lbs/day or 14.5 TPY. Particulate emissions shall not exceed 2.41 TPY. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B), and 3745-21-09(U)(1)(c).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 0.551 lb/hr. See b)(2)a. below.
d.	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon, excluding water and exempt solvents

(2) Additional Terms and Conditions

a. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface

coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(1) and (2)(b) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

(2) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(2)(e)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each day for this emissions unit:

a. the name and identification number of each coating and cleanup material employed;

b. the volume of each coating employed, in gallons excluding water and exempt solvents;

c. the volume, in gallons, of each cleanup material employed;

d. the VOC content of each cleanup material, in pounds per gallon;

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

f. the daily volume-weighted average VOC content (in pounds of VOC per gallon of coating excluding water and exempt solvents, as applied) of all the coatings. This calculation may be performed at the end of each calendar month; and

g. the total VOC emissions from all coatings and cleanup materials employed, in pounds per day [summation of (b)(e) + (c)(d) for all the coatings and cleanup material. This calculation may be performed at the end of each calendar month.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

(2) The permittee shall collect and record the total VOC emissions from all coatings and cleanup materials employed, in tons, for this emissions unit for the purpose of determining annual VOC emissions.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Cleveland Division of Air Quality (Cleveland DAQ) upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)(a)]

(4) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)]

(5) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)]

(6) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

a. the date of the inspection;
b. a description of each/any problem identified and the date it was corrected;
c. a description of any maintenance and repairs performed; and
d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)(d) and (f)]

(7) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications

made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2) e),(f), and (g) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland DAQ in writing of any daily record showing that the daily volume-weighted average VOC content exceeds the applicable limitation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:
3.5 lbs of VOC per gallon of coating excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirement in d)(1) and using the formula in OAC rule 3745-21-10(B)(9) for C_{VOC},2 for the daily volume-weighted average VOC content.

[Authority for term: OAC rule 3745-77-07(C)(1)]

b. Emission Limitation:
Particulate emissions shall not exceed 0.551 lb/hr.

Applicable Compliance Method:
To determine the actual worst case particulate emissions rate, the following equation shall be used:

E = maximum coating solids usage rate in pounds per hour X (1-TE) X (1-CE)

E = particulate emissions rate (lbs/hr)

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

CE = fractional control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

c. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

d. Emission Limitations:
VOC emissions shall not exceed 79.5 lbs/day or 14.5 TPY of VOC

Applicable Compliance Method:
Compliance shall be based upon the record keeping specified in d)(1) and d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

e. Emission Limitation:
Particulate emissions shall not exceed 2.41 TPY

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

(2) USEPA Method 24 shall be used to determine the VOC contents of the coatings.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

(3) Formulation data or USEPA Method 24 shall be used to determine the VOC contents of the cleanup materials.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-3470]

g) Miscellaneous Requirements

(1) None.

8. K080, Stator Cell Paint Booth

Operations, Property and/or Equipment Description:

Paint spray booth for coating of stators Stator Cell Paint Booth 14C1

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) as effective 11/30/2001 Permit No. P0107761 issued April 20, 2011)	Particulate emissions (PE) shall not exceed 2.41 tons/year. Volatile organic compound (VOC) emissions from the coatings shall not exceed 1.75 lbs/hr and 7.7 tons/year. Volatile organic compound (VOC) emissions from the cleanup material shall not exceed and 0.5 ton/year. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B). See b)(2)b below.
b.	OAC rule 3745-31-05(A)(3)(b) as effective 12/01/06	See b)(2)a. below.
c.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed20% opacity, as a six-minute average, except as provided by rule.
d.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 0.551 lb/hr.
e.	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon, excluding water and exempt solvents

(2) Additional Terms and Conditions

a. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled emissions of VOC and the controlled emissions of PE from this emissions unit since the potential to emit for VOC and PE are each less than ten tons per year taking into account the federally enforceable rule limits from OAC rule 3745-21-09(U)(1)(c) and 3745-17-11(B) for VOC and PE respectively.

b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

(2) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(2)(e)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the name and identification number of each coating employed; and

b. the VOC content, in lbs of VOC per gallon (excluding water and exempt solvents), of each coating, as applied.

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

d. the monthly VOC emissions from all the coatings employed, in pounds, [i.e., the sum of d)(1)b. times d)(1)c. for each coating employed];

e. the total number of hours this emissions unit was in operation;

f. the average hourly VOC emissions from all coatings employed, in pounds [i.e., the quotient of d)(1)d. divided by d)(1)e.];

g. the name of each cleanup material;

h. the VOC content of each cleanup material;

i. the number of gallons of each cleanup material; and

j. the monthly VOC emissions from all cleanup material [i.e., the sum of d)(1)h. times d)(1)i. for each cleanup material employed].

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(f) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

(2) The permittee shall maintain annual records of the VOC emissions from this emission unit for both coatings and cleanup material determined by summing the monthly emissions from d)(1)d. and d)(1)j. above.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

(3) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Cleveland Division of Air Quality (Cleveland DAQ) upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)(a)]

(4) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be

based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(c)]

(5) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(c)]

(6) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

a. the date of the inspection;
b. a description of each/any problem identified and the date it was corrected;
c. a description of any maintenance and repairs performed; and
d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(d) and (f)]

(7) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-17-11(C)(2)(e),(f), and (g) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing a coating VOC content greater than 3.5 pounds VOC per gallon, as applied, excluding water and exempt solvents. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(g) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

(2) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify any daily record showing that the dry particulate filter system was not in

service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following method(s):

a. Emission Limitation:

Visible particulate emissions from any stack serving this emissions unit shall not exceed 20% opacity, as a six-minute average, except as specified by rule.

Applicable Compliance Method:

Compliance with the above visible emission limitation shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Reference Method 9. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

b. Emission Limitation:

Particulate emissions shall not exceed 0.551 lb/hr.

Applicable Compliance Method:

To determine the actual worst case particulate emissions rate, the following equation shall be used:

E = maximum coating solids usage rate in pounds per hour X (1-TE) X (1-CE)

E = particulate emissions rate (lbs/hr)

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

CE = fractional control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

c. Emission Limitation:

Particulate emissions shall not exceed 2.41 tons/year.

Applicable Compliance Method

The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual limitation shall also be demonstrated.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

d. Emission Limitation:
Volatile organic compound (VOC) emissions from the coatings shall not exceed 1.75 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements in d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

e. Emission Limitation:
Volatile organic compound (VOC) emissions from the coatings shall not exceed 7.7 tons/year

Applicable Compliance Method:
The annual emission limitation was established by multiplying the hourly emission rate by 8,760 hours of operation per year and dividing by 2,000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual limitation shall also be demonstrated. Compliance shall also be based upon the record keeping requirements in d)(1) and d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

f. Emission Limitation:
Volatile organic compound (VOC) emissions from the cleanup material shall not exceed 0.5 ton/year.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements in d)(1) and d)(2).

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

g. Emissions Limitation:

3.5 lbs VOC per gallon of coating, as applied, excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be based upon the record keeping specified in d)(1). In accordance with OAC rule 3745-21-04(B)(5), facilities located in Cuyahoga County shall use USEPA Method 24 to determine the VOC contents of the coatings. If, pursuant to section 4.3 of Method 24, 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 cannot be used for a particular coating, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

(2) US EPA Method 24 or formulation data shall be used to determine the VOC contents of the cleanup materials.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the Ohio EPA s Air Toxic Policy was not necessary because the emissions unit s maximum annual emissions for each toxic pollutant will be less than 1.0 ton. OAC Chapter 3745-31 requires a permittee to apply for and obtain a new or modified permit to install prior to making a modification as defined by OAC rule 3745-31-01. The permittee is hereby advised that a new permit to install application would be required for an emissions unit if changes in the composition of the materials or use of new materials would cause the emissions of any pollutant that has a listed Threshold Limit Value (TLV), as documented in the most current version of the American Conference of Governmental Industrial Hygienists (ACGIH s) handbook entitled TLVs and BEIs (Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices), to increase to above 1.0 ton per year.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# P0107761]

9. N002, Gasmac Bake Oven

Operations, Property and/or Equipment Description:

Electric Bake Oven

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-4345 issued October 28, 2004)	Particulate emissions shall not exceed 10.5 tons/year. Visible particulate emissions from the stack shall not exceed 5% opacity as a 6-minute average. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-09.
b.	OAC rule 3745-17-07(A)	The visible particulate emission limitation specified by this rule is less stringent than the visible particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-09	Particulate emissions shall not exceed 0.10 lb per 100 lbs of material charged.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence 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.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-4345]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports to the Cleveland Division of Air Quality (Cleveland DAQ) which (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.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-4345]

f) Testing Requirements

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

a. Emission Limitation:

Particulate emissions shall not exceed 0.10 lb per 100 lbs of material charged.

Applicable Compliance Method:

The following calculation is for the conversion of the allowable emission limitation above to lbs/hr:

allowable emission limitation * max hourly amount of material introduced to the oven

(0.10 lb/ 100 lbs) * (2400 lbs/hr) = 2.4 lbs/hr

Compliance with this emission limitation was demonstrated through mass balance conducted at a similar source at the facility where the material was weighed prior to being introduced to the oven (max of 2400 lbs/hr). The material was then weighed after the heating cycle. The % weight of the dry drawing lubricant applied to the weld wire is 0.2. Based on the results of the weighing, 38% of the dry drawing lubricant material is left to volatilize.

PE rate = (2400 lbs/hr) * (0.2 % or 0.002) * (38% or 0.38) = 1.8 lbs/hr

If required, compliance with this emission limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-4345]

b. Emission Limitation:

Particulate emissions shall not exceed 10.5 tons/year.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-4345]

c. Emission Limitation:

Visible particulate emissions from the stack shall not exceed 5% opacity as a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-31-05(A)(3) PTI# 13-4345]

g) Miscellaneous Requirements

(1) None.

10. P021, Kiln 01

Operations, Property and/or Equipment Description:

Calcining operation, equipped with a 13.5 mmBtu/hr natural gas burner and baghouse for control of particulate emissions

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-4550 issued September 15, 2005)	Natural gas burner emissions: Particulate emissions shall not exceed 0.10 lb/hr and 0.44 tons/yr. Nitrogen oxide (NOx) emissions shall not exceed 1.50 lbs/hr and 6.57 tons/yr. Carbon monoxide (CO) emissions shall not exceed 1.25 lbs/hr and 5.48 tons/yr. Calciner emissions: Particulate emissions shall not exceed 2.5 lbs/hr and 10.95 tons/yr. PM10 emissions shall not exceed 2.0 lbs/hr and 8.76 tons/yr. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-10(B)(1)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		established pursuant to OAC rule 3745-31-05(A)(3).
d.	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).
e.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2), d)(3) and e)(3) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-4550]

(2) The permittee shall burn only natural gas in this emissions unit.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions is the pressure drop range for the baghouse and weekly visible particulate emission checks.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

The CAM performance indicator range as measured by the weekly visible particulate emission checks is specified in d)(3).

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and

prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 8.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the

range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-31-05(A)(3) PTI# 13-4550 and 40 CFR Part 64]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550 and 40 CFR Part 64]

(4) 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across the baghouse did not comply with the requirements specified above.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

(2) The permittee shall submit semiannual written reports to the Cleveland DAQ which (a) identify all days during which any visible particulate emissions were observed from the baghouse 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

(3) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(4) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) 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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A) and 3745-31-05(A)(3) PTI# 13-4550]

b. Emission Limitation:

Particulate emissions shall not exceed 0.10 lb/hr from the natural gas burner.

Applicable Compliance Method:

Compliance with the hourly emission limit may be determined by multiplying the maximum hourly natural gas usage of each emissions unit (0.0135 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2(7/98) emission factor for PM/PM10 (1.9 lbs PM/PM10/mmcf).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

c. Emission Limitation:

Particulate emissions shall not exceed 0.44 tons/yr from the natural gas burner.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

d. Emission Limitation:

Nitrogen oxide (NOx) emissions shall not exceed 1.50 lbs/hr from the natural gas burner.

Applicable Compliance Method:

Compliance with the hourly emission limit may be determined by multiplying the maximum hourly natural gas usage of each emissions unit (0.0135 mmcf/hr) by the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1(7/98) emission factor for NOx (100 lbs NOx/mmcf).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

e. Emission Limitation:

Nitrogen oxide (NOx) emissions shall not exceed 6.57 tons/yr from the natural gas burner.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

f. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 1.25 lbs/hr from the natural gas burner.

Applicable Compliance Method:

Compliance with the hourly emission limit may be determined by multiplying the maximum hourly natural gas usage of each emissions unit (0.0135 mmcf/hr) and the U.S. EPA reference document AP-42, 5th edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-1(7/98) emission factor for CO (84 lbs CO/mmcf).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

g. Emission Limitation:

Carbon monoxide (CO) emissions shall not exceed 5.48 tons/yr from the natural gas burner.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

h. Emission Limitation:

Particulate emissions shall not exceed 2.50 lbs/hr from the calcining operation.

Applicable Compliance Method -

Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

i. Emission Limitation:

Particulate emissions shall not exceed 10.95 tons/yr from the calcining operation.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

j. Emission Limitation:

PM10 emissions shall not exceed 2.0 lbs/hr from the calcining operation.

Applicable Compliance Method:

Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

k. Emission Limitation:

PM10 emissions shall not exceed 8.76 tons/yr from the calcining operation.

Applicable Compliance Method:

The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods shall be employed to demonstrate compliance with the particulate emission limitation and opacity: Methods 1 through 5 and 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-4550]

g) Miscellaneous Requirements

(1) None.

11. P022, Drier 02

Operations, Property and/or Equipment Description:

Fluorspar drier for flux manufacturing, equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 8.61 lbs/hr.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the baghouse while this emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for particulate emissions is the pressure drop range for the baghouse.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified

in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 4.5 to 7.5 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A)]

b. Emission Limitation:
Particulate emissions shall not exceed 8.61 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods shall be employed to demonstrate compliance with the particulate emission limitation and opacity: Methods 1 through 5 and 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

12. P023, Kiln 02

Operations, Property and/or Equipment Description:

Kiln for processing of chemicals, equipped with an Aerodyne cyclone

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule
b.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 1.15 lbs/hr.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2), d)(3) and e)(3) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the Aerodyne cyclone while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions is the secondary blower velocity pressure drop range for the Aerodyne cyclone and weekly visible particulate emission checks.

The CAM performance indicator range as measured by the Aerodyne cyclone pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

The CAM performance indicator range as measured by the weekly visible particulate emission checks is specified in d)(3).

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the secondary blower velocity pressure drop across the Aerodyne cyclone while the emissions unit is in operation, including periods of startup and shutdown. 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 secondary blower velocity pressure drop across the Aerodyne cyclone on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective

action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the Aerodyne cyclone is 0.5 to 5.5 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the secondary air flow across the Aerodyne cyclone did not comply with the range established during the most recent emission test that demonstrated that the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit semiannual written reports to the Cleveland DAQ which (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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A)]

b. Emission Limitation:
Particulate emissions shall not exceed 1.15 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods shall be employed to demonstrate compliance with the particulate emission limitation and opacity: Methods 1 through 5 and 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

13. P025, Drier 03

Operations, Property and/or Equipment Description:

Drier for wet ore, equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule
b.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 4.03 lbs/hr.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the baghouse while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions is the pressure drop range for the baghouse.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified

in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 2.0 to 7.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A)]

b. Emission Limitation:
Particulate emissions shall not exceed 4.03 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods shall be employed to demonstrate compliance with the particulate emission limitation and opacity: Methods 1 through 5 and 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

14. P026, Kiln 03

Operations, Property and/or Equipment Description:

Kiln #3 direct-fired equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-1136 issued November 3, 1983)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-07(A) and 3745-17-11(B).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)	Particulate emissions shall not exceed 4.10 lbs/hr.
d.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2), d)(3) and e)(3) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the baghouse while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions are the pressure drop range for the baghouse and weekly visible particulate emission checks.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

The CAM performance indicator range as measured by the weekly visible particulate emission checks is specified in d)(3).

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period

of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 2.0 to 6.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

e) Reporting Requirements

(1) The permittee shall submit semiannual written reports to the Cleveland Division of Air Quality (Cleveland DAQ) which (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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland DAQ that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A)]

b. Emission Limitation:
Particulate emissions shall not exceed 4.10 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods shall be employed to demonstrate compliance with the particulate emission limitation and opacity: Methods 1 through 5 and 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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).

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

15. P031, R&D Engine Test

Operations, Property and/or Equipment Description:

R&D engine test stand for diesel and gasoline powered welders (not used to operate mechanical equipment)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-3136 issued August 28, 1996)	Annual emissions from the combustion of gasoline and diesel fuel in this emissions unit shall not exceed the following limitations: 2.03 tons particulate emissions/yr; 1.83 tons of sulfur dioxide/yr; 29.97 tons of nitrogen oxides/yr; and 16.80 tons of organic compounds/yr.
b.	OAC rule 3745-17-07(A)	None, see b)(2)b.
c.	OAC rule 3745-17-11(B)(1)	None, see b)(2)a.
d.	OAC rule 3745-18-06	Exempt pursuant to OAC rule 3745-18-06(B).

(2) Additional Terms and Conditions

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.

b. 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.

c. No short-term emission limitations were established in PTI# 13-3136. The annual emission limitations specified in b)(1) reflect the emissions unit's potential to emit for these pollutants; therefore, there are no additional monitoring, record keeping or reporting requirements associated with these emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall submit annual reports to the Cleveland Division of Air Quality (Cleveland DAQ) which specify the total emissions of particulates, sulfur dioxide, nitrogen oxides, and organic compounds from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: OAC rules 3745-77-07(C)(1)]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:
2.03 tons particulate emissions/yr
1.83 tons of sulfur dioxide/yr
29.97 tons of nitrogen oxides/yr
16.80 tons of organic compounds/yr

Applicable Compliance Methods:
The annual emission limitations were established by multiplying the worst case hourly emission rates by 8760 hours per year and dividing the total by 2000 lbs/ton. (The maximum uncontrolled hourly emissions were determined using AP-42 emission factors* for gasoline and diesel industrial engines and a maximum fuel usage of 11.3 gallons per hour).

*AP-42, Fifth Edition, Supplement B (10-96), Table 3.3-1

If required, the permittee shall demonstrate compliance with these emission limitations in accordance with the appropriate approved method(s) found in 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03136]

g) Miscellaneous Requirements

(1) None.

16. P034, Strip Etch Strip Line

Operations, Property and/or Equipment Description:

Ammonia etchant strip line with condensor

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-3490 issued February 18, 1999)	Ammonia emissions shall not exceed 0.5 lb/hr* and 2.2 tons/yr. See b)(2)a. below.

(2) Additional Terms and Conditions

a. The lb/hr and TPY emission limitations are based on the emissions unit's potential to emit. Therefore, no record keeping and/or reporting requirements are necessary to ensure compliance with these emission limitations.

c) Operational Restrictions

(1) The permittee shall operate the condenser whenever this emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-03490]

(2) The average temperature of the exhaust gases from the condenser, for any 3-hour block of time, shall not be greater than 120 degrees Fahrenheit.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-03490]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature of the exhaust gases from the condenser when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within + or - 1 percent of the temperature being measured or + or - 5

degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

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

a. the average temperature of the exhaust gases from the condenser during each of the eight 3-hour blocks of time during the day; and

b. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03490]

(2) The permittee shall maintain records of the monthly and annual etchant usage for the strip line, in gallons.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03490]

e) Reporting Requirements

(1) The permittee shall submit quarterly temperature deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all 3-hour blocks of time during which the average temperature of the exhaust gases from the condenser exceeded the temperature limitation specified above.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03490]

(2) The permittee shall submit annual reports to the Cleveland DAQ which specify the total emissions of ammonia from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emission Limitation:
Ammonia emissions shall not exceed 0.5 lb/hr.

Applicable Compliance Method:

Compliance shall be determined by multiplying the hourly etchant usage for the strip line, in gallons, by the permittee supplied emission factor of 0.1488 lb ammonia/gallon and multiplying by 0.5 (estimated 50% control efficiency for the condensor).

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 1-4 and Modified Method 5. Alternative EPA approved test methods may be used with prior approval from the Ohio EPA.

Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03490]

b. Emission Limitation:
Ammonia emissions shall not exceed 2.2 tons/yr.

Applicable Compliance Method:
Compliance shall be determined by multiplying the annual etchant usage for the strip line, in gallons, by the permittee supplied emission factor of 0.1488 lb ammonia/gallon, multiplying by 0.5 (estimated 50% control efficiency for the condensor) and dividing by 2000 lbs/ton.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03490]

g) Miscellaneous Requirements

(1) None.

17. P035, Engine Welder Burn-In

Operations, Property and/or Equipment Description:

Engine test stand for gasoline powered welders (not used to operate mechanical equipment)

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-3604 issued November 10, 1999)	Emissions from the combustion of gasoline in this emissions unit shall not exceed the following limitations: Nitrogen oxide emissions shall not exceed 0.318 lb/hr and 1.39 tons/yr. Organic compound emissions shall not exceed 0.43 lb/hr and 1.89 tons/yr. Carbon monoxide emissions shall no exceed 12.96 lbs/hr and 55.6 tons/yr. Particulate emissions shall not exceed 0.08 ton/yr.
b.	OAC rule 3745-17-07(A)	None, see b)(2)b.
c.	OAC rule 3745-17-11(B)(1)	None, see b)(2)a.
d.	OAC rule 3745-18-06	Exempt pursuant to OAC rule 3745-18-06(B).

(2) Additional Terms and Conditions

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.

b. 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.

c. The emission limitations specified in b)(1) reflect the emissions unit's potentials to emit for these pollutants; therefore, there are no additional monitoring, record keeping or reporting requirements associated with these emission limitations.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

e) Reporting Requirements

(1) The permittee shall submit annual reports to the Cleveland Division of Air Quality (Cleveland DAQ) which specify the total emissions of nitrogen oxides, organic compounds carbon monoxide, and particulate emissions from this emissions unit for the previous calendar year. The reports shall be submitted by April 15 of each year. This reporting requirement may be satisfied by including and identifying the specific emission data for this emissions unit in the annual Fee Emission Report.

[Authority for term: OAC rules 3745-77-07(C)(1)] and 3745-31-05(A)(3) PTI #13-03604]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
Nitrogen oxide emissions shall not exceed 0.318 lb/hr and 1.39 tons/yr.

Applicable Compliance Method:
The maximum uncontrolled hourly emissions were determined using the AP-42 emission factor* (0.110 lb NOx/hp-hr) for gasoline industrial engines and the maximum operating rate of 29 hp-hrs/hr. The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

*AP-42, Fifth Edition, Supplement B (10-96), Table 3.3-1

If required, the permittee shall demonstrate compliance with the hourly emission

limitation in accordance with method(s) 1 through 4 and 7 found in 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI #13-03604]

b. Emission Limitation:

Organic compound emissions shall not exceed 0.43 lb/hr and 1.89 tons/yr.

Applicable Compliance Method:
The maximum uncontrolled hourly emissions were determined using the AP-42 emission factor* (0.015 lb OC/hp-hr) for gasoline industrial engines and the maximum operating rate of 29 hp-hrs/hr. The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

*AP-42, Fifth Edition, Supplement B (10-96), Table 3.3-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with method(s) 1 through 4 and 25 or 25A found in 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI #13-03604]

c. Emission Limitation:

Carbon monoxide emissions shall not exceed 12.96 lbs/hr and 55.6 tons/yr.

Applicable Compliance Method:
The maximum uncontrolled hourly emissions were determined using the AP-42 emission factor* (0.439 lb CO/hp-hr) for gasoline industrial engines and the maximum operating rate of 29 hp-hrs/hr). The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

*AP-42, Fifth Edition, Supplement B (10-96), Table 3.3-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with method(s) 1 through 4 and 10 found in 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI #13-03604]

d. Emission Limitation:

Particulate emissions shall not exceed 0.08 ton/yr.

Applicable Compliance Method:
The maximum uncontrolled hourly emissions were determined using the AP-42 emission factor* (0.1 lb PE/mmBtu x 2.544 Btu/hp-hr) for gasoline industrial engines and the maximum operating rate of 29 hp-hrs/hr. The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

*AP-42, Fifth Edition, Supplement B (10-96), Table 3.3-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation in accordance with method(s) 1 through 5 found in 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI #13-03604]

g) Miscellaneous Requirements

(1) None.

18. P036, Oven 12

Operations, Property and/or Equipment Description:

14.5 mmBtu/hr natural gas fired burner train for oven N in Dept 24

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-03706 issued June 14, 2000)	Nitrogen oxide emissions shall not exceed 1.45 lbs/hr and 6.35 tons/yr. Carbon monoxide emissions 1.22 lbs/hr and 5.34 tons/yr. Particulate emissions shall not exceed 1.27 tons/yr. Visible particulate emissions shall not exceed 5% opacity as a six minute average. The requirements of this rule include compliance with the requirements of OAC rules 3745-17-10(B) and 3745-21-08(B).
b.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb of per million Btu actual heat input.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

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

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) PTI# 13-03706]

d) Monitoring and/or Recordkeeping 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03706]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03706]

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
Particulate emissions shall not exceed 0.020 lb of per million Btu actual heat input.

Applicable Compliance Method:
Compliance with the lb/mmBtu emission limitation may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0145 mmcu.ft/hr) by the AP-42 emission factor* for particulates (1.9 lbs particulates/mmcu.ft) and divide by the maximum hourly heat input capacity (14.5 mmBtu/hr) of the emissions unit.

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03706]

b. Emission Limitation:
Particulate emissions shall not exceed 1.27 tons/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the lb/mmBtu emission limitation by the maximum hourly heat input capacity of the emissions unit (14.5 mmBtu/hr) by 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, provided compliance is maintained with the lb/mmBtu limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03706]

c. Emission Limitation:
Nitrogen oxide emissions shall not exceed 1.45 lbs/hr.

Applicable Compliance Method:
Compliance with the hourly emission limitation may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0145 mmcu.ft/hr) by the AP-42 emission factor* for NOx (100 lbs NOx/million cubic feet).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI # 13-03706]

d. Emission Limitation:
Nitrogen oxide emissions shall not exceed 6.35 tons/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI # 13-03706]

e. Emission Limitation:
Carbon monoxide emissions shall not exceed 1.22 lbs/hr.

Applicable Compliance Method:
Compliance with the hourly emission limitation may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0145 mmcu.ft/hr) by the AP-42 emission factor* for CO (84 lbs CO/million cubic feet).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03706]

f. Emission Limitation:
Carbon monoxide emissions shall not exceed 5.34 tons/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03706]

g. Emission Limitation:
Visible particulate emissions shall not exceed 5% opacity as a six minute average.

Applicable Compliance Method:
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) PTI# 13-03706]

g) Miscellaneous Requirements

(1) None.

19. P037, #1 Roll Crusher Line

Operations, Property and/or Equipment Description:

2.5 TPH #1 roll crusher line for crushing and sizing of mineral alloys equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-03711 issued December 14, 2000)	Particulate emissions shall not exceed 0.9 lb/hr and 3.9 tons/year. The requirements of this rule include compliance with the requirements of OAC rule 3745-17-07(A)(1).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(1)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the baghouse while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for particulate emissions is the pressure drop range for the baghouse.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination

and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 2.0 to 8.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-03(A)(3) PTI#13-03711 and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-03(A)(3) PTI#13-03711)]

(2) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-07(A) and 3745-31-03(A)(3) PTI#13-03711)]

b. Emission Limitation:
Particulate emissions shall not exceed 0.9 lb/hr.

Applicable Compliance Method:

Compliance with this emission limit may be based on an emission factor of 0.34 pound of particulate emissions per ton of raw material processed which was established through stack testing of the source to arrive at the lb/hr emission rate. These stack tests were performed on September 14, 2000 at a process weight rate of 2000 pounds per hour with an emission rate of 0.34 pound per hour. The emission factor may be used to demonstrate compliance with the hourly allowable emission rate by multiplying the actual process weight rate (tons per hour) by the 0.34 pound particulate emissions per ton of materials processed emission factor to determine the pound particulate emissions per hour.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-03(A)(3) PTI#13-03711)]

c. Emission Limitation:
Particulate emissions shall not exceed 3.9 tons/year.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-03(A)(3) PTI#13-03711)]

g) Miscellaneous Requirements

(1) None.

20. P039, #4 Ball Mill

Operations, Property and/or Equipment Description:

#4 Ball Mill operation for sizing of Bauxite material equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
b.	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 6.50 lbs/hr.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the baghouse while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for particulate emissions is the pressure drop range for the baghouse.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified

in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 7.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emissions 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). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A)]

b. Emission Limitation:
Particulate emissions shall not exceed 6.50 lbs/hr.

Applicable Compliance Method:
Compliance with the hourly emission limitation may be determined through the use of the material handling emission factor for bauxite manufacturing (1.1 lbs/ton) which is multiplied by the maximum production rate for the emissions unit (1.99 tons/hr) and (1-0.999) which is the 99.9% baghouse removal efficiency.

*AP-42, Fifth Edition, Supplement D (1/95), Table 11.24-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)]

g) Miscellaneous Requirements

(1) None.

21. P040, Sweco

Operations, Property and/or Equipment Description:

Sweco operation for sizing of solid chemical with a max PWR of 60,000 lb/hr equipped with a fabric filter baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-03778 issued June 7, 2001)	Particulate emissions shall not exceed 0.45 lb/hr and 1.97 tons/year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
c.	OAC rule 3745-17-11(B)(1)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall operate the baghouse while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for particulate emissions is the pressure drop range for the baghouse.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. 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 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination

and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1.0 to 7.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-03(A)(3) and PTI#13-03778 and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-03(A)(3) and PTI#13-03778)]

(2) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-07(A), 3745-31-03(A)(3) and PTI#13-03778)]

b. Emission Limitation:
Particulate emissions shall not exceed 0.45 lb/hr.

Applicable Compliance Method:
Compliance with the hourly emission limit may be based on use of the U.S. EPA database, FIRE 6.22 emission factor for Stone Quarry Processing secondary screening (0.015 lb/ton) multiplied by the maximum process rate for the emissions unit (30 tons/hr) and multiplied by (1-0.99) to account for the 99%, by weight, design control efficiency of the baghouse.

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-03(A)(3) and PTI#13-03778)]

c. Emission Limitation:
Particulate emissions shall not exceed 1.97 tons/year.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-03(A)(3) and PTI#13-03778)]

g) Miscellaneous Requirements

(1) None.

22. P902, Kiln 05

Operations, Property and/or Equipment Description:

Rotary kiln A for production of granular flux, equipped with two baghouses

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-12(N)(4)	Particulate emissions shall not exceed 2.4 lbs/hr.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. All particulate emissions from this emissions unit shall be vented to the baghouses.

c) Operational Restrictions

(1) The permittee shall operate the baghouses at all times while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for particulate emissions is the pressure drop range for baghouse#1 and baghouse#2.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified

in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across baghouse#1 and baghouse#2 while the emissions unit is in operation, including periods of startup and shutdown. 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 baghouse#1 and baghouse#2 on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse#1 is 0.5 to 8 inches of water.

The acceptable range for the pressure drop across the baghouse#2 is 0.5 to 8 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across baghouse #1 did not comply with the allowable range specified above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland DAQ that identify all periods of time during which the pressure drop across baghouse #2 did not comply with the allowable range specified above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A)]

b. Emission Limitation:
Particulate emissions shall not exceed 2.4 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods and procedures shall be employed to demonstrate compliance with the particulate emission limitation and opacity: Methods 1 through 5 and 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

23. P904, Kiln 07

Operations, Property and/or Equipment Description:

Kiln C for production of granular flux, equipped with a baghouse

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)	Visible particulate emissions shall not exceed 20% opacity as a six-minute average, except as provided by rule.
b.	OAC rule 3745-17-12(N)(4)	Particulate emissions shall not exceed 2.4 lbs/hr.
c.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. All particulate emissions from this emissions unit shall be vented to the baghouse.

c) Operational Restrictions

(1) The permittee shall operate the baghouse at all times while the emissions unit is in operation.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for particulate emissions is the pressure drop range for the baghouse.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified

in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate, and maintain equipment to continuously monitor the pressure drop across the baghouse while the emissions unit is in operation, including periods of startup and shutdown. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 2.0 to 8.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
Visible particulate emissions shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:
Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-07(A)]

b. Emission Limitation:
Particulate emissions shall not exceed 2.4 lbs/hr.

Applicable Compliance Method:
Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-17-11(B)]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods and procedures shall be employed to demonstrate compliance with the particulate emission limitation and opacity: Methods 1 through 5 and 9 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

24. P910, "B" Flux Kiln

Operations, Property and/or Equipment Description:

Flux Kiln B equipped with a primary baghouse, fluidized bed with a secondary baghouse and HEPA filter that will exhaust into the building.

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) d)(4) through d)(7).

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (Permit No. P0107753 issued April 20, 2011)	Particulate emissions shall not exceed 2.4 lbs/hr and 10.51 tons/year. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1).
b.	OAC rule 3745-31-05(A)(3) as effective 11/30/2001	Nitrogen oxide (NOx) emissions shall not exceed 1.35 lbs/hr and 5.91 tons/year. Carbon monoxide (CO) emissions shall not exceed 1.13 lbs/hr and 4.95 tons/year. See b)(2)b. below.
c.	OAC rule 3745-31-05(A)(3)(b) as effective 12/01/06	See b)(2)a. below.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-11(B)	The particulate emission limitation specified by this rule is less stringent than the particulate emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
f.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(1), d)(2) and e)(2) below.

(2) Additional Terms and Conditions

a. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the uncontrolled emissions of NOx and CO from this emissions unit since the potential to emit for NOx and CO are less than ten tons per year.

b. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

c) Operational Restrictions

(1) The permittee shall operate a primary baghouse at all times while the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A(3) PTI# P0107753]

(2) The permittee shall operate a secondary baghouse with a HEPA filter that exhausts internally at all times while the emissions unit is in operation.

[Authority for term: OAC rules 3745-77-07(A)(1)]

(3) The permittee shall only burn natural gas during the hot kiln mix process.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A(3) PTI# P0107753]

d) Monitoring and/or Recordkeeping Requirements

(1) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicator for particulate emissions is the pressure drop range for the primary baghouse.

The CAM performance indicator range as measured by the baghouse pressure drops is specified in d)(2). When the pressure drops are outside of the indicator range specified in d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the particulate emission indicator ranges listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(2) The permittee shall properly operate and maintain equipment to continuously monitor the pressure drop across the baghouses while the emissions unit is in operation, including periods of startup and shutdown. 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 baghouses on a daily basis.

Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination

and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouses is 1.0 to 8.0 inches of water.

This range is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Cleveland Division of Air Quality. The permittee may request revisions to the range based upon information obtained during future particulate emission tests that demonstrate compliance with the allowable particulate emission rate for this emissions unit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a minor permit modification.

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-31-05(A(3) PTI# P0107753 and 40 CFR Part 64]

(3) For each day during which the permittee burns a fuel other than natural gas during the hot kiln mix process, the permittee shall maintain a record of the type and quantity of fuel burned.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

(4) The permit to install for this/these emissions unit(s) P910 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee in the permit application. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN 3.0, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "**X**" hours per day and "**Y**" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/X x 5/Y = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Manganese

TLV (mg/m^3): 0.20

Maximum Hourly Emission Rate (lb/hr): 0.225

Predicted 1-hour Maximum Ground-Level Concentration (µg/m3): 2.14

MAGLC ($\mu g/m^3$): 4.76

Toxic Contaminant: Aluminum Oxide

TLV (mg/m3): 10.0

Maximum Hourly Emission Rate (lb/hr): 0.741

Predicted 1-hour Maximum Ground-Level Concentration (µg/m3): 6.97

MAGLC (µg/m3): 238

The permittee, has demonstrated that emissions of Manganese and Aluminum Oxide, from emissions unit(s) P910, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw

material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

(5) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification" or if a new toxic is emitted, or the modeled toxic(s) is/are expected to exceed the previous modeled level(s), then the permittee shall apply for and obtain a final permit-to-install prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit-to-install application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and may require the permittee to submit a permit-to-install application for the increased emissions.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

(6) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s)

b. modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

c. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

d. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

e. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

(7) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum groundlevel concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

e) Reporting Requirements

(1) The permittee shall submit quarterly pressure drop deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) that identify all periods of time during which the pressure drop across baghouses did not comply with the allowable range specified above.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

(2) If the results of monitoring or record keeping data indicate that the particulate emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify each day when a fuel other than natural gas was burned during the hot kiln mix process. Each report shall be submitted within 30 days after the deviation occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

f) Testing Requirements

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

a. Emission Limitation:

Particulate emissions shall not exceed 2.4 lbs/hr.

Applicable Compliance Method

Compliance shall be based upon the results of the emission testing specified in f)(2).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

b. Emission Limitation:

Particulate emissions shall not exceed 10.51 TPY.

Applicable Compliance Method

The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

c. Emission Limitation:

Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method

Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

d. Emission Limitation:

NOx emissions shall not exceed 1.35 lbs/hr.

Applicable Compliance Methods:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0135 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while firing natural gas.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

e. Emission Limitation:

NOx emissions shall not exceed 5.91 tons/year.

Applicable Compliance Method(s):

The ton per year limitation was developed by multiplying the hourly NOx emission rate by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, compliance with the annual emission limitation shall be demonstrated provided compliance is maintained with the lb/hr limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

f. Emission Limitation:

CO emissions shall not exceed 1.13 lbs/hr.

Applicable Compliance Methods:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mm cu. ft. by the emissions unit's maximum hourly natural gas firing rate (0.0135 mm cu. ft./hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lbs/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while firing natural gas.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

g. Emission Limitation:

CO emissions shall not exceed 4.95 tons/year.

Applicable Compliance Method(s):

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, compliance with the annual emission limitation shall be demonstrated provided compliance is maintained with the lb/hr limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the particulate emission limitation and opacity.

The following test methods and procedures shall be employed to demonstrate compliance with the particulate emission and opacity limitation: Methods 1 through 5 of 40 CFR Part 60, Appendix A and the procedures specified in OAC rule 3745-17-03(B)(10) for particulates and Method 9 of 40 CFR Part 60, Appendix A for opacity.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# P0107753]

g) Miscellaneous Requirements

(1) None.

25. Emissions Unit Group -12 mmBtu/hr gas dryers: P048, P049, P050, P051, P052, P053, P054,

EU ID	Operations, Property and/or Equipment Description
P048	12 mmBtu/hr natural gas fired B line dryer
P049	12 mmBtu/hr natural gas fired D line dryer
P050	12 mmBtu/hr natural gas fired E line dryer
P051	12 mmBtu/hr natural gas fired F line dryer
P052	12 mmBtu/hr natural gas fired H line dryer
P053	12 mmBtu/hr natural gas fired L line dryer
P054	12 mmBtu/hr natural gas fired M line dryer

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-03792 issued March 15, 2001)	Nitrogen oxide emissions shall not exceed 1.18 lbs/hr and 5.17 tons/yr. Carbon monoxide emissions shall not exceed 0.99 lb/hr and 4.34 tons/yr. Volatile organic compound emissions shall not exceed 0.064 lb/hr and 0.28 ton/yr. Particulate emissions shall not exceed 1.05 tons/yr. The requirements of this rule include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-17-10(B)(1).
b.	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per million Btu actual heat input.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

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

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A(3) PTI# 13-03792]

d) Monitoring and/or Recordkeeping 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

f) Testing Requirements

(1) Compliance with the emission limitation(s) in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:
Particulate emissions shall not exceed 0.020 lb per million Btu actual heat input.

Applicable Compliance Method:
Compliance with the lb/mmBtu emission limitation may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0117 mmcu.ft/hr) by the AP-42 emission factor* for particulates (1.9 lbs particulates/mmcu.ft) and dividing by the maximum hourly heat input capacity of the emissions unit (12.0 mmBtu/hr).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-10(B)(1) and 3745-31-05(A(3) PTI# 13-03792]

b. Emission Limitation:
Particulate emissions shall not exceed 1.05 tons/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the lb/mmBtu emission limitation by the maximum hourly heat input capacity of the emissions unit (12.0 mmBtu/hr) by 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, provided compliance is maintained with the lb/mmBtu limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-10(B)(1) and 3745-31-05(A(3) PTI# 13-03792]

c. Emission Limitation:
Nitrogen oxide emissions shall not exceed 1.18 lbs/hr.

Applicable Compliance Method:
Compliance with the hourly emission limitation may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0117 mmcu.ft/hr) by the AP-42 emission factor* for NOx (100 lbs NOx/million cubic feet).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

d. Emission Limitation:
Nitrogen oxide emissions shall not exceed 5.17 tons/yr

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

e. Emission Limitation:
Carbon monoxide emissions shall not exceed 0.99 lb/hr.

Applicable Compliance Method:
Compliance with the hourly emission limitation may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0117 mmcu.ft/hr) by the AP-42 emission factor* for CO (84 lbs CO/million cubic feet).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-1

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

f. Emission Limitation:
Carbon monoxide emissions shall not exceed 4.34 tons/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

g. Emission Limitation:
Volatile organic compound emissions shall not exceed 0.064 lb/hr.

Applicable Compliance Method:
Compliance with the hourly emission limitation may be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.0117 mmcu.ft/hr) by the AP-42 emission factor* for VOC (5.5 lbs VOC/million cubic feet).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with the hourly emission limitation through emission testing performed in accordance with Methods 1-4 and 25 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

h. Emission Limitation:
Volatile organic compound emissions shall not exceed 0.28 ton/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-03792]

i. Emission Limitation:
Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:
Compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03 (B)(1) using the methods and procedures specified in USEPA Reference Method 9. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-07(A) and 3745-31-05(A(3) PTI# 13-03792]

g) Miscellaneous Requirements

(1) None.

26. Emissions Unit Group -36 mmBtu/hr boilers: B011, B012,

EU ID	Operations, Property and/or Equipment Description
B011	36 mmBtu/hr natural gas-fired boiler
B012	36 mmBtu/hr natural gas-fired boiler

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-2932 issued May 17, 1995)	Nitrogen oxide (NOx) emissions shall not exceed 0.1 lb per mmBtu actual heat input (This limitation is equivalent to 3.6 lbs/hr of NOx emissions.) Nitrogen oxide (NOx) emissions shall not exceed 15.77 TPY. Particulate emissions shall not exceed 3.15 TPY. Opacity shall not exceed 5%, as a six-minute average, except for one six-minute period in any hour when up to 27% is permissible. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-10(B).
b.	OAC rule 3745-17-07(A)	The visible emission limitation specified by this rule is less stringent than the visible emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
c.	OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.020 lb per million Btu actual heat input.
d.	40 CFR Part 60, Subpart Dc	See b)(2)a.
e.	OAC rule 3745-110-03(B)	See d)(2)

(2) Additional Terms and Conditions

a. So long as only natural gas is burned, this emissions unit is not subject to the emission limits listed in 40 CFR Part 60, Subpart Dc.

c) Operational Restrictions

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

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A(3) PTI#13-2932]

d) Monitoring and/or Recordkeeping 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI#13-2932]

(2) The owner or operator of a small boiler must annually perform a tune-up and maintain, in a permanently bound log book, or other format approved in writing by the director the following information:

a. the date of the last tune-up;

b. the name, title and affiliation of the person who performed the tune-up and made any adjustments; and

c. any other information which the Ohio Environmental Protection agency may require as a condition of approval of any permit for the boiler.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-110-03(C)]

e) Reporting Requirements

(1) The permittee shall submit deviation (excursion) reports to the Cleveland Division of Air Quality (Cleveland DAQ) 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.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI#13-2932]

f) Testing Requirements

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

a. Emission Limitation:
Particulate emissions shall not exceed 0.020 lb per mmBtu actual heat input.

Applicable Compliance Method:
For the use of natural gas, compliance shall be based upon multiplying the maximum hourly gas burning capacity of the emissions unit (0.036 mmcu.ft/hr) by the AP-42 emission factor* for natural gas (1.9 lbs particulate/mmcu.ft), and dividing by the maximum hourly heat input capacity of the emissions unit (36 mmBtu/hr).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-2

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-5 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-10(B)(1) and 3745-31-05(A(3) PTI#13-2932]

b. Emission Limitation:
Particulate emissions shall not exceed 3.15 tons/yr.

Applicable Compliance Method:
The annual emission limitation was established by multiplying the lb/mmBtu emission limitation by the maximum hourly heat input capacity of the emissions unit (36.0 mmBtu/hr) by 8,760 hours per year and dividing by 2,000 pounds per ton. Therefore, provided compliance is maintained with the lb/mmBtu limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1), 3745-17-10(B)(1) and 3745-31-05(A(3) PTI# 13-02932]

c. Emission Limitation:
NOx emissions shall not exceed 0.1 lb of per mmBtu actual heat input. This limitation is equivalent to 3.6 lbs/hr of NOx emissions.

Applicable Compliance Method:
Compliance shall be determined by multiplying the AP-42 emission factor* for natural gas (32 lbs/mmcu.ft) by the maximum hourly gas burning capacity (0.036 mmcu.ft/hr) of the emissions unit and dividing by the maximum heat input capacity of the boiler (36 mmBtu/hr).

*AP-42, Fifth Edition, Supplement D (7-98), Table 1.4-1

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1-4 and 7 of 40 CFR Part 60, Appendix A.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI#13-2932]

d. Emission Limitation:
Nitrogen oxide emissions shall not exceed 15.77 tons/yr

Applicable Compliance Method:
The annual emission limitation was established by multiplying the pound per hour allowable for each pollutant by the maximum operating schedule of 8760 hours per year and dividing by 2000 pounds per ton. Therefore, provided compliance is maintained with the pounds per hour limitation, compliance with the annual emission limitation shall also be demonstrated.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI# 13-02932]

e. Emission Limitation:
Visible particulate emissions shall not exceed 5% opacity as a six-minute average, except for one six-minute period in any hour when up to 27% is permissible.

Applicable Compliance Method:
Compliance shall be determined by visible emission observations performed in accordance with USEPA Reference Method 9. This compliance method shall be used whenever a compliance determination is warranted.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A(3) PTI#13-2932]

g) Miscellaneous Requirements

(1) None.

27. Emissions Unit Group –paint spray booths K026, K031

Operations, Property and/or Equipment Description

K026 int spray booth #3 for coating of welder case parts

K031 paint spray booth #5 for coating metal armatures

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI# 13-1025 issued January 7, 1983)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rules 3745-17-11(C) and 3745-21-09(U).
b.	OAC rule 3745-17-11(C)	See b)(2)a. below.
c.	OAC rule 3745-21-09(U)(1)(c)	3.5 pounds of VOC per gallon, excluding water and exempt solvents

(2) Additional Terms and Conditions

a. On February 1, 2008, OAC rule 3745-17-11 was revised to include paragraph (C), pertaining to control requirements for particulate emissions from surface coating processes. These control requirements and the associated operational restrictions, monitoring, record keeping, and reporting requirements contained in this permit shall become federally enforceable on the date the U.S. EPA approves paragraph (C) of OAC rule 3745-17-11 as a revision to the Ohio State Implementation Plan.

c) Operational Restrictions

(1) The permittee shall operate the dry filtration system for the control of particulate emissions whenever this emissions unit is in operation and shall maintain the dry particulate filter in accordance with the manufacturer's recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(1) and (2)(b)]

(2) In the event the particulate filter system is not operating in accordance with the manufacturer's recommendations, instructions, or operating manual, with any modifications deemed necessary by the permittee, the control device shall be expeditiously repaired or otherwise returned to these documented operating conditions.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-17-11(C)(2)(e)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month for this emissions unit:

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

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall maintain documentation of the manufacturer's recommendations, instructions, or operating manuals for the dry particulate filter, along with documentation of any modifications deemed necessary by the permittee. These documents shall be maintained at the facility and shall be made available to the Cleveland Division of Air Quality (Cleveland DAQ) upon request

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)(a)]

(3) The permittee shall conduct periodic inspections of the dry particulate filter to determine whether it is operating in accordance with the manufacturer's recommendations, instructions, or operating manuals with any modifications deemed necessary by the permittee or operator. These inspections shall be performed at a frequency that shall be based upon the recommendation of the manufacturer and the permittee shall maintain a copy of the manufacturer's recommended inspection frequency and it shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)]

(4) In addition to the recommended periodic inspections, not less than once each calendar year the permittee shall conduct a comprehensive inspection of the dry particulate filter while the emissions unit is shut down and perform any needed maintenance and repair to ensure that it is operated in accordance with the manufacturer's recommendations.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)]

(5) The permittee shall document each inspection (periodic and annual) of the dry particulate filter system and shall maintain the following information:

a. the date of the inspection;
b. a description of each/any problem identified and the date it was corrected;
c. a description of any maintenance and repairs performed; and
d. the name of person who performed the inspection.

These records shall be maintained at the facility for not less than five years from the date the inspection and any necessary maintenance or repairs were completed and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2)(d) and (f)]

(6) The permittee shall maintain records that document any time periods when the dry particulate filter was not in service when the emissions unit(s) was/were in operation, as well as, a record of all operations during which the dry particulate filter was not operated according to the manufacturer's recommendations with any documented modifications made by the permittee. These records shall be maintained for a period of not less than five years and shall be made available to the Cleveland DAQ upon request.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC 3745-17-11(C)(2) e),(f), and (g)]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland DAQ in writing of any monthly record showing that the VOC content of any coating exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall submit quarterly deviation (excursion) reports to the Cleveland DAQ that identify any daily record showing that the dry particulate filter system was not in service or not operated according to manufacturer's recommendations (with any documented modifications made by the permittee) when the emissions unit(s) was/were in operation.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-15-03(B)(1)(a) and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

a. Emission Limitation:
3.5 lbs of VOC per gallon of coating excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirement in d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1), 3745-21-09(U) and 3745-31-05(A)(3) PTI#13-1025]

(2) USEPA Method 24 shall be used to determine the VOC contents of the coatings.

[Authority for term: OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

28. Emissions Unit Group -paint dip lines: K014, K015

EU ID	Operations, Property and/or Equipment Description
K014	paint dip #3 tank for coating of welder coils large stator assembly
K015	paint dip #4 tank for coating of welder coils large stator assembly

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI#13-1024 issued January 7, 1983)	The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-09 (U)(1)(c).
b.	OAC 3745-21-09 (U)(1)(c)	3.5 pounds of VOC per gallon, excluding water and exempt solvents

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for the coating line:

a. the name and identification number of each coating employed;

b. the VOC content (excluding water and exempt solvents), in pounds per gallon, of each coating, as applied;

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

d. the monthly VOC emissions from all the coatings employed, in pounds, [i.e., the sum of d)(2)b. times d)(2)c. for each coating employed]; and

e. the daily volume-weighted average VOC content of all the coatings, as applied, calculated in accordance with the equation specified in paragraph (B)(9) of OAC rule 3745-21-10 for CVOC,2 – this calculation can be performed at the end of each month.

Note: If the VOC content of each of the coatings employed during a day is less than 3.5 lbs per gallon, as applied, excluding water and exempt solvents, the daily volume-weighted average VOC content record is not required for that day.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(f) and OAC rule 3745-21-09(B)(3)(h)]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the VOC content of any material exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(g) and OAC rule 3745-21-09(B)(3)(i)]

f) Testing Requirements

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

a. Emission Limitation:
3.5 lbs of VOC per gallon of coating excluding water and exempt solvents

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirement in d)(1).

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) USEPA Method 24 shall be used to determine the VOC contents of the materials added to the dip tank.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-04(B)(5)]

g) Miscellaneous Requirements

(1) None.

29. Emissions Unit Group -varnish dip lines: K060, K061,

EU ID	Operations, Property and/or Equipment Description
K060	varnish dip tank #7 for coating of miscellaneous metal parts equipped with a thermal incinerator
K061	varnish dip tank #8 for coating of miscellaneous metal parts equipped with a thermal incinerator

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-21-09(U)(1)(a)	10.3 pounds of VOC per gallon of coating solids
b.	40 CFR Part 64 Compliance Assurance Monitoring (CAM)	See d)(3), e)(2) and e)(3) below.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The average combustion temperature within the thermal incinerator, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal incinerator when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the

desired parameter. The temperature monitor and recorder shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(2) The permittee shall collect and record the following information for each day for the dip tank and control equipment:

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

b. the pounds of VOC per gallon of coating solids, as applied, the volume solids content, as applied, and the volume, as applied, of each coating;

c. the daily volume-weighted average VOC content (in pounds of VOC per gallon of coating solids, as applied) of all the coatings - this calculation may be performed at the end of each calendar month;

d. the calculated, controlled VOC emission rate, in pounds of VOC per gallon of coating solids, as applied. The controlled VOC emission rate shall be calculated using (i) either the maximum VOC content or the daily volume-weighted VOC content recorded in accordance with paragraph (c) above and (ii) the overall control efficiency for the control equipment as determined during the most recent emission test that demonstrated that the emissions unit was in compliance. This calculation may be performed at the end of each calendar month. ;

e. a log or record of operating time for the capture (collection) system, control device, monitoring equipment, and the associated emissions unit; and

f. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(f) and OAC rule 3745-21-09(B)(3)(h)]

(3) The CAM plan for this emissions unit has been developed for VOC emissions. The CAM performance indicators for VOC emissions is the record keeping program for the emissions unit and its control equipment.

The CAM performance indicator device to continuously monitor the combustion temperature within the thermal incinerator when the emissions unit is in operation is specified in c)(1). When the monitoring requirements are outside of any parameters specified in c)(1) and d)(2), corrective action (including, but not limited to, an evaluation of the emissions unit and the control device) will be required.

Upon detecting an excursion of any of the VOC emission indicator parameters listed above, the owner or operator shall restore operation of the emissions unit (including the control devices) to its normal or usual manner of operation as expeditiously as

practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion. Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as thorough response by the computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range.

If a determination is made by the Administrator or Ohio EPA that the permittee has not used acceptable procedures in response to an excursion or exceedance based on the results of a determination made under 40 CFR Part 64.7(d)(2), the permittee may be required to develop a Quality Improvement Plan (QIP) consistent with the requirements of 40 CFR Part 64.8.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any daily record showing that the calculated, controlled VOC emission rate exceeds the applicable pounds of VOC per gallon of solids limitation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-09(B)(3)(g) and OAC rule 3745-21-09(B)(3)(i)]

(2) The permittee shall submit quarterly temperature deviation (excursion) reports to the Cleveland DAQ that identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated that the emissions unit was in compliance.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

(3) If the results of monitoring or record keeping data indicate that the VOC emission limitations may have been exceeded, the permittee shall submit the results of that data, and document any corrective action taken to restore operation of the emissions unit, or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The reports shall be submitted in accordance with the Standard Terms and Conditions of this permit.

[Authority for term: OAC rule 3745-77-07(C)(1) and 40 CFR Part 64]

f) Testing Requirements

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

a. Emission Limitation:
10.3 lbs of VOC per gallon of coating solids

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirement in d)(2). and the emission testing specified in f)(2).

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

The emission testing shall be conducted within 12 months after issuance of the permit and within 12 months prior to permit expiration.

The emission testing shall be conducted to demonstrate compliance with the allowable VOC emission limitation.

The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for VOC, Method 25 or 25A of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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.

The capture efficiency shall be determined using Methods 204 through 204F, as specified in 40 CFR Part 51, Appendix M, or the permittee may request to use an alternative method or procedure for the determination of capture efficiency in accordance with the USEPA's "Guidelines for Determining Capture Efficiency," dated January 9, 1995. (The Ohio EPA will consider the request, including an evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.) The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

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 test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Cleveland DAQ within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Cleveland DAQ.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) USEPA Method 24 shall be used to determine the VOC contents of the coatings.

[Authority for term: OAC rule 3745-77-07(C)(1) and OAC rule 3745-21-04(B)(5)]

g) Miscellaneous Requirements

(1) None.

30. Emissions Unit Group – varnish lines: K103, K104, K105, K106, K107

EU ID	Operations, Property and/or Equipment Description
K103	Varnish Line #1 dip tankwith a 4.5 mmBtu/hr natural gas fired drying oven
K104	Varnish Line #2 dip tankwith a 4.5 mmBtu/hr natural gas fired drying oven
K105	Varnish Line #3 dip tankwith a 4.5 mmBtu/hr natural gas fired drying oven
K106	Varnish Line #4 dip tankwith a 4.5 mmBtu/hr natural gas fired drying oven
K107	Varnish Line #5 dip tankwith a 4.5 mmBtu/hr natural gas fired drying oven

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(s), property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)(Permit No. P0107727 issued April 20, 2011)	0.64 lb of volatile organic compounds (VOC) per gallon of coating, excluding water and exempt solvents VOC emissions shall not exceed 6.38 lbs/hr. See b)(2)a below.
b.	OAC rule 3745-31-05(A)(3) as effective 11/30/2001	From natural gas combustion: Carbon monoxide (CO) emissions shall not exceed 0.38 lb/hr and 1.66 tons/year. Nitrogen oxide (NOx) emissions shall not exceed 0.45 lb/hr and 1.97 tons/year. See b)(2)c. below.
c.	OAC rule 3745-31-05(A)(3)(b) as effective 12/01/06	See b)(2)b. below.

d.	OAC rule 3745-21-09(U)(1)(c)	The VOC emission limitation specified by this rule is less stringent than the VOC emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
e.	OAC rule 3745-31-05(D)(1)(a) (Synthetic Minor to avoid NSR)	The combined annual VOC emissions from emissions units K103 through K107 shall not exceed 39.0 tons/year as a rolling, 12-month summation. See c)(1).

(2) Additional Terms and Conditions

a. The lb/hr VOC emission limitation reflects the potential to emit for this emissions unit. Therefore, no additional monitoring, record keeping and/or reporting requirements are necessary to ensure compliance with this emission limitation.

b. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the natural gas combustion emissions of NOx and CO from this emissions unit since the potential to emit for NOx and CO are each less than ten tons per year.

c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, these emission limitations/control measures no longer apply.

c) Operational Restrictions

(1) The maximum annual coating usage for emissions units K103 through K107 combined shall not exceed 121,875 gallons/year (less water and exempt solvents) based upon a rolling, 12-month summation of the coating usage figures.

[Authority for term: OAC rules 3745-77-07(A)(1) and 3745-31-05(A)(3) Permit # P0107727]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information for each month for the dip tank:

a. the name and identification number of each material added to the dip tank;

b. the VOC content, in pounds per gallon (excluding water and exempt solvents), of each material added to the dip tank;

c. the amount, in gallons (excluding water and exempt solvents), of each coating employed in the dip tank;

d. the total VOC emissions from all coatings employed, in pounds (b*c).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

(2) The permittee shall maintain monthly records of the following information:

a. the combined coating usage rate for K103 through K107, in gallons (excluding water and exempt solvents), for each month of operations; and

b. the rolling, 12-month summation of the combined coating usage rate for K103 through K107, in gallons (excluding water and exempt solvents).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

e) Reporting Requirements

(1) The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the VOC content of any material exceeded the applicable limitation. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 45 days after the exceedance occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

(2) The permittee shall submit deviation (excursion) reports to the Cleveland DAQ that identify all exceedances of the rolling, 12-month coating usage limitation for emissions units K103 through K107 combined. The deviation reports shall be submitted within 45 days after the exceedance occurs.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

f) Testing Requirements

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

a. Emission Limitation:

0.64 lb of VOC emissions per gallon of coating, excluding water and exempt solvents

Applicable Compliance Method:

Compliance shall be based upon the record keeping and reporting requirements in d)(1)and e)(1) respectively. USEPA Method 24 shall be used to determine the VOC contents of the materials added to the dip tank.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

b. Emission Limitation:

VOC emissions shall not exceed 6.38 lbs/hr.

Applicable Compliance Method:

Compliance shall be determined through multiplying the maximum VOC content, in pounds per gallon, of each material added to the dip tank (0.59 lbs/gallon) by the maximum hourly amount, in gallons, of each coating employed in the dip tank (10.81 gallons/hour).

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

c. Emission Limitation:

The combined annual VOC emissions from emissions units K103 through K107 shall not exceed 39.0 tons/year as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping and reporting requirements in d)(1), d)(2) and e)(2) respectively. The monthly VOC emissions shall be summed on a rolling, 12-month basis for all of the emissions units combined.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

d. Emission Limitation:

CO emissions shall not exceed 0.38 lb/hr.

Applicable Compliance Methods:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 84 lbs of CO/mmcf by the emissions unit's maximum hourly natural gas firing rate (0.0045 mmcf/hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lb/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10 while firing natural gas.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

e. Emission Limitation:

1.66 TPY of CO emissions

Applicable Compliance Method(s):

The ton per year limitation was developed by multiplying the hourly CO emission rate by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, compliance with the annual emission limitation shall be demonstrated provided compliance is maintained with the lb/hr limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

f. Emission Limitation:

NOx emissions shall not exceed 0.45 lb/hr.

Applicable Compliance Methods:

When firing natural gas, compliance shall be determined by multiplying an emission factor of 100 lbs of NOx/mmcf by the emissions unit's maximum hourly natural gas firing rate (0.0045 mmcf/hr). The emission factor is specified in U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4, Table 1.4-2 (7/98).

If required, the permittee shall demonstrate compliance with the lb/hr emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7 while firing natural gas.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

g. Emission Limitation:

1.97 TPY of NOx emissions

Applicable Compliance Method(s):

The ton per year limitation was developed by multiplying the hourly NOx emission rate by the maximum operating schedule of 8,760 hours/year, and dividing by 2,000 pounds/ton. Therefore, compliance with the annual emission

limitation shall be demonstrated provided compliance is maintained with the lb/hr limitation.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with, the Toxic Air Contaminant Statute, ORC 3704.03(F)(4)(b), was not necessary because the emissions units maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install (PTI) prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI.

[Authority for term: OAC rules 3745-77-07(C)(1) and 3745-31-05(A)(3) Permit # P0107727]