State of Ohio Environmental Protection Agency

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

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

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

11/30/99

CERTIFIED MAIL

RE: Preliminary Proposed Title V
Chapter 3745-77 permit

16-67-09-0000
Harbison-Walker Refractories Co.
Tom Herrman
East Center Street / Route 303
P. O. Box 397
Windham, OH 44288

Dear Tom Herrman:

Enclosed is the Ohio EPA Preliminary Proposed Title V permit that was issued in draft form on 08/27/98. The comment period has ended. We are now ready to submit this permit to USEPA for approval.

We are submitting this for your review and comment. If you do not agree with the Preliminary Proposed Title V permit as written or with agreed-upon changes, then you have the opportunity to schedule a meeting with us to discuss your concerns.

Please contact Jim Orlemann, Engineering Section Manager, 614-644-3592, or you can telefax your request to (614) 644-3681, within fourteen (14) days from receipt of this letter if a meeting is desired. If a request for a meeting is not received within fourteen (14) days of receipt of this letter, we will forward this proposed permit (as written, or with agreed-upon changes) to USEPA for approval.

Very truly yours,

Thomas G. Rigo

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

cc: Akron Air Pollution Control
Becky Castle, DAPC PMU

Ohio EPA
State of Ohio Environmental Protection Agency

PRELIMINARY PROPOSED TITLE V PERMIT

Date: 11/30/99

Effective Date:

Expiration Date:

The duration of this permit will be five years.

This document constitutes issuance to:

Harbison-Walker Refractories Co.
East Center Street / Route 303
P. O. Box 397
Windham, OH 44288

of a Title V permit for Facility ID: 16-67-09-0000

Emissions Unit ID (Company ID)/
Emissions Unit Activity Description:
F001 (Enclosed SandblastingRetort Cleaner)
Sandblasting Operation Retort Cleaning

P001 (Basic Refractory Line)
Basic Refractory Line Unloading, Grinding, Screening, Batching and Mixing

P002 (Refractory Processing Material Line
)
Refractory Material Unloading, Grinding, Screening, Batching and Mixing

P004 (Barber Green Grain Heater)
Rotary Heater to Heat Refractory Grain

P006 (Tar Impregnator Preheater)
Preheat Basic and High Alumina Refractory Shapes

P007 (Tar Impregnator Autoclave and Defumer)
Tar Impregnation of Refractory Shapes

P014 (#1 Tunnel Kiln)
Firing of Refractory Shapes

P015 (High Alumina Mixing)
High Alumina Mixing

P016 (Feco High Temperature Baking Oven)

Baking Oven for Refractory Shapes with Afterburner

P901 (Hazemag Crusher)
Crush refractory shapes and materials.

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

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

Akron Air Pollution Control
146 South High Street, Room 904
Akron, OH 44308
(330) 375-2480

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. State and Federally Enforceable Section

1. Monitoring and Related Recordkeeping and Reporting Requirements

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

   i. The date, place (as defined in the permit), and time of sampling or measurements.
   ii. The date(s) analyses were performed.
   iii. The company or entity that performed the analyses.
   iv. The analytical techniques or methods used.
   v. The results of such analyses.
   vi. The operating conditions existing at the time of sampling or measurement.

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

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

   i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
   ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.
   iii. Written reports, which identify any deviations from the federally enforceable <u>monitoring</u>, <u>recordkeeping</u>, <u>and reporting requirements</u> contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
   iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

2. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports submitted pursuant to OAC rule 3745-15-06 shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of deviations caused by malfunctions or upsets.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If 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 CFR 68.215(a), the permittee shall submit either of the following:

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

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

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

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

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

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

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

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

7. Fees

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

8. Marketable Permit Programs

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

9. Reasonably Anticipated Operating Scenarios

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

10. Reopening for Cause

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

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

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

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

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

11. Federal and State Enforceability

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

12. Compliance Requirements

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

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

   i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
   ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
   iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
   iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be

submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

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

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

i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.
(b) The permittee's current compliance status.
(c) Whether compliance was continuous or intermittent.
(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

13. Permit Shield

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

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

14. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

15. Emergencies

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

16. Off Permit Changes

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

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

b. The permittee provides contemporaneous written notice of the change to the director and the administrator, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

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

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

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

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

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

17. Compliance Method Requirements

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

18. 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.

B. State Only Enforceable Section

1. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. 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).

4. 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.

5. 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.

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

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforceable Section

None

B. State Only Enforceable Section

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

B002 - tar impregnation tar tank heater
P008 - shrinkwrap tunnel
P009 - tar impregnator preheater #2
T005 - large fuel oil storage tank
Z001 - tunnel kiln fuel oil storage tank
Z002 - tar impregantion tar storage tank
Z004 - silicanit storage tank
Z005 - brick oil storage tank
Z006 - tunnel kiln waste heat vent stack
Z007 - tunnel kiln undercar cooling air exhaust
Z008 - tunnel kiln dryer #1
Z009 - tunnel kiln dryer #2
Z020 - slide gate grinders
Z021 - shipping room refractory shapes cleaner
Z022 - large tar bond space heater
Z023 - rack tunnel dryer

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Enclosed SandblastingRetort Cleaner (F001)

Activity Description: Sandblasting Operation Retort Cleaning

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sandblasting operation - retort cleaning; controlled by an enclosure with a baghouse	none	none

2. Additional Terms and Conditions

2.a This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B)(1) and 3745-17-08(B) do not apply to this emissions unit.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
sandblasting operation - retort cleaning; controlled by an enclosure with a baghouse	OAC rule 3745-31-05 (PTI 16-762)	See B.I.2.a below.

2. Additional Terms and Conditions

2.a The permittee shall employ hoods, fans, and other equipment to adequately enclose, contain, capture, vent and control the fugitive dust. Such equipment shall meet the following requirements:

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

ii. the control equipment shall achieve an outlet emission rate of not greater than 0.030 grain of particulate emissions per dry standard cubic foot of exhaust gases or there shall be no visible particulate emissions from the exhaust stack(s), which ever is less stringent.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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.

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

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

IV. Reporting Requirements (continued)

2. The deviation reports shall be submitted in accordance with the requirements specified in Part I - General Term and Condition B.2.b of this permit.

3. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in section B.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

no visible particulate emissions from the exhaust stack(s)

Applicable Compliance Method:

daily visible emission checks and OAC rule 3745-17-03(B)(4)

1.b Emission Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recording of the pressure drop across the baghouse as required in section B.III.1. Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Basic Refractory Line (P001)

Activity Description: Basic Refractory Line Unloading, Grinding, Screening, Batching and Mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
basic refractory line - unloading, grinding, screening, batching, and mixing with two baghouses as control	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	16.7 lbs/hr of particulates
	OAC rule 3745-21-07(G)(2)	See A.I.2.b below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

2.b When employing, applying, evaporating, or drying any photochemically reactive material, or substance containing such photochemically reactive material, the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds of organic material in any one hour.

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation or the range of pressure drop in inches of water as established during the most recent emission test that demonstrated that the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information for this emissions unit:

a. the MSDS sheets for each liquid organic raw material and cleanup material currently employed; and

b. documentation as to whether or not each liquid organic raw material and cleanup material is a photochemically reactive material.

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

2. If it is determined that a photochemically reactive material is being employed in this emissions unit, the permittee shall collect and record the following information for each day for this emissions unit:

a. the company identification for each liquid organic raw material and cleanup material employed;

b. documentation of whether each liquid organic raw material or cleanup material employed is a photochemically reactive material;

c. the number of gallons of each photochemically reactive cleanup material employed;

d. the organic compound content of each photochemically reactive cleanup material, in pounds per gallon;

e. the organic compound emission rate for all photochemically reactive cleanup materials, in pounds per day (i.e., the sum of (c) times (d) for each photochemically reactive cleanup material);

f. the organic compound emission rate for the mixing operation as determined using either equations from EIIP Document Series Volume II: Point Sources - Chapter 8: Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing, Section 4.1 or an alternative method or emission factor which becomes available, provided that the alternative method or emission factor is mutually agreeable to the Ohio EPA, the Akron Regional Air Quality Management District, and the Harbison-Walker Refractories Co.;

g. for each day during which a photochemically reactive material is employed, the total organic compound emission rate for the mixing operation and the photochemically reactive cleanup materials, in pounds per day (i.e., (e) plus (f));

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

i. for each day during which a photochemically reactive material is employed, the average hourly organic compound emission rate for the mixing operation and the photochemically reactive cleanup materials, (i.e., (g)/(h)), in pounds per hour (average).

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

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

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the mixing operation and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and

b. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the mixing operation and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

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

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

4. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

a. The emission testing shall be conducted within 6 months after issuance of the permit. Whether additional stack testing will be required and the frequency of the additional stack testing shall be determined based on the Ohio EPA, Office of Air Pollution Control, Division of Engineering, Engineering Guide #16.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for particulates.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): for particulates, Method 5 of 40 CFR Part 60, Appendix A .

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

2. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

3. Personnel from the appropriate Ohio EPA District Office or local air agency 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.

4. 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

V. Testing Requirements (continued)

5. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

5.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

5.b Emission Limitation:

16.7 lbs/hr of particulates

Applicable Compliance Method:

Compliance with the allowable mass emission rate shall be demonstrated by using Method 5 of 40 CFR Part 60, Appendix A and by monitoring and recording the pressure drop across the baghouse as required in section A.III.3.

5.c Emission Limitation:

8.0 lbs/hr of organic material
40 lbs/day of organic material

Applicable Compliance Method:

Compliance shall be demonstrated based upon the daily record keeping of the emissions and hours of operation of the emissions unit as required in sections A.III.1 and A.III.2.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Refractory Processing Material Line (P002)

Activity Description: Refractory Material Unloading, Grinding, Screening, Batching and Mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
refractory processing line - unloading, grinding, screening, batching, and mixing with three baghouses as control	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	19.2 lbs/hr of particulates
	OAC rule 3745-21-07(G)	See A.I.2.b below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

2.b When employing, applying, evaporating, or drying any photochemically reactive material, or substance containing such photochemically reactive material, the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds in any one hour.

II. Operational Restrictions

1. The pressure drop across each baghouse shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation or the range of pressure drop in inches of water as established during the most recent emission test that demonstrated that the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information for this emissions unit:

a. the MSDS sheets for each liquid organic raw material and cleanup material currently employed; and

b. documentation as to whether or not each liquid organic raw material and cleanup material is a photochemically reactive material.

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

2. If it is determined that a photochemically reactive material is being employed in this emissions unit, the permittee shall collect and record the following information for each day for this emissions unit:

a. the company identification for each liquid organic raw material and cleanup material employed;

b. documentation of whether each liquid organic raw material or cleanup material employed is a photochemically reactive material;

c. the number of gallons of each photochemically reactive cleanup material employed;

d. the organic compound content of each photochemically reactive cleanup material, in pounds per gallon;

e. the organic compound emission rate for all photochemically reactive cleanup materials, in pounds per day (i.e., the sum of (c) times (d) for each photochemically reactive cleanup material);

f. the organic compound emission rate for the mixing operation as determined using either equations from EIIP Document Series Volume II: Point Sources - Chapter 8: Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing, Section 4.1 or an alternative method or emission factor which becomes available, provided that the alternative method or emission factor is mutually agreeable to the Ohio EPA, the Akron Regional Air Quality Management District, and the Harbison-Walker Refractories Co.;

g. for each day during which a photochemically reactive material is employed, the total organic compound emission rate for the mixing operation and the photochemically reactive cleanup materials, in pounds per day (i.e., (e) plus (f));

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

i. for each day during which a photochemically reactive material is employed, the average hourly organic compound emission rate for the mixing operation and the photochemically reactive cleanup materials, (i.e., (g)/(h)), in pounds per hour (average).

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

3. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each baghouse while the emissions unit is in operation. The monitoring equipment shall be 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 each baghouse on a daily basis.

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the mixing operation and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and

b. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the mixing operation and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

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

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

4. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

19.2 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recording of the pressure drop across the baghouse as required by section A.III.3. Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

8.0 lbs/hr of organic material
40 lbs/day of organic material

Applicable Compliance Method:

Compliance shall be demonstrated based upon the daily record keeping of the emissions and hours of operation of the emissions unit as required in sections A.III.1 and A.III.2.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Barber Green Grain Heater (P004)

Activity Description: Rotary Heater to Heat Refractory Grain

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
rotary heater to heat refractory grain with a baghouse as control	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	16.2 lbs/hr of particulates

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 to 8 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be 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.

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

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

IV. Reporting Requirements (continued)

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

3. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

16.2 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recording of the pressure drop across the baghouse as required in section A.III.1. Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tar Impregnator Preheater (P006)

Activity Description: Preheat Basic and High Alumina Refractory Shapes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
tar impregnator preheater - preheat basic and high alumina refractory shapes	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	13.6 lbs/hr of particulates

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

13.6 lbs/hr of particulates

Applicable Compliance Method:

Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Tar Impregnator Autoclave and Defumer (P007)

Activity Description: Tar Impregnation of Refractory Shapes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
tar impregnator autoclave and defumer - tar impregnation of refractory shapes with a catalytic incinerator as control	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	13.0 lbs/hr of particulates
	OAC rule 3745-21-07(G)	See A.I.2.b below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

2.b When employing, applying, evaporating, or drying any photochemically reactive material, or substance containing such photochemically reactive material, the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds in any one hour.

II. Operational Restrictions

1. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than the temperature recommended by the manufacturer of the catalytic incinerator.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information for this emissions unit:

a. the MSDS sheets for each liquid organic raw material and cleanup material currently employed;

b. documentation as to whether or not each liquid organic raw material and cleanup material is a photochemically reactive material; and

c. when a new liquid organic raw material or cleanup material is going to be employed in this emissions unit, the permittee shall determine and document prior to employing the new liquid organic raw material or cleanup material whether or not it is a photochemically reactive material.

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

2. If it is determined that a photochemically reactive material is being employed in this emissions unit, the permittee shall collect and record the following information for each day for this emissions unit:

a. the company identification for each liquid organic raw material and cleanup material employed;

b. documentation of whether each liquid organic raw material or cleanup material employed is a photochemically reactive material;

c. the number of gallons of each photochemically reactive cleanup material and each liquid organic raw material employed;

d. the organic compound content of each photochemically reactive cleanup material and each liquid organic raw material, in pounds per gallon;

e. for each day during which a photochemically reactive material is employed, the total organic compound emission rate for all photochemically reactive cleanup materials and all liquid organic raw material, in pounds per day (i.e., the sum of (c) times (d) for each photochemically reactive cleanup material and for each liquid organic raw material);

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

g. for each day during which a photochemically reactive material is employed, the average hourly organic compound emission rate for all liquid organic raw materials and photochemically reactive cleanup materials, (i.e., (e)/(f)), in pounds per hour (average).

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

3. The permittee shall operate and maintain continuous temperature monitors which measure and display the temperature immediately upstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring device shall be capable of accurately measuring the desired parameter. The temperature monitors shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. the temperature of the exhaust gases immediately before the catalyst bed; and

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

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the raw materials and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and

b. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the raw materials and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

2. The permittee shall submit deviation (excursion) reports that identify each day when the emissions unit was in operation during which the temperature of the exhaust gases immediately before the catalyst bed did not comply with the temperature limitation specified above.

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

4. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

13.0 lbs/hr of particulates

Applicable Compliance Method:

Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

8.0 lbs/hr of organic material
40 lbs/day of organic material

Applicable Compliance Method:

Compliance shall be demonstrated based upon the daily record keeping of the emissions and hours of operation of the emissions unit as required in sections A.III.1 and A.III.2.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: #1 Tunnel Kiln (P014)

Activity Description: Firing of Refractory Shapes

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
tunnel kiln #1 - firing of refractory shapes	OAC rule 3745-17-07 (PTI 16-214)	See A.I.2.a below.
	OAC rule 3745-17-11	11.96 lbs/hr of particulates

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

11.96 lbs/hr of particulates

Applicable Compliance Method:

Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: High Alumina Mixing (P015)

Activity Description: High Alumina Mixing

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
high alumina mixing with a baghouse as control	OAC rule 3745-17-07	See A.I.2.a below.
	OAC rule 3745-17-11	8.17 lbs/hr of particulates
	OAC rule 3745-21-07(G)	See A.I.2.b below.

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

2.b When employing, applying, evaporating, or drying any photochemically reactive material, or substance containing such photochemically reactive material, the permittee shall not discharge more than 40 pounds of organic material into the atmosphere in any one day, nor more than 8 pounds in any one hour.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 2 to 8 inches of water while the emissions unit is in operation or the range of pressure drop in inches of water as established during the most recent emission test that demonstrated that the emissions unit was in compliance.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information for this emissions unit:

a. the MSDS sheets for each liquid organic raw material and cleanup material currently employed; and

b. documentation as to whether or not each liquid organic raw material and cleanup material is a photochemically reactive material.

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

2. If it is determined that a photochemically reactive material is being employed in this emissions unit, the permittee shall collect and record the following information for each day for this emissions unit:

a. the company identification for each liquid organic raw material and cleanup material employed;

b. documentation of whether each liquid organic raw material or cleanup material employed is a photochemically reactive material;

c. the number of gallons of each photochemically reactive cleanup material employed;

d. the organic compound content of each photochemically reactive cleanup material, in pounds per gallon;

e. the organic compound emission rate for all photochemically reactive cleanup materials, in pounds per day (i.e., the sum of (c) times (d) for each photochemically reactive cleanup material);

f. the organic compound emission rate for the mixing operation as determined using either equations from EIIP Document Series Volume II: Point Sources - Chapter 8: Alternative Methods for Estimating Air Emissions from Paint and Ink Manufacturing, Section 4.1 or an alternative method or emission factor which becomes available, provided that the alternative method or emission factor is mutually agreeable to the Ohio EPA, the Akron Regional Air Quality Management District, and the Harbison-Walker Refractories Co.;

g. for each day during which a photochemically reactive material is employed, the total organic compound emission rate for the mixing operation and the photochemically reactive cleanup materials, in pounds per day (i.e., (e) plus (f));

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

i. for each day during which a photochemically reactive material is employed, the average hourly organic compound emission rate for the mixing operation and the photochemically reactive cleanup materials, (i.e., (g)/(h)), in pounds per hour (average).

[Note: The definition of "photochemically reactive material" is based upon OAC rule 3745-21-01(C)(5).]

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

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which include the following information:

a. for the days during which a photochemically reactive material was employed, an identification of each day during which the average hourly organic compound emissions from the mixing operation and photochemically reactive cleanup materials exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day; and

b. for the days during which a photochemically reactive material was employed, an identification of each day during which the organic compound emissions from the mixing operation and photochemically reactive cleanup materials exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

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

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

4. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

8.17 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recording of the pressure drop across the baghouse as required by section A.III.3. Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

8.0 lbs/hr of organic material
40 lbs/day of organic material

Applicable Compliance Method:

Compliance shall be demonstrated based upon the daily record keeping of the emissions and hours of operation of the emissions unit as required in sections A.III.1 and A.III.2.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
high alumina mixing with a baghouse as control	OAC rule 3745-31-05 (PTI 16-673)	2.15 lbs/hr of particulates

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

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

1.a Emission Limitation:

2.15 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recording of the pressure drop across the baghouse as required by section A.III.3. Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Feco High Temperature Baking Oven (P016)

Activity Description: Baking Oven for Refractory Shapes with Afterburner

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
baking oven for refractory shapes with afterburner	OAC rule 3745-17-07 (PTI 16-291)	See A.I.2.a below.
	OAC rule 3745-17-11	4.15 lbs/hr of particulates for the low temperature bake cycle (TIB cycle) run which operated at a maximum production rate of 2034.8 lbs/hr during the stack test 2.96 lbs/hr of particulates for the high temperature (TIHB) baking cycle which operated at a maximum production rate of 1231.6 lbs/hr during the stack test

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

II. Operational Restrictions

1. The incinerator burners shall be shut off for the entire low temperature bake cycle (TIB cycle) run.

2. The incinerator shall be operated during the high temperature baking cycle (TIHB cycle) run. The incinerator operating temperatures (firing conditions) shall be dependent on the baking oven operating temperatures. The incinerator operating modes shall be:

a. Between the baking oven temperature range of ambient to 1000 degrees Fahrenheit, the combustion temperature within the incinerator shall be set at 450 degrees Fahrenheit.

b. When the oven temperature reaches 1000 degrees Fahrenheit, the incinerator burners shall go to a high fire condition and maintain a combustion temperature within the incinerator of 1800 degrees Fahrenheit.

c. The combustion temperature within the incinerator shall be maintained at 1800 degrees Fahrenheit for the remainder of the baking cycle. Once the oven cool-down cycle is completed, both the bake oven and incinerator shall be shut down.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the oven temperature, combustion temperature of the incinerator, the date, and the time 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. The baking cycle shall be noted on the chart recorder for reference.

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

a. the color of the emissions;

b. whether the emissions are representative of normal operations;

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

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

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports which identify any time periods during which the required incinerator operating parameters specified in section A.II.2 of these terms and conditions were not met.

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

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

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

4.15 lbs/hr of particulates
2.96 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by monitoring the temperature of the oven and the combustion chamber of the incinerator. Stack testing may be required in the future in accordance with the test method(s) and procedures in OAC rule 3745-17-03(B)(10).

1.b Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Hazemag Crusher (P901)

Activity Description: Crush refractory shapes and materials.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
refractory materials crusher	OAC rule 3745-17-07(A)	See A.I.2.a below.
	OAC rule 3745-17-11	43.4 lbs/hr of particulates

2. Additional Terms and Conditions

2.a Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by rule.

2.b This facility is not located in an Appendix A area as described in OAC rule 3745-17-08; therefore, OAC rules 3745-17-07(B)(1) and 3745-17-08(B) do not apply to this emissions unit.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 4 to 6 inches of water, while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating mainual(s). The permittee shall record the pressure drop across the baghouse on a daily basis.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, ther 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. whether 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 emisions.

IV. Reporting Requirements

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

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

3. The permittee shall submit semiannual written reports 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 Director (the appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in sections A.I.1 and A.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

43.4 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recording of the pressure drop across the baghouse as required by section A.III.3. Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
refractory materials crusher	OAC rule 3745-31-05 (PTI 16-1785)	Visible particulate emissions from the exhaust stack shall not exceed 1% opacity, as a 6-minute average. 1.5 lbs/hr of particulates from the exhaust stack 6.6 tpy of particulates from the exhaust stack See B.I.2.a below.

2. Additional Terms and Conditions

2.a There shall be no visible particulate emissions of fugitive dust from this emissions unit, except for a total cumulative time of 5 minutes during any 60-minute observation period.

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, ther 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. whether 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 emisions.

IV. Reporting Requirements

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

V. Testing Requirements

1. Compliance with the emission limitations in sections B.I.1 and B.I.2 of these terms and conditions shall be determined in accordance with the following methods:

1.a Emission Limitation:

1% opacity as a 6-minute average

Applicable Compliance Method:

OAC rule 3745-17-03(B)(1)

1.b Emission Limitation:

1.5 lbs/hr of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by the monitoring and recording of the pressure drop across the baghouse as required by section A.III.3. Stack testing may be required in the future in accordance with the procedures and test method(s) in OAC rule 3745-17-03(B)(10).

1.c Emission Limitation:

6.6 tpy of particulates

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the hourly particulate emisssions limitation by 8760 hours per year, and dividing by 2000 lbs/ton.

1.d Emission Limitation:

no visible particulate emissions of fugitive dust from this emissions unit, except for a total cumulative time of 5 minutes during any 60-minute observation period

Applicable Compliance Method:

OAC rule 3745-17-03(B)(4)

VI. Miscellaneous Requirements

None

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