



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

03/18/08

**CERTIFIED MAIL**

**RE: Final Title V Off-Permit Change Chapter 3745-77 permit**

06-79-00-0118  
The Belden Brick Company  
John C Jensen Mr  
P.O. Box 430  
Sugarcreek, OH 44681-0430

Dear John C Jensen:

Enclosed is the Title V permit that allows you to operate the facility in the manner indicated in the permit. Because this permit may contain several conditions and restrictions, we urge you to read it carefully.

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission  
309 South Fourth Street, Room 222  
Columbus, OH 43215

If you have any questions, please contact Southeast District Office.

Sincerely,

Michael W. Ahern  
Permit Issuance and Data Management Section  
Division of Air Pollution Control

cc: Southeast District Office  
File, DAPC PIER



State of Ohio Environmental Protection Agency

FINAL TITLE V OFF-PERMIT CHANGE

Effective Date: 03/22/04

Expiration Date: 03/22/09

Modification Issue Date: 03/18/08

This document constitutes issuance of a Title V permit for Facility ID: 06-79-00-0118 to:

The Belden Brick Company
P.O. Box 430
Sugarcreek, OH 44681-0430

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units like F126 (Plt 9 Factory), F151 (Plt 9 Grinding Plant), F225 (Plt 2 Factory), etc., with detailed descriptions of dust sources and control measures.

P802 (Plt 8 Tunnel Kiln #2)  
Plt 8 Tunnel Kiln # 2 to P8SCRUBSTK. Ware  
Cool bypass to P8WC2STK. Kiln bypass to  
P8K23STK

P803 (Plt 8 Tunnel Kiln #3)  
Plt 8 Tunnel Kiln # 3 to P8SCRUBSTK. Ware

Cool bypass to P8WC3STK. Kiln bypass to  
P8K23STK.

P861 (Plt 8 Dryer # 2)  
Plt 8 Dryer #2 to P8D2STK

P862 (Plt 8 Dryer # 3)

Plt 8 Dryer #3 to P8D3STK

P870 (Plt 8 Sand Dryer)  
Plt 8 Sand Dryer to P8SANDSTK

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, provided that a complete renewal application is submitted no earlier than eighteen (18) months and no later than one-hundred eighty (180) days prior to the expiration date.

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

Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740) 385-8501

Ohio Environmental Protection Agency



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Chris Korleski  
Director

## PART I - GENERAL TERMS AND CONDITIONS

### A. *State and Federally Enforceable Section*

#### 1. **Monitoring and Related Record Keeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*
- c. 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 record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c))*
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements of 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.  
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, record keeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, record keeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.  
*(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))*
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))*

## **2. Scheduled Maintenance/Malfunction Reporting**

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

Except as provided in OAC rule 3745-15-06, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

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

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

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

## **4. Title IV Provisions**

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

*(Authority for term: OAC rule 3745-77-07(A)(5))*

## **5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or

condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

*(Authority for term: OAC rule 3745-77-07(A)(6))*

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with A.10 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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

## **7. Fees**

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

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

## **8. Marketable Permit Programs**

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

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

## **9. Reasonably Anticipated Operating Scenarios**

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility

the scenario under which the permittee is operating. The permit shield provided in these general terms and conditions shall apply to all operating scenarios authorized in this permit.  
*(Authority for term: OAC rule 3745-77-07(A)(10))*

#### **10. Reopening for Cause**

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

- a. Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.
- b. This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.
- c. The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.
- d. The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

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

#### **11. Federal and State Enforceability**

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

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

#### **12. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

- i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
- i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d. Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:
- i. Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted on or before April 30th of each year during the permit term.
  - ii. Compliance certifications shall include the following:
    - (a) An identification of each term or condition of this permit that is the basis of the certification.
    - (b) The permittee's current compliance status.
    - (c) Whether compliance was continuous or intermittent.
    - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
    - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.
  - iii. Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

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

### **13. Permit Shield**

- a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.
- b. This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

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

### **14. Operational Flexibility**

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

*(Authority for term: OAC rules 3745-77-07(H)(1) and (2))*

### **15. Emergencies**

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

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

### **16. Off-Permit Changes**

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

- a. The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition;
- b. The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emission levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such

change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change;

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; 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 purposes of clarification, the permittee can refer to Engineering Guide #63 that is available in the STARSHIP software package.)  
(Authority for term: OAC rule 3745-77-07(I))

**17. Compliance Method Requirements**

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

**18. Insignificant Activities**

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

**19. Permit to Install Requirement**

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

**20. Air Pollution Nuisance**

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

## **B. State Only Enforceable Section**

### **1. Reporting Requirements Related to Monitoring and Record Keeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (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.)

### **2. Records Retention Requirements**

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

### **3. Inspections and Information Requests**

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

### **4. Scheduled Maintenance/Malfunction Reporting**

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

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

**5. Permit Transfers**

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

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

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

## Part II - Specific Facility Terms and Conditions

### A. State and Federally Enforceable Section

- 1.** [40 CFR 63.8395 (b)]  
If you have an existing affected source, you must comply with the applicable emission limitations in Tables 1 and 2 to this subpart no later than May 16, 2006.
- 1.a** [40 CFR 63.8405 (a)]  
You must meet each emission limit in Table 1 to this subpart that applies to you.
- 1.b** [40 CFR 63.8405 (b)]  
You must meet each operating limit in Table 2 to this subpart that applies to you.
- 2.a** Based on the information contained in this permit and other available information, Ohio EPA has performed Industrial Source Complex Short Term modeling that simulated ambient concentrations greater than the SO<sub>2</sub> NAAQS and greater than the applicable maximum allowable increases (PSD increment) specified in OAC rule 3745-31-11(B) for Tuscarawas County. No actual monitoring data has demonstrated ambient concentrations greater than the SO<sub>2</sub> NAAQS or the maximum allowable increases (PSD increment). The permittee reserves all rights in regards to the modeling performed by Ohio EPA, and takes no position as to the modeling's validity or accuracy at this time.
- 2.b** Within 180 days of the effective date of this permit, the permittee shall submit to Ohio EPA, for the Director's approval, revised modeling showing simulated compliance with the SO<sub>2</sub> NAAQS and allowable PSD increment or a written plan and schedule that contains proposed control measures and measurable milestones that demonstrate that simulated modeling impact concentrations will not exceed the SO<sub>2</sub> NAAQS and PSD increment. The demonstration shall adhere to the air quality dispersion modeling, databases and other requirements specified in 40 CFR Part 51, Appendix W and in Ohio Engineering Guide 69. Additionally, an electronic copy shall accompany the plan as well as monitoring, record keeping and reporting requirements that provide reasonable assurance that approved control measures, once implemented, will be maintained. Unless an alternative is approved by the Director, the permittee's refined modeling and control plan and schedule shall be based on the modeling performed by Ohio EPA that forms the basis of the Ohio EPA's conclusions in 2.a. above. The submittal of a control plan and schedule pursuant to the provisions of this section do not represent an agreement on the part of the permittee as to the accuracy or validity of the modeling performed by Ohio EPA, and the permittee does not waive its rights to challenge such modeling in any subsequent action.
- 2.c** The permittee shall submit a progress report for each milestone specified in the approved compliance plan required above within 14 days after each completion date. The report shall include a narrative description of whether the milestone has been completed and how this has been accomplished, with any documentation necessary to demonstrate that the milestone is completed. If the milestone has not been completed, the report shall include an explanation of the reasons for the missed completion date, a description of all actions to be taken to complete the milestone, and a proposed schedule to complete the milestone. In the event of a missed completion date, a follow-up progress report shall be submitted every 14 days after the initial report of non-completion until the milestone is completed.
- 2.d** Additional time may be granted for the submittal of the information required in section A.2.b above if the permittee demonstrates to the Director's satisfaction that such additional time is warranted.

**A. State and Federally Enforceable Section (continued)**

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

F176 - Plant 9 parking area;  
F276 - Plant 2 parking area;  
F277 - Plant 2 load/storage area;  
F376 - Plant 3 parking area;  
F377 - Plant 3 load/storage area;  
F378 - Plant 3 haul roads;  
F478 - Plant 4 haul roads;  
F676 - Plant 6 parking area;  
F678 - Plant 6 haul roads;  
F877 - Plant 8 load/storage area;  
P169 - Plant 9 car cleaner;  
P364 - Plant 3 soft mud dryer;  
P369 - Plant 3 car cleaner;  
P370 - Plant 3 sand dryer;  
P661 - Plant 6 dryer # 1;  
P662 - Plant 6 dryer # 2;  
P663 - Plant 6 dryer # 3;  
P669 - Plant 6 car cleaner;  
P675 - Plant 6 shuttle kiln;  
P863 - Plant 8 soft mud dryer A;  
P864 - Plant 8 soft mud dryer B; and  
P869 - Plant 8 car cleaner.

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 the identified permit to install for the emissions unit. Insignificant emissions units listed above that are not subject to specific permit to install requirements are subject to one or more applicable requirements contained in the SIP-approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21.

**B. State Only Enforceable Section**

1. The following insignificant emissions units located at this facility are exempt from permit requirements because they are not subject to any applicable requirements or because they meet the "de minimis" criteria established in OAC rule 3745-15-05:

B271 - Plant 2 factory heater east (5 mmBtu);  
B272 - Plant 2 factory heater west (5 mmBtu);  
B671 - Plant 6 Dravo heater #1, factory;  
B672 - Plant 6 Dravo heater #2, grinding plant;  
B871 - Plant 8 Dravo heater #1, factory;  
B872 - Plant 8 Dravo heater #2, car repair;  
B873 - Plant 8 Dravo heater #3, package dept.;  
B874 - Plant 8 Dravo heater #4, soft mud;  
F251 - Plant 2 truck dumps for clay and shale;  
P261 - Plant 2 dryer;  
P365 - Plant 3 preheater;  
P664 - Plant 6 glaze line;  
P668 - Plant 6 waxer; and  
P865 - Plant 8 preheater.

**B. State Only Enforceable Section (continued)**

**2. Off-Permit Changes**

The following emission units are included in this Title V permit as an off-permit change and must continue to operate in accordance with the applicable requirements listed below until this Title V permit has been renewed:

Emissions Unit	Applicable Requirement
F325	Terms and conditions of PTI # 06-07523
F351	Terms and conditions of PTI # 06-07523

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Plt 9 Factory (F126)

**Activity Description:** Plt 9 Factory is a fugitive dust source under negative pressure from kilns

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 9 factory (which includes raw material conveyors and a pug mill/extruder)	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 9 Grinding Plant (F151)

**Activity Description:** Plt 9 Grinding Plant is a fugitive dust source under negative pressure from kilns.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 9 grinding plant	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.

**2. Additional Terms and Conditions**

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 Factory (F225)

**Activity Description:** Plt 2 Factory is a fugitive dust source under negative pressure from kiln

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 2 factory (which includes raw material conveyors and a pug mill/extruder)	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 Clay/Shale Crushers (F252)  
**Activity Description:** Plt 2 One clay and one shale crusher

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
one clay crusher and one shale crusher, in Plant 2, vented to a fabric filter	OAC rule 3745-31-05(A)(3) (PTI 06-06301 as issued on 1/7/03)	The requirements of this rule also include compliance with the requirements of 40 CFR 60.670 - 676.
	40 CFR 60.670 - 676 (NSPS Subpart 000)	Particulate emissions shall not exceed 1.5 tons per year from the grinding plant (F252 - F257). No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions.
	OAC rule 3745-17-07(A)	See section A.1.2.a.
	OAC rule 3745-17-11(B)	See section A.1.2.a.

##### 2. Additional Terms and Conditions

- The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

- The enclosure of the grinding plant is equipped with wall fans which are defined as vents in 40 CFR 60.671. These vents have been disabled in order to avoid the initial performance test requirement in 40 CFR 60.8. Any subsequent activation of vents in the grinding plant enclosure is a violation of this permit and would result in the immediate applicability of the particulate emissions limits in 40 CFR 60.672(a) of 0.05 g/dscm and 7 % opacity and the stack test requirements of 40 CFR 60.8.

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.
2. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in section 60.672 of this subpart, including reports of observations using Method 22 to demonstrate compliance with section 60.672(e).

#### **V. Testing Requirements**

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

**1.a** Emission Limitation:

1.5 tons of particulate emissions per year

Applicable Compliance Method:

Compliance is based on emission factors developed during testing by USEPA at Plant 6 when gathering data to update AP-42 emission factors.

Total grinding plant:  $(8.5 \text{ \#/ton})(350,000\text{ton/yr})(95\% \text{ efficiency of dust suppressants and fabric filters})(98\% \text{ efficiency of total enclosure})(0.0005 \text{ ton/\#}) = 1.5 \text{ tons/yr}$

**1.b** Emission Limitation:

no visible fugitive emissions from the building

Applicable Compliance Method:

In determining compliance with section 60.672(e), and while performing the daily visible fugitive emissions checks, the owner or operator shall use Method 22 to determine fugitive emissions. The initial performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

#### **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 material Handling Operations (F253)  
**Activity Description:** Plt 2 All material handling operations

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
all material handling operations, including the 8 additive feeding operations, at Plant 2, equipped with baghouses	OAC rule 3745-31-05(A)(3) (PTI 06-06301 as issued on 1/7/03)	The requirements of this rule also include compliance with the requirements of 40 CFR 60.670 - 676.
	40 CFR 60.670 - 676 (NSPS Subpart 000)	Particulate emissions shall not exceed 1.5 tons per year from the grinding plant (F252 - F257). No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions.
	OAC rule 3745-17-07(A)	See section A.1.2.a.
	OAC rule 3745-17-11(B)	See section A.1.2.a.

##### 2. Additional Terms and Conditions

- 2.a The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

- The enclosure of the grinding plant is equipped with wall fans which are defined as vents in 40 CFR 60.671. These vents have been disabled in order to avoid the initial performance test requirement in 40 CFR 60.8. Any subsequent activation of vents in the grinding plant enclosure is a violation of this permit to install and would result in the immediate applicability of the particulate emissions limits in 40 CFR 60.672(a) of 0.05 g/dscm and 7 % opacity and the stack test requirements of 40 CFR 60.8.

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### 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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.
2. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in section 60.672 of this subpart, including reports of observations using Method 22 to demonstrate compliance with section 60.672(e).

#### V. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation:  
  
1.5 tons of particulate emissions per year  
  
Applicable Compliance Method:  
  
Compliance is based on emission factors developed during testing by USEPA at Plant 6 when gathering data to update AP-42 emission factors.  
  
Total grinding plant:  $(8.5 \text{ \#/ton})(350,000\text{ton/yr})(95\% \text{ efficiency of dust suppressants and fabric filters})(98\% \text{ efficiency of total enclosure})(0.0005 \text{ ton/\#}) = 1.5 \text{ tons/yr}$
  - 1.b Emission Limitation:  
  
no visible fugitive emissions from the building  
  
Applicable Compliance Method:  
  
In determining compliance with section 60.672(e), and while performing the daily visible fugitive emissions checks, the owner or operator shall use Method 22 to determine fugitive emissions. The initial performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 Crushed Material Storage Bins (F254)  
**Activity Description:** Plt 2 Eight crushed material storage bins

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
eight crushed material storage bins, in Plant 2, vented to two fabric filters	OAC rule 3745-31-05(A)(3) (PTI 06-06301 as issued on 1/7/03)	The requirements of this rule also include compliance with the requirements of 40 CFR 60.670 - 676.
	40 CFR 60.670 - 676 (NSPS Subpart 000)	Particulate emissions shall not exceed 1.5 tons per year from the grinding plant (F252 - F257). No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions.
	OAC rule 3745-17-07(A)	See section A.1.2.a.
	OAC rule 3745-17-11(B)	See section A.1.2.a.

##### 2. Additional Terms and Conditions

- 2.a The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

- The enclosure of the grinding plant is equipped with wall fans which are defined as vents in 40 CFR 60.671. These vents have been disabled in order to avoid the initial performance test requirement in 40 CFR 60.8. Any subsequent activation of vents in the grinding plant enclosure is a violation of this permit to install and would result in the immediate applicability of the particulate emissions limits in 40 CFR 60.672(a) of 0.05 g/dscm and 7 % opacity and the stack test requirements of 40 CFR 60.8.

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.
2. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in section 60.672 of this subpart, including reports of observations using Method 22 to demonstrate compliance with section 60.672(e).

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) in section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):
  - 1.a Emission Limitation:  
  
1.5 tons of particulate emissions per year  
  
Applicable Compliance Method:  
  
Compliance is based on emission factors developed during testing by USEPA at Plant 6 when gathering data to update AP-42 emission factors.  
  
Total grinding plant:  $(8.5 \text{ \#/ton})(350,000\text{ton/yr})(95\% \text{ efficiency of dust suppressants and fabric filters})(98\% \text{ efficiency of total enclosure})(0.0005 \text{ ton/\#}) = 1.5 \text{ tons/yr}$
  - 1.b Emission Limitation:  
  
no visible fugitive emissions from the building  
  
Applicable Compliance Method:  
  
In determining compliance with section 60.672(e), and while performing the daily visible fugitive emissions checks, the owner or operator shall use Method 22 to determine fugitive emissions. The initial performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

#### **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 Clay/Shale Grinders (F255)  
**Activity Description:** Plt 2 One clay and one shale grinder

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
one clay grinder and one shale grinder, in Plant 2, vented to two fabric filters	OAC rule 3745-31-05(A)(3) (PTI 06-06301 as issued on 1/7/03)	The requirements of this rule also include compliance with the requirements of 40 CFR 60.670 - 676.
	40 CFR 60.670 - 676 (NSPS Subpart 000)	Particulate emissions shall not exceed 1.5 tons per year from the grinding plant (F252 - F257). No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions.
	OAC rule 3745-17-07(A)	See section A.1.2.a.
	OAC rule 3745-17-11(B)	See section A.1.2.a.

##### 2. Additional Terms and Conditions

- The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

- The enclosure of the grinding plant is equipped with wall fans which are defined as vents in 40 CFR 60.671. These vents have been disabled in order to avoid the initial performance test requirement in 40 CFR 60.8. Any subsequent activation of vents in the grinding plant enclosure is a violation of this permit to install and would result in the immediate applicability of the particulate emissions limits in 40 CFR 60.672(a) of 0.05 g/dscm and 7 % opacity and the stack test requirements of 40 CFR 60.8.

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.
2. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in section 60.672 of this subpart, including reports of observations using Method 22 to demonstrate compliance with section 60.672(e).

#### **V. Testing Requirements**

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

**1.a** Emission Limitation:

1.5 tons of particulate emissions per year

Applicable Compliance Method:

Compliance is based on emission factors developed during testing by USEPA at Plant 6 when gathering data to update AP-42 emission factors.

Total grinding plant:  $(8.5 \text{ \#/ton})(350,000\text{ton/yr})(95\% \text{ efficiency of dust suppressants and fabric filters})(98\% \text{ efficiency of total enclosure})(0.0005 \text{ ton/\#}) = 1.5 \text{ tons/yr}$

**1.b** Emission Limitation:

no visible fugitive emissions from the building

Applicable Compliance Method:

In determining compliance with section 60.672(e), and while performing the daily visible fugitive emissions checks, the owner or operator shall use Method 22 to determine fugitive emissions. The initial performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

#### **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 Screening Operations (F256)  
**Activity Description:** Plt 2 Four screening operations

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
four screening operations, in Plant 2, vented to two fabric filters	OAC rule 3745-31-05(A)(3) (PTI 06-06301 as issued on 1/7/03)	The requirements of this rule also include compliance with the requirements of 40 CFR 60.670 - 676.
	40 CFR 60.670 - 676 (NSPS Subpart 000)	Particulate emissions shall not exceed 1.5 tons per year from the grinding plant (F252 - F257). No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions.
	OAC rule 3745-17-07(A)	See section A.1.2.a.
	OAC rule 3745-17-11(B)	See section A.1.2.a.

##### 2. Additional Terms and Conditions

- The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

- The enclosure of the grinding plant is equipped with wall fans which are defined as vents in 40 CFR 60.671. These vents have been disabled in order to avoid the initial performance test requirement in 40 CFR 60.8. Any subsequent activation of vents in the grinding plant enclosure is a violation of this permit to install and would result in the immediate applicability of the particulate emissions limits in 40 CFR 60.672(a) of 0.05 g/dscm and 7 % opacity and the stack test requirements of 40 CFR 60.8.

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.
2. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in section 60.672 of this subpart, including reports of observations using Method 22 to demonstrate compliance with section 60.672(e).

#### **V. Testing Requirements**

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

**1.a** Emission Limitation:

1.5 tons of particulate emissions per year

Applicable Compliance Method:

Compliance is based on emission factors developed during testing by USEPA at Plant 6 when gathering data to update AP-42 emission factors.

Total grinding plant:  $(8.5 \text{ \#/ton})(350,000\text{ton/yr})(95\% \text{ efficiency of dust suppressants and fabric filters})(98\% \text{ efficiency of total enclosure})(0.0005 \text{ ton/\#}) = 1.5 \text{ tons/yr}$

**1.b** Emission Limitation:

no visible fugitive emissions from the building

Applicable Compliance Method:

In determining compliance with section 60.672(e), and while performing the daily visible fugitive emissions checks, the owner or operator shall use Method 22 to determine fugitive emissions. The initial performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

#### **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 Ground Material Storage Bins (F257)  
**Activity Description:** Plt 2 Twelve ground material storage bins

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
twelve ground material storage bins, in Plant 2, vented to two fabric filters	OAC rule 3745-31-05(A)(3) (PTI 06-06301 as issued on 1/7/03)	The requirements of this rule also include compliance with the requirements of 40 CFR 60.670 - 676.
	40 CFR 60.670 - 676 (NSPS Subpart 000)	Particulate emissions shall not exceed 1.5 tons per year from the grinding plant (F252 - F257). No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions.
	OAC rule 3745-17-07(A)	See section A.1.2.a.
	OAC rule 3745-17-11(B)	See section A.1.2.a.

##### 2. Additional Terms and Conditions

- 2.a The requirements of this rule are less stringent than the requirements established pursuant to OAC rule 3745-31-05(A)(3).

##### II. Operational Restrictions

- The enclosure of the grinding plant is equipped with wall fans which are defined as vents in 40 CFR 60.671. These vents have been disabled in order to avoid the initial performance test requirement in 40 CFR 60.8. Any subsequent activation of vents in the grinding plant enclosure is a violation of this permit to install and would result in the immediate applicability of the particulate emissions limits in 40 CFR 60.672(a) of 0.05 g/dscm and 7 % opacity and the stack test requirements of 40 CFR 60.8.

##### III. Monitoring and/or Record Keeping Requirements

- The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.
2. The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in section 60.672 of this subpart, including reports of observations using Method 22 to demonstrate compliance with section 60.672(e).

#### **V. Testing Requirements**

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

**1.a** Emission Limitation:

1.5 tons of particulate emissions per year

Applicable Compliance Method:

Compliance is based on emission factors developed during testing by USEPA at Plant 6 when gathering data to update AP-42 emission factors.

Total grinding plant:  $(8.5 \text{ \#/ton})(350,000\text{ton/yr})(95\% \text{ efficiency of dust suppressants and fabric filters})(98\% \text{ efficiency of total enclosure})(0.0005 \text{ ton/\#}) = 1.5 \text{ tons/yr}$

**1.b** Emission Limitation:

no visible fugitive emissions from the building

Applicable Compliance Method:

In determining compliance with section 60.672(e), and while performing the daily visible fugitive emissions checks, the owner or operator shall use Method 22 to determine fugitive emissions. The initial performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

#### **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 3 Factory (F325)

**Activity Description:** Plt 3 Factory is a fugitive dust source - the dust collectors discharge back into the factory - three roof vents are the source of any fugitive duct. Factory is under negative pressure from kiln

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
factory (which includes raw material conveyors and a pug mill/extruder), in Plant 3, vented to three fabric filters	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	Particulate emissions from the stacks serving this emissions unit shall not exceed 2.7 pounds per hour, combined.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive emissions unit.

##### II. Operational Restrictions

1. To ensure ongoing compliance with the mass emission limitation for particulate emissions, there shall be no visible emissions from the building that contains this emissions unit.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall check for the presence of any visible particulate emissions from all openings in the Plant 3 factory building each day when this emissions unit is in operation. The presence of any visible emissions from any opening in the Plant 3 factory building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the Plant 3 factory building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

##### **1.a** Emission Limitation:

Particulate emissions from the stacks serving this emissions unit shall not exceed 2.7 pounds per hour, combined.

Applicable Compliance Method:

If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Methods 1 through 5, which are located in 40 CFR Part 60, Appendix A. Such a particulate emissions test shall also include testing at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

##### **1.b** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

#### **VI. Miscellaneous Requirements**

1. The permittee shall submit a complete PTI application for this emissions unit within 60 days after issuance of this permit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 3 Grinding Plant (F351)

**Activity Description:** Plt 3 Grinding Plant is a fugitive dust source - the dust collector discharges back into the grinding plant - a roof vent is the source of any fugitive dust

### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 3 grinding plant vented to a baghouse	OAC rule 3745-17-07(B)	See section A.I.2.a.
	OAC rule 3745-17-08(B)	See section A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	Particulate emissions from the stack serving this emissions unit shall not exceed 46.3 pounds per hour.

#### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive emissions unit.

#### II. Operational Restrictions

1. To ensure ongoing compliance with the mass emission limitation for particulate emissions, there shall be no visible emissions from the building that contains this emissions unit.

#### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### 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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.

## **V. Testing Requirements**

1. Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

- 1.a Emission Limitation:

Particulate emissions from the stack serving this emissions unit shall not exceed 46.3 pounds per hour.

Applicable Compliance Method:

If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Methods 1 through 5, which are located in 40 CFR Part 60, Appendix A. Such a particulate emissions test shall also include testing at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11.

- 1.b Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

## **VI. Miscellaneous Requirements**

1. The permittee shall submit a complete PTI application for this emissions unit within 60 days after issuance of this permit.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Factory (F426)

**Activity Description:** Plt 4-2 Factory is a fugitive dust source. It has a dust collector. The building is totally enclosed except for open windows in summer.

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
factory (includes raw material conveyors and a pug mill/extruder), in Plant 4-2, vented to a fabric filter	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.
	OAC rule 3745-17-11(A)	See section A.1.2.c.
	OAC rule 3745-17-07(A)	See section A.1.2.d.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive emissions unit.
- 2.c The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.22 lb/ton obtained from AP42 for a similar source. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.d This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

None

##### III. Monitoring and/or Record Keeping Requirements

None

##### IV. Reporting Requirements

None

Facility Name: **The Belden Brick Company**  
Facility ID: **06-79-00-0118**  
Emissions Unit: **Plt 4-2 Factory (F426)**

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Grinding Plant (F452)

**Activity Description:** Plt 4-2 Grinding Plant is a fugitive dust source. DeTer foam dust control system

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2 grinding plant, controlled by dust suppressant foam	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4 Brick Crusher (F467)

**Activity Description:** Plt 4 Brick Crusher is a fugitive dust source. Water spray dust control system

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
50 tons per hour jaw crusher and screen for coarse crushing of brick, with water sprays for control of fugitive dust	OAC rule 3745-31-05(A)(3) (PTI 06-3340)	Particulate emissions shall not exceed 1.25 lbs/hr or there shall be no visible emissions of fugitive dust.
	OAC rule 3745-17-07(B)	See section A.1.2.b.
	OAC rule 3745-17-08(B)	See section A.1.2.a.

##### 2. Additional Terms and Conditions

- 2.a This facility is located in Tuscarawas County, which is not identified in Appendix A of OAC rule 3745-17-08. Therefore, the fugitive dust emissions from this emissions unit are exempt from the fugitive dust control requirements and visible emission limitation established in OAC rules 3745-17-08(B) and 3745-17-07(B), respectively.
- 2.b The water sprays on the crusher shall be employed, if necessary, when the emissions unit is in operation, to control visible emissions of fugitive dust.

##### II. Operational Restrictions

None

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall check for the presence of any visible particulate emissions from the crusher each day when the crusher is in operation. The presence of any visible emissions from the crusher shall be noted in an operations log along with the date and time that the visible emissions were observed.

##### IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the crusher and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 15 and July 15 of each year and shall cover the previous 6-month period.

## **V. Testing Requirements**

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

1.a Emission Limitation:

1.25 lbs/hr of particulate emissions or no visible particulate emissions of fugitive dust

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the emission factor of 0.5 pound of particulates per ton (from Table 2.18-1 of the document entitled "Reasonably Available Control Measures for Fugitive Dust Sources", published by Ohio EPA) by the rated capacity of 50 tons per hour, and by the estimated control efficiency of 95% (1 - 0.95) for wet suppression or compliance may be demonstrated based upon visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22. Compliance with the 1.25 lbs/hr particulate emission limitation is assumed if the crusher complies with the no visible emissions limitation.

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 6 Factory (F625)

**Activity Description:** Plt 6 Factory is a fugitive dust source - the dust collector discharges back into the factory - roof vents are the source of any fugitive duct. Factory under negative pressure from kilns

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
factory (which includes raw material conveyors and a pug mill/extruder), in Plant 6, vented to a fabric filter	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	Particulate emissions from the stack serving this emissions unit shall not exceed 2.3 pounds per hour.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive emissions unit.

##### II. Operational Restrictions

1. To ensure ongoing compliance with the mass emission limitation for particulate emissions, there shall be no visible emissions from the building that contains this emissions unit.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall check for the presence of any visible particulate emissions from all openings in the Plant 6 factory building each day when this emissions unit is in operation. The presence of any visible emissions from any opening in the Plant 6 factory building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the Plant 6 factory building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

**1.a** Emission Limitation:

Particulate emissions from the stack serving this emissions unit shall not exceed 2.3 pounds per hour.

Applicable Compliance Method:

If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Methods 1 through 5, which are located in 40 CFR Part 60, Appendix A. Such a particulate emissions test shall also include testing at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11.

**1.b** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 6 Grinding Plant (F651)

**Activity Description:** Plt 6 Grinding Plant is a fugitive dust source - the dust collectors discharge back into the grinding plant - roof vents are the source of any fugitive dust.

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 6 grinding plant vented to two fabric filters	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	Particulate emissions from the stacks serving this emissions unit shall not exceed 40.7 pounds per hour, combined.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive emissions unit.

##### II. Operational Restrictions

1. To ensure ongoing compliance with the mass emission limitation for particulate emissions, there shall be no visible emissions from the building that contains this emissions unit.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

**1.a** Emission Limitation:

Particulate emissions from the stacks serving this emissions unit shall not exceed 40.7 pounds per hour, combined.

Applicable Compliance Method:

If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Methods 1 through 5, which are located in 40 CFR Part 60, Appendix A. Such a particulate emissions test shall also include testing at the inlet of the control device to determine the uncontrolled mass rate of emission for the emissions unit, for purposes of applying Figure II of OAC rule 3745-17-11.

**1.b** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Factory (F825)

**Activity Description:** Plt 8 Factory is a fugitive dust source - the dust collectors discharge back into the factory - roof vents are the source of any fugitive duct. factory is under negative pressure from kilns

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
factory (which includes raw material conveyors and a pug mill/extruder), in Plant 8, vented to three fabric filters	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	Particulate emissions from the stacks serving this emissions unit shall not exceed 5.0 pounds per hour, combined.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive emissions unit.

##### II. Operational Restrictions

1. To ensure ongoing compliance with the mass emission limitation for particulate emissions, there shall be no visible emissions from the building that contains this emissions unit.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall check for the presence of any visible particulate emissions from all openings in the Plant 8 factory building each day when this emissions unit is in operation. The presence of any visible emissions from any opening in the Plant 8 factory building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the Plant 8 factory building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

**1.a** Emission Limitation:

Particulate emissions from the stacks serving this emissions unit shall not exceed 5.0 pounds per hour, combined.

Applicable Compliance Method:

If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Methods 1 through 5, which are located in 40 CFR Part 60, Appendix A. Such a particulate emissions test shall also include testing at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11.

**1.b** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Grinding Plant (F851)

**Activity Description:** Plt 8 Grinding Plant is a fugitive dust source - the dust collectors discharge back into the grinding plant - roof vents are the source of any fugitive dust.

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 8 grinding plant vented to four fabric filters	OAC rule 3745-17-07(B)	See section A.1.2.a.
	OAC rule 3745-17-08(B)	See section A.1.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	Particulate emissions from the stacks serving this emissions unit shall not exceed 72.9 pounds per hour, combined.

##### 2. Additional Terms and Conditions

- 2.a Pursuant to paragraph (B)(11)(e) of OAC rule 3745-17-07, the requirements of OAC rule 3745-17-07(B) do not apply to this emissions unit.
- 2.b Since this emissions unit is not located in an Appendix A area, pursuant to paragraph (A)(1) of OAC rule 3745-17-08, the requirements of OAC rule 3745-17-08(B) do not apply to this fugitive emissions unit.

##### II. Operational Restrictions

1. To ensure ongoing compliance with the mass emission limitation for particulate emissions, there shall be no visible emissions from the building that contains this emissions unit.

##### III. Monitoring and/or Record Keeping Requirements

1. The permittee shall check for the presence of any visible particulate emissions from all openings in the grinding plant building each day when the grinding plant is in operation. The presence of any visible emissions from any opening in the grinding plant building shall be noted in an operations log along with the date and time that the visible emissions were observed.

#### **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 any openings in the grinding plant building and (b) describe the 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) semiannually, i.e., by January 15 and July 15 of each year and shall cover the previous six months.

#### **V. Testing Requirements**

1. Compliance with the emission limitation(s) established in this permit shall be determined in accordance with the following method(s):

**1.a** Emission Limitation:

Particulate emissions from the stacks serving this emissions unit shall not exceed 72.9 pounds per hour, combined.

Applicable Compliance Method:

If required, compliance with the particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Methods 1 through 5, which are located in 40 CFR Part 60, Appendix A. Such a particulate emissions test shall also include testing at the inlet of the control device to determine the uncontrolled mass rate of emission for the emission unit, for purposes of applying Figure II of OAC rule 3745-17-11.

**1.b** Emission Limitation:

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

Applicable Compliance Method:

If required, compliance with the visible particulate emission limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

#### **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 9 Tunnel Kiln #1 (P101)

**Activity Description:** Plt 9 Tunnel Kiln # 1 to P9KILNSTK, P9K1WCSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 9, natural gas-fired tunnel kiln # 1	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 61.4 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions unit P101 (weight of green brick fired);
- d. the total combined firing time for emissions unit P101; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 61.4 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

61.4 lbs/hr of sulfur dioxide

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 9 Tunnel Kiln #2 (P102)

**Activity Description:** Plt 9 Tunnel Kiln # 2 to P9KILNSTK, P9K2WCSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 9, Swindell Dressler natural gas-fired tunnel kiln #2	OAC rule 3745-31-05(A)(3) (PTI 06-074)	See section A.I.2.a.
	OAC rule 3745-17-11(A)	See section A.I.2.b.
	OAC rule 3745-17-07(A)	See section A.I.2.c.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 63.4 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The best available technology (BAT) determination was determined to be compliance with all applicable rules.
- 2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.c This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions unit P102 (weight of green brick fired);
- d. the total combined firing time for emissions unit P102; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 63.4 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

63.4 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 9 Dryer (P161)  
**Activity Description:** Plt 9 Dryer to P9DNSTK & P9DSSTK

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 9 Dryer	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.

**2. Additional Terms and Conditions**

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 2 Gas-Fired Tunnel Kiln #1 (P201)

**Activity Description:** Plt 2 Gas-Fired Tunnel Kiln #1 to P2KILBAGSK

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Gas fired tunnel kiln vented to a dry scrubber and baghouse	OAC rule 3745-31-05(A)(3) (PTI 06-06301, modified 1/7/03)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-21-08(B), and 3745-21-08(B), and 40 CFR 63.8380 through 63.8515.
		Emissions of particulate matter shall not exceed 1.9 pounds per hour nor 8.2 tons per year.
		Emissions of sulfur dioxide shall not exceed 20.2 pounds per hour nor 88.5 tons per year.
		Emissions of nitrogen oxides shall not exceed 5.4 pounds per hour nor 23.7 tons per year.
		Emissions of carbon monoxide shall not exceed 17.0 pounds per hour nor 74.5 tons per year.
		Emissions of hydrogen fluoride shall not exceed 1.4 pounds per hour nor 6.2 tons per year.
		Emissions of hydrogen chloride shall not exceed 0.9 pound per hour nor 4.0 tons per year.
	OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
	OAC rule 3745-17-11(B)	The requirements of this rule are less stringent than those defined in OAC rule 3745-31-05(A)(3) above.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	40 CFR Part 63, Subpart JJJJJ (63.8380 through 63.8515)	[40 CFR 63.8405] HF emissions must not exceed 0.029 kilogram per megagram (kg/Mg) (0.057 pound per ton (lb/ton)) of fired product or uncontrolled emissions must be reduced by at least 90%.  HCl emissions must not exceed 0.13 kg/Mg (0.26 lb/ton) of fired product or uncontrolled emissions must be reduced by at least 30%.  PM emissions must not exceed 0.21 kg/Mg (0.42 lb/ton) of fired product.
	OAC rule 3745-21-08(B)	See section A.I.2.r.
	OAC rule 3745-23-06(B)	See section A.I.2.s.

**2. Additional Terms and Conditions**

**2.a** The Belden Brick Company operates a brick making facility in Sugarcreek, Ohio consisting of several adjacent brick plants. Belden shall install control equipment on the three tunnel kilns at Plant 8 (P801 - P803) in order to reduce existing source emissions sufficiently to net out of PSD review for Plant 2 (P201). Belden shall install a continuous emissions monitoring system on the existing Plant 8. This system shall be functionally equivalent to the system described in this permit for Plant 2. Adequate records shall be kept by the Plant 8 CEMS to document the compliance status of Plant 2 with applicable PSD significance levels. The Belden Brick Company shall not violate those significance levels. The table below summarizes the average netted emission rates, in tons per year, for Plant 8 over the last two years (1999 and 2000), with reductions based on operating experience and testing of Plant 2 and Plant 3 scrubbers. The Plant 8 emission reduction for PE reflects the increased dust loading associated with the dry scrubber.

POLLUTANT	PLANT 2	PLANT 8	PLANT 8	PLANT 3	NET
		AVG. UNC.	REDUCTION	INCREASE	INCREASE
Particulate Matter	8.2	15.2	8.1		0.1
Sulfur Dioxide	88.5	966.3*	649.3	124.4	- 436.4
Nitrogen Oxides	23.7	36.0	0		23.7
Carbon Monoxide	74.5	140.0	0		74.5
Hydrogen Fluoride	6.2	86.2	75.3		- 69.1
Hydrogen Chloride	4.0	52.5	46.0		- 42.0

\* See the note in section A.V.1.b.

**2.b** [40 CFR 63.8420(a)]  
 You must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction and during periods of routine control device maintenance as specified in 40 CFR 63.8420(e).

## 2. Additional Terms and Conditions (continued)

- 2.c** [40 CFR 63.8420(b)]  
Except as specified in 40 CFR 63.8420(e), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in section 63.6(e)(1)(i). During the period between the compliance date specified for your affected source in section 63.8395 and the date upon which continuous monitoring systems (CMS) (e.g., continuous parameter monitoring systems) have been installed and verified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- 2.d** [40 CFR 63.8420(c)]  
You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in section 63.6(e)(3).
- 2.e** [40 CFR 63.8420(d)]  
You must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan according to the requirements in section 63.8425.
- 2.f** [40 CFR 63.8420(e)]  
If you own or operate an affected kiln and must perform routine maintenance on the control device for that kiln, you may bypass the kiln control device and continue operating the kiln upon approval by the Administrator provided you satisfy the conditions listed in 40 CFR 63.8420(e)(1) through (5).  
(1) You must request a routine control device maintenance exemption from the Administrator. Your request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during kiln shutdowns, describe how you plan to minimize emissions to the greatest extent possible during the maintenance, and provide any other documentation required by the Administrator.  
(2) The routine control device maintenance exemption must not exceed 4 percent of the annual operating uptime for each kiln.  
(3) The request for the routine control device maintenance exemption, if approved by the Administrator, must be incorporated by reference in and attached to the affected source's title V permit.  
(4) You must minimize HAP emissions during the period when the kiln is operating and the control device is offline.  
(5) You must minimize the time period during which the kiln is operating and the control device is offline.
- 2.g** [40 CFR 63.8420(f)]  
You must be in compliance with the provisions of subpart A of this part, except as noted in Table 7 to this subpart.
- 2.h** [40 CFR 63.8455(a)]  
You must demonstrate initial compliance with each emission limitation that applies to you according to Table 4 to this subpart.
- 2.i** [40 CFR 63.8455(b)]  
You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in section 63.8445 and Table 3 to this subpart.
- 2.j** [40 CFR 63.8455(c)]  
You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in section 63.8480(e).
- 2.k** [40 CFR 63.8470(a)]  
You must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 2 to this subpart that applies to you according to the methods specified in Table 5 to this subpart.
- 2.l** [40 CFR 63.8470(c)]  
You must report each instance in which you did not meet each emission limit and each operating limit in this subpart that applies to you. This includes periods of startup, shutdown, malfunction, and routine control device maintenance. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in section 63.8485.

## 2. Additional Terms and Conditions (continued)

- 2.m** [40 CFR 63.8470(d)]  
During periods of startup, shutdown, and malfunction, you must operate according to your SSMP.
- 2.n** [40 CFR 63.8470(e)]  
Consistent with sections 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating according to an SSMP that satisfies the requirements of section 63.6(e) and your OM&M plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in section 63.6(e).
- 2.o** [40 CFR 63.8470(f)]  
Deviations that occur during periods of control device maintenance covered by an approved routine control device maintenance exemption according to section 63.8420(e) are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the approved routine control device maintenance exemption.
- 2.p** [40 CFR 63.8470(g)]  
You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from tunnel kilns equipped with DLA, DIFF, or DLS/FF by monitoring VE at each kiln stack according to the requirements in 40 CFR 63.8470(g)(1) through (3).  
(1) Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A. You must conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.  
(2) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A, you must promptly initiate and complete corrective actions according to your OM&M plan. If no VE are observed in 30 consecutive daily Method 22 tests for any kiln stack, you may decrease the frequency of Method 22 testing from daily to weekly for that kiln stack. If VE are observed during any weekly test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume Method 22 testing of that kiln stack on a daily basis, and maintain that schedule until no VE are observed in 30 consecutive daily tests, at which time you may again decrease the frequency of Method 22 testing to a weekly basis.  
(3) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A, you must report these deviations by following the requirements in section 63.8485.
- 2.q** [40 CFR 63.8505]  
Table 7 to this subpart shows which parts of the General Provisions in sections 63.1 through 63.15 apply to you.
- 2.r** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06301.  
  
On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.s** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06301.

## II. Operational Restrictions

1. During any period of CEMS downtime which exceeds 3 hours, all scrubber reagent feed rates shall be set to the maximum rates which were recorded for the same product during its most recent run.

## II. Operational Restrictions (continued)

2. [40 CFR 63.8405 (Table 2)]  
If you use a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; or maintain no VE from the DIFF or DLS/FF stack.
3. [40 CFR 63.8405 (Table 2)]  
You must maintain free-flowing lime in the feed hopper or silo and to the APCD at all times for continuous injection systems; maintain the feeder setting at or above the level established during the performance test for continuous injection systems.

## 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 baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

2. For sulfur dioxide, nitrogen oxides, carbon monoxide and exhaust gas flow:

- a. The permittee shall operate and maintain equipment to continuously monitor and record SO<sub>2</sub>, NO<sub>x</sub>, CO, and exhaust gas flow data from this emissions unit in units of the applicable standards (pounds per hour and tons per year for SO<sub>2</sub>, NO<sub>x</sub>, and CO). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 6, and be operated in accordance with 40 CFR Part 60.13 unless otherwise specified in section A.III.2.b below.

The permittee shall maintain records of all data obtained by the continuous SO<sub>2</sub>, NO<sub>x</sub>, CO, and exhaust gas flow monitoring system including, but not limited to, minute-by-minute concentration data for SO<sub>2</sub>, NO<sub>x</sub>, and CO; minute-by-minute flow data in ACFM; SO<sub>2</sub>, NO<sub>x</sub> and CO data in pounds per hour; the results of all daily, weekly, and quarterly calibration checks; and the magnitude of any calibration adjustments.

Each CEMS consists of all the equipment used to acquire and record data and includes any sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The data recorded by the CEMS shall be used to determine compliance with the applicable emission limitations on an ongoing basis.

- b. Within 90 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO<sub>2</sub>, NO<sub>x</sub> CO and exhaust gas flow monitoring system designed to meet all requirements as listed in 40 CFR Part 60, Appendix F and ensure continuous valid and representative readings of SO<sub>2</sub>, NO<sub>x</sub>, CO and flow. The plan shall describe in detail, complete, step-by-step procedures and operations for each of the following activities:

- i. calibration of CEMS;
- ii. CD determination and adjustment of CEMS;
- iii. preventive maintenance of CEMS (including spare parts inventory);
- iv. data recording, calculations, and reporting;
- v. accuracy audit procedures including sampling and analysis methods; and
- vi. program of corrective action for malfunctioning CEMS.

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

The permittee shall be required to complete a CEMS certification relative accuracy test audit (RATA), in accordance with the procedures specified in 40 CFR Part 60, Appendix F, within 12 months after permit issuance (see section A.V.3). From the date of CEMS certification forward, the permittee may forego annual RATA requirements as listed in 40 CFR Part 60, Appendix F, by completing a quarterly cylinder gas or relative accuracy audit, in accordance with 40 CFR Part 60, Appendix F, for each quarter of the year. Should any CEMS not pass a cylinder gas or relative accuracy audit on the first attempt for two consecutive quarters (even though a recalibration or repair allows the second attempted cylinder gas or relative accuracy audit to pass), the permittee shall complete a RATA within 60 days of the second quarter's failed cylinder gas or relative accuracy audit. The permittee shall also complete a RATA for the CEMS within 6 months prior to the expiration of this permit. RATA testing may also be required if the CEMS as listed on the CEMS certification letter from Ohio EPA, Central Office, or any CEMS associated equipment, are changed or modified.

Beginning on the effective date of this permit, the permittee shall perform daily zero/span calibration drift checks on each SO<sub>2</sub>, NO<sub>x</sub>, CO, and flow CEMS for 60 consecutive operating days in accordance with the requirements specified in 40 CFR Part 60, Appendix F, section 4. If, on the first attempt, the results of each daily zero/span calibration drift check are less than the criteria for excessive calibration drift specified in 40 CFR Part 60, Appendix F, section 4.3 (as determined by the Ohio EPA, Southeast District Office), the permittee shall begin performing zero/span calibration drift checks on a weekly basis. If any CEMS should fail a weekly zero/span calibration drift check for 2 consecutive weeks (based on the criteria of being 2x over the limit as stated in Appendix F, section 4.3), the permittee shall perform daily zero/span calibration drift checks until such time as 60 consecutive daily zero/span calibration drift checks have been successfully completed within the criteria specified in Appendix F, section 4.3.

The quality assurance/quality control plan and a logbook dedicated to the SO<sub>2</sub>, NO<sub>x</sub>, CO, and flow CEMS must be kept on site and available for inspection during regular office hours.

**3.** For hydrogen fluoride and hydrogen chloride:

a. The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen fluoride and hydrogen chloride from this emissions unit in units of the applicable standards (pounds per hour and tons per year for both HF and HCl). The permittee shall maintain records of all data obtained by the HF and HCl CEMS including, but not limited to minute-by-minute concentration data for HF and HCl; HF and HCl data in pounds per hour; the results of all manufacturer's recommended calibration checks; and the magnitude of any calibration adjustments.

Each CEMS consists of all the equipment used to acquire and record data and includes any sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The data recorded by the CEMS shall be used to determine compliance with the applicable emission limitations on an ongoing basis.

b. Within 90 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of HF and HCl. The plan shall follow all manufacturer's recommendations regarding maintaining the CEMS, and assuring accurate data measurements.

The permittee shall be required to complete a CEMS certification RATA within the first 12 months of the effective date of this permit. From the date of CEMS certification forward, the quality assurance/quality control plan developed for the CEMS shall be followed. The permittee shall also complete a RATA for the CEMS within 6 months prior to the expiration of this permit. RATA testing may also be required if CEMS as listed on the CEMS certification letter from Ohio EPA, Central Office, or CEMS associated equipment, are changed or modified.

The quality assurance/quality control plan and a logbook dedicated to the HF and HCl CEMS must be kept on site and available for inspection during regular office hours.

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

4. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.
5. The permittee shall maintain daily records of all scrubber reagent feed rates (maximum actual rates or set points) and the associated product in the kiln at the time.
6. For Plant 2 (P201), Plant 3 (P301) and Plant 8 (P801, P802, P803) the permittee shall maintain the following monthly records for each plant:
  - a. total SO<sub>2</sub> emissions for the month, including any emissions that occur during the bypassing of the control equipment and/or the continuous emission monitor;
  - b. total SO<sub>2</sub> emissions for the previous 12 months; and
  - c. the net SO<sub>2</sub> emissions increase, calculated in accordance with the equation in section A.V.1.b.
7. [40 CFR 63.8425(a)]  
You must prepare, implement, and revise as necessary an OM&M plan that includes the information in 40 CFR 63.8425(b). Your OM&M plan must be available for inspection by the permitting authority upon request.
8. [40 CFR 63.8425(b)]  
Your OM&M plan must include, as a minimum, the information in 40 CFR 63.8425(b)(1) through (13).
  - (1) Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.
  - (2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.
  - (3) The limits for each parameter that represent continuous compliance with the emission limitations in section 63.8405. The limits must be based on values of the monitored parameters recorded during performance tests.
  - (4) Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer's recommendations.
  - (5) Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last APCD).
  - (6) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.
  - (7) Continuous monitoring system performance evaluation procedures and acceptance criteria (e.g., calibrations).
  - (8) Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in sections 63.8450 and 63.8(c)(1), (3), (4)(ii), (7), and (8).
  - (9) Continuous monitoring system data quality assurance procedures consistent with the requirements in section 63.8(d).
  - (10) Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in section 63.10(c), (e)(1), and (e)(2)(i).
  - (11) Procedures for responding to operating parameter deviations, including the procedures in 40 CFR 63.8425(b)(11)(i) through (iii).
    - (i) Procedures for determining the cause of the operating parameter deviation.
    - (ii) Actions for correcting the deviation and returning the operating parameters to the allowable limits.
    - (iii) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.
  - (12) Procedures for keeping records to document compliance.
  - (13) If you operate an affected kiln and you plan to take the kiln control device out of service for routine maintenance, as specified in section 63.8420(e), the procedures specified in 40 CFR 63.8425(b)(13)(i) and (ii).
    - (i) Procedures for minimizing HAP emissions from the kiln during periods of routine maintenance of the kiln control device when the kiln is operating and the control device is offline.
    - (ii) Procedures for minimizing the duration of any period of routine maintenance on the kiln control device when the kiln is operating and the control device is offline.

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

9. [40 CFR 63.8425(c)]  
Changes to the operating limits in your OM&M plan require a new performance test. If you are revising an operating limit parameter value, you must meet the requirements in paragraphs (c)(1) and (2) of this section.  
(1) Submit a notification of performance test to the Administrator as specified in section 63.7(b).  
(2) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, you must submit the performance test results and the revised operating limits as part of the Notification of Compliance Status required under section 63.9(h).
10. [40 CFR 63.8425(d)]  
If you are revising the inspection and maintenance procedures in your OM&M plan, you do not need to conduct a new performance test.
11. [40 CFR 63.8450(a)]  
You must install, operate, and maintain each CMS according to your OM&M plan and the requirements in 40 CFR 63.8450(a)(1) through (5).  
(1) Conduct a performance evaluation of each CMS according to your OM&M plan.  
(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, you must have at least three of four equally spaced data values (or at least 75 percent if you collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in section 63.8420(e)).  
(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3-hour average period, you must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in section 63.8420(e)).  
(4) Record the results of each inspection, calibration, and validation check.  
(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
12. [40 CFR 63.8450(e)]  
For each bag leak detection system, you must meet the requirements in 40 CFR 63.8450(e)(1) through (11).  
(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (EPA-454/R-98-015, September 1997). This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Continuous Emission Monitoring. Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.  
(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.  
(3) The bag leak detection system sensor must provide an output of relative PM loadings.  
(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.  
(5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.  
(6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.

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

(7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

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

(9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the "Fabric Filter Bag Leak Detection Guidance."

(10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as detailed in your OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Record each adjustment.

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

**13.** [40 CFR 63.8450(f)]

For each lime or chemical feed rate measurement device, you must meet the requirements in 40 CFR 63.8450(a)(1) through (5) and 40 CFR 63.8450(f)(1) and (2).

(1) Locate the measurement device in a position that provides a representative feed rate measurement.

(2) At least semiannually, conduct a calibration check.

**14.** [40 CFR 63.8450(h)]

Requests for approval of alternate monitoring procedures must meet the requirements in 40 CFR 63.8445(i) and 63.8(f).

**15.** [40 CFR 63.8465(b)]

Except for periods of monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in section 63.8420(e) when the affected source is operating.

**16.** [40 CFR 63.8465(c)]

You may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. You must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

**17.** [40 CFR 63.8490(a)]

You must keep the records listed in 40 CFR 63.8490(a)(1) through (4).

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in section 63.10(b)(2)(xiv).

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

(3) Records of performance tests as required in section 63.10(b)(2)(viii).

(4) Records relating to control device maintenance and documentation of your approved routine control device maintenance exemption, if you request such an exemption under section 63.8420(e).

**18.** [40 CFR 63.8490(b)]

You must keep the records required in Table 5 to this subpart to show continuous compliance with each emission limitation that applies to you.

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

19. [40 CFR 63.8490(c)]  
You must also maintain the records listed in paragraphs (c)(1) through (6) of this section.  
(1) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.  
(2) For each deviation of an operating limit parameter value, the date, time, and duration of the deviation, a brief explanation of the cause of the deviation and the corrective action taken, and whether the deviation occurred during a period of startup, shutdown, or malfunction.  
(3) For each affected source, records of production rates on a fired-product basis.  
(4) Records for any approved alternative monitoring or test procedures.  
(5) Records of maintenance and inspections performed on the APCD.  
(6) Current copies of your SSMP and OM&M plan, including any revisions, with records documenting conformance.
20. [40 CFR 63.8495(a)]  
Your records must be in a form suitable and readily available for expeditious review, according to section 63.10(b)(1).
21. [40 CFR 63.8495(b)]  
As specified in section 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
22. [40 CFR 63.8495(c)]  
You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to section 63.10(b)(1). You may keep the records offsite for the remaining 3 years.

### IV. Reporting Requirements

1. The permittee shall submit the results of the daily zero/span calibration drift checks required in section A.III.2.b to the Ohio EPA, Southeast District Office within 14 days after the drift checks are completed.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit deviation (excursion) reports that identify all periods of CEMS downtime which exceeds 3-hours duration during which the scrubber reagent feed rates were less than the maximum actual feed rate or set point which was previously associated with the product being run.
4. Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(l) and 3704.031, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO<sub>2</sub>, NO<sub>x</sub>, and CO values in excess of the applicable limits specified in this permit.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting any continuous SO<sub>2</sub>, NO<sub>x</sub>, CO, and exhaust gas flow monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

#### **IV. Reporting Requirements (continued)**

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission report. The summary shall be submitted to the Ohio EPA, Southeast District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

5. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting all instances of hydrogen fluoride and hydrogen chloride values in excess of the limitations specified in the terms and conditions of this permit, detailing the date, commencement and completion times, duration, magnitude, reason (if known) and corrective actions taken (if any) of all values above the applicable emission limitations.

The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting any continuous hydrogen fluoride and hydrogen chloride monitoring system downtime while the emissions unit was on-line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of source and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report. If there are no excess emissions during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly excess emission reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during previous calendar quarter.

Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(l) and 3704.031, the permittee shall submit a summary of the excess emission report. The summary shall be submitted to the Ohio EPA, Southeast District Office within thirty (30) days following the end of each calendar quarter in a manner prescribed by the Director.

6. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month, net SO<sub>2</sub> emissions increase exceeded the SO<sub>2</sub> significance level, as calculated in section A.V.1.b. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
7. [40 CFR 63.8480(a)]  
You must submit all of the notifications in sections 63.7(b) and (c), 63.8(f)(4), and 63.9 (b) through (e), (g)(1), and (h) that apply to you, by the dates specified.
8. [40 CFR 63.8480(b)]  
As specified in section 63.9(b)(2) and (3), if you start up your affected source before May 16, 2003, you must submit an Initial Notification not later than 120 calendar days after May 16, 2003.
9. [40 CFR 63.8480(d)]  
If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in section 63.7(b)(1).

#### IV. Reporting Requirements (continued)

- 10.** [40 CFR 63.8480(e)]  
If you are required to conduct a performance test as specified in Table 3 to this subpart, you must submit a Notification of Compliance Status as specified in section 63.9(h) and 40 CFR 63.8480(e)(1) and (2).  
(1) For each compliance demonstration that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test, according to section 63.10(d)(2).  
(2) In addition to the requirements in section 63.9(h)(2)(i), you must include the information in 40 CFR 63.8480(e)(2)(i) and (ii) in your Notification of Compliance Status.  
(i) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.  
(ii) For each APCD that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in section 63.8450(e).
- 11.** [40 CFR 63.8480(f)]  
If you request a routine control device maintenance exemption according to section 63.8420(e), you must submit your request for the exemption no later than 30 days before the compliance date.
- 12.** [40 CFR 63.8485(a)]  
You must submit each report in Table 6 to this subpart that applies to you.
- 13.** [40 CFR 63.8485(b)]  
Unless the Administrator has approved a different schedule for submission of reports under section 63.10(a), you must submit each report by the date in Table 6 to this subpart and as specified in 40 CFR 63.8485(b)(1) through (5).  
(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in section 63.8395 and ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months. For example, if your compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.  
(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.  
(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.  
(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.  
(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 CFR 63.8485(b)(1) through (4).

#### IV. Reporting Requirements (continued)

14. [40 CFR 63.8485(c)]

The compliance report must contain the information in 40 CFR 63.8485(c)(1) through (7).

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP and OM&M plan, the compliance report must include the information specified in section 63.10(d)(5)(i).

(5) A description of control device maintenance performed while the control device was offline and the kiln controlled by the control device was operating, including the information specified in 40 CFR 63.8485(c)(5)(i) through (iii).

(i) The date and time when the control device was shutdown and restarted.

(ii) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline.

(iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance exemption developed as specified in section 63.8420(e). If the control device maintenance was included in your approved routine control device maintenance exemption, then you must report the information in 40 CFR 63.8485(c)(5)(iii)(A) through (C).

(A) The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(B) The amount of time that each kiln controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance exemption during the current semiannual compliance period and during the previous semiannual compliance period.

(C) Based on the information recorded under 40 CFR 63.8485(c)(5)(iii)(A) and (B), compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance using Equation 1 of this section:

$$RM = [(DTp + DTc) / (KUp + KUc)] \times 100$$

where:

RM = Annual percentage of kiln uptime during which control device was offline for routine control device maintenance;

DTp = Control device downtime claimed under the routine control device maintenance exemption for the previous semiannual compliance period;

DTc = Control device downtime claimed under the routine control device maintenance exemption for the current semiannual compliance period;

KUp = Kiln uptime for the previous semiannual compliance period; and

KUc = Kiln uptime for the current semiannual compliance period.

(6) If there are no deviations from any emission limitations (emission limits or operating limits) that apply to you, the compliance report must contain a statement that there were no deviations from the emission limitations during the reporting period.

(7) If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

#### IV. Reporting Requirements (continued)

- 15.** [40 CFR 63.8485(e)]  
For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where you are using a CMS to comply with the emission limitations in this subpart, you must include the information in 40 CFR 63.8485(c)(1) through (5) and 40 CFR 63.8485(e)(1) through (13). This includes periods of startup, shutdown, malfunction, and routine control device maintenance.
- (1) The total operating time of each affected source during the reporting period.
  - (2) The date and time that each malfunction started and stopped.
  - (3) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (4) The date, time, and duration that each CMS was out-of-control, including the pertinent information in your OM&M plan.
  - (5) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during routine control device maintenance covered in your approved routine control device maintenance exemption; or during another period.
  - (6) A description of corrective action taken in response to a deviation.
  - (7) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
  - (8) A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (9) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
  - (10) A brief description of the process units.
  - (11) A brief description of the CMS.
  - (12) The date of the latest CMS certification or audit.
  - (13) A description of any changes in CMS, processes, or control equipment since the last reporting period.
- 16.** [40 CFR 63.8485(f)]  
If you have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report according to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation you may have to report deviations from permit requirements to the permitting authority.
- 17.** [40 CFR 63.8485 (Table 6)]  
You must submit a compliance report semiannually according to the requirements in section 63.8485(b).
- a. If there are no deviations from any emission limitations (emission limits, operating limits) that apply to you, the report must contain a statement that there were no deviations from the emission limitations during the reporting period. If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.
  - b. If you have a deviation from any emission limitation (emission limit, operating limit) during the reporting period, the report must contain the information in section 63.8485(d) or (e). If there were periods during which the CMS was out-of-control, as specified in your OM&M plan, the report must contain the information in section 63.8485(e).
  - c. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in section 63.10(d)(5)(i).
- 18.** [40 CFR 63.8485 (Table 6)]  
You must submit an immediate startup, shutdown, and malfunction report if you took actions during a startup, shutdown, or malfunction during the reporting period that are not consistent with your SSMP. The report must contain:
- a. actions taken for the event according to the requirements in section 63.10(d)(5)(ii) by fax or telephone within 2 working days after starting actions inconsistent with the plan..
  - b. the information in 63.10(d)(5)(ii) by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 6-minute average, except as provided by the rule

Applicable Compliance Method:

Compliance with the visible particulate emission limit shall be determined through visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible particulate emission testing is specifically required to demonstrate compliance with this limit, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

**1.b** Emission Limitations:

Emissions of sulfur dioxide shall not exceed 20.2 pounds per hour nor 88.5 tons per year.  
Emissions of nitrogen oxides shall not exceed 5.4 pounds per hour nor 23.7 tons per year.  
Emissions of carbon monoxide shall not exceed 17.0 pounds per hour nor 74.5 tons per year.  
Emissions of hydrogen fluoride shall not exceed 1.4 pounds per hour nor 6.2 tons per year.  
Emissions of hydrogen chloride shall not exceed 0.9 pound per hour nor 4.0 tons per year.

Applicable Compliance Method:

Compliance with the sulfur dioxide, nitrogen oxides, carbon monoxide, hydrogen fluoride, and hydrogen chloride emission limitations shall be based upon the records and report data specified in sections A.III.2 and A.III.3. If required, the permittee shall demonstrate compliance with the allowable mass emission rate for sulfur dioxide, nitrogen oxides, carbon monoxide, hydrogen fluoride, and hydrogen chloride in accordance with the methods and procedures specified in 40 CFR Part 60 Appendix A.

Data required by section A.III.6 shall be used in the following equation. If true, the calculation demonstrates that the PSD significance level has not been exceeded.

$$P2 + P3 + P8 - 966.3 \text{ TPY} < 40 \text{ TPY} + (6.6 \text{ lbs/hr} \times \text{hr}/12\text{-month} \times 0.0005 \text{ ton/lb})$$

where: P2, P3 and P8 = Plant 2, 3 and 8 emissions in tons/12-month period.

NOTE: The 966.3 TPY value in the equation is from PTI # 06-06301 and will be revised to a value consistent with the requirements of OAC rules 3745-31-10 through 20.

**1.c** Emission Limitations:

Particulate emissions shall not exceed 1.9 pounds per hour nor 8.2 tons per year.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

The allowable ton per year limit was determined by multiplying the allowable emission rate, in pounds per hour, by 8760 hours per year, then dividing by 2000 pounds per ton. Therefore, compliance with the pound per hour limit will result in compliance with the ton per year limit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- The emission testing shall be conducted within 12 months after permit issuance.
  - The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates, sulfur dioxide, nitrogen oxides, carbon monoxide, hydrogen fluoride, and hydrogen chloride.
  - The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:

for particulates - Method 5 of 40 CFR Part 60, Appendix A;  
for sulfur dioxide - Method 6 of 40 CFR Part 60, Appendix A;  
for nitrogen oxides - Method 7 of 40 CFR Part 60, Appendix A;  
for carbon monoxide - Method 10 of 40 CFR Part 60, Appendix A;  
for exhaust gas flow - Methods 1 through 4 of 40 CFR Part 60, Appendix A;  
for hydrogen fluoride - Method 26A of 40 CFR Part 60, Appendix A; and  
for hydrogen chloride - Method 26 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

In addition, during each test run for PE, visible emission readings shall be performed in accordance with USEPA Method 9.

- 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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)

3. During the emission test required to be conducted within 12 months after permit issuance, the permittee shall conduct certification tests for each CEMS specified in sections A.III.2 and A.III.3 pursuant to ORC section 3704.03(I) and the appropriate performance specifications as designated below. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of each CEMS specified in sections A.III.2 and A.III.3 shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and the appropriate performance specification as designated below:

for sulfur dioxide - Performance Specifications 2 and 6 of 40 CFR Part 60, Appendix B;  
for nitrogen oxides - Performance Specifications 2 and 6 of 40 CFR Part 60, Appendix B;  
for carbon monoxide - Performance Specifications 4 and 6 of 40 CFR Part 60, Appendix B;  
for exhaust gas flow - Performance Specification 6 of 40 CFR Part 60, Appendix B;  
for hydrogen fluoride - Performance Specifications 6 and 15 of 40 CFR Part 60, Appendix B; and  
for hydrogen chloride - Performance Specifications 6 and 15 of 40 CFR Part 60, Appendix B.

4. [40 CFR 63.8435]  
You must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in section 63.8395 and according to the provisions in section 63.7(a)(2).
5. [40 CFR 63.8440(a)]  
You must conduct a performance test before renewing your 40 CFR part 70 operating permit or at least every 5 years following the initial performance test.
6. [40 CFR 63.8440(b)]  
You must conduct a performance test when you want to change the parameter value for any operating limit specified in your OM&M plan.
7. [40 CFR 63.8445(a)]  
You must conduct each performance test in Table 3 to this subpart that applies to you.
8. [40 CFR 63.8445(b)]  
Before conducting the performance test, you must install and calibrate all monitoring equipment.
9. [40 CFR 63.8445(c)]  
Each performance test must be conducted according to the requirements in section 63.7 and under the specific conditions in Table 3 to this subpart.
10. [40 CFR 63.8445(d)]  
You must test while operating at the maximum production level.
11. [40 CFR 63.8445(e)]  
You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in section 63.7(e)(1).
12. [40 CFR 63.8445(f)]  
You must conduct at least three separate test runs for each performance test required in this section, as specified in section 63.7(e)(3). Each test run must last at least 1 hour.

## V. Testing Requirements (continued)

**13.** [40 CFR 63.8445(g)]

You must use the data gathered during the performance test and the equations in 40 CFR 63.8445(g)(1) and (2) to determine compliance with the emission limitations.

(1) To determine compliance with the production-based hydrogen fluoride (HF), hydrogen chloride (HCl), and particulate matter (PM) emission limits in Table 1 to this subpart, you must calculate your mass emissions per unit of production for each test run using Equation 1 of this section:

$$MP = ER / P \quad (\text{Eq. 1})$$

Where:

MP=mass per unit of production, kilograms (pounds) of pollutant per megagram (ton) of fired product

ER=mass emission rate of pollutant (HF, HCl, or PM) during each performance test run, kilograms (pounds) per hour

P=production rate during each performance test run, megagrams (tons) of fired product per hour.

(2) To determine compliance with the percent reduction HF and HCl emission limits in Table 1 to this subpart, you must calculate the percent reduction for each test run using Equation 2 of this section:

$$PR = [(ER_i - ER_o) / ER_i] \times 100 \quad (\text{Eq. 2})$$

Where:

PR=percent reduction, percent

ER<sub>i</sub>=mass emission rate of specific HAP (HF or HCl) entering the APCD, kilograms (pounds) per hour

ER<sub>o</sub>=mass emission rate of specific HAP (HF or HCl) exiting the APCD, kilograms (pounds) per hour.

**14.** [40 CFR 63.8445(h)]

You must establish each site-specific operating limit in Table 2 to this subpart that applies to you as specified in Table 3 to this subpart.

**15.a** [40 CFR 63.8405 (Table 3)]

For each kiln, you must select locations of sampling ports and the number of traverse points using Method 1 or 1A of 40 CFR part 60, appendix A according to the following requirements: Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for affected sources. If you choose to meet the percent emission reduction requirements for HF or HCl, a sampling site must also be located at the APCD inlet.

**15.b** For each kiln, you must determine velocities and volumetric flow rate using Method 2 of 40 CFR part 60, appendix A according to the following requirements: You may use Method 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A.

**15.c** For each kiln, you must conduct gas molecular weight analysis using Method 3 of 40 CFR part 60, appendix A according to the following requirements: You may use Method 3A or 3B of 40 CFR part 60, appendix A, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A.

**15.d** For each kiln, you must measure moisture content of the stack gas using Method 4 of 40 CFR part 60, appendix A.

**15.e** For each kiln, you must measure HF and HCl emissions using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A according to one of the following requirements: (1) Conduct the Method 26A test while operating at the maximum production level. You may use Method 26 of 40 CFR part 60, appendix A, as an alternative to using Method 26A of 40 CFR part 60, appendix A, when no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present. (2) Conduct the Method 320 test while operating at the maximum production level. You must follow the analyte spiking procedures of section 13 of Method 320 of 40 CFR part 63 appendix A, unless you can demonstrate that the complete spiking procedure has been conducted at a similar source.

**15.f** For each kiln, you must measure PM emissions using Method 5 of 40 CFR part 60, appendix A according to the following requirements: Conduct the test while operating at the maximum production level.

## V. Testing Requirements (continued)

- 16.** [40 CFR 63.8405 (Table 3)]  
For each kiln equipped with a DIFF or DLS/FF, you must establish the operating limit for the lime feeder setting using data from the lime feeder during the performance test according to the following requirements: For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting during the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs.
- 17.a** [40 CFR 63.8455 (Table 4)]  
For each Existing large tunnel kiln, for the limitation that HF emissions must not exceed 0.029 kg/Mg (0.057 lb/ton) of fired product; or uncontrolled HF emissions must be reduced by at least 90 percent, you have demonstrated initial compliance if (i) the HF emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test, according to the calculations in section 63.8445(g)(1), do not exceed 0.029 kg/Mg (0.057 lb/ton); or uncontrolled HF emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test are reduced by at least 90 percent, according to the calculations in section 63.8445(g)(2); and (ii) you establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which HF emissions did not exceed 0.029 kg/Mg (0.057 lb/ton) or uncontrolled HF emissions were reduced by at least 90 percent.
- 17.b** For each Existing large tunnel kiln, for the limitation that HCl emissions must not exceed 0.13 kg/Mg (0.26 lb/ton) of fired product; or uncontrolled HCl emissions must be reduced by at least 30 percent, you have demonstrated initial compliance if (i) emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test, according to the calculations in section 63.8445(g)(1), do not exceed 0.13 kg/Mg (0.26 lb/ton); or uncontrolled HCl emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test are reduced by at least 30 percent, according to the calculations in section 63.8445(g)(2); (ii) You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which HCl emissions did not exceed 0.13 kg/Mg (0.26 lb/ton) or uncontrolled HCl emissions were reduced by at least 30 percent.
- 18.** [40 CFR 63.8470 (Table 5)]  
For each kiln equipped with a DIFF or DLS/FF, for each emission limit in Table 1 to this subpart and each operating limit in Item 2 of Table 2 to this subpart, you must demonstrate continuous compliance by (i) if you use a bag leak detection system, initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action; or performing VE observations of the DIFF or DLS/FF stack at the frequency specified in section 63.8470(g) using Method 22 of 40 CFR part 60, appendix A; maintaining no VE from the DIFF or DLS/FF stack; and (ii) Verifying that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions in accordance with your OM&M plan; recording the feeder setting once during each shift of operation to verify that the feeder setting is being maintained at or above the level established during the performance test.

## VI. Miscellaneous Requirements

- 1.** Plant 2 (emissions unit P201) started operation on September 1, 1999. The permittee's Fee Emission Report did not contain any actual emissions for 1999 and 2000 for Plant 2. The permittee failed to submit complete emission fees for 1999 through 2000 for Plant 2, in violation of OAC rule 3745-78-02 and R.C. 3704.05(G) and (J).

Pursuant to OAC rule 3745-78-02, within 60 days of the effective date of this permit, the permittee shall submit fee emission reports for the Plant 2 (emissions unit P201) actual emission rates of the specified air pollutants for 1999 and 2000 and pay the assessed emission fees as indicated by the invoice from Ohio EPA.

## **VI. Miscellaneous Requirements (continued)**

2. On March 29, 1999, Ohio EPA issued PTI #06-5543 (administratively modified on April 23, 1999) authorizing the construction of Plant 2. The PTI required the permittee to install a scrubber system on Plant 6's kilns (emissions units P601, P602 and P603) so that the installation of Plant 2 could net out of the requirements of PSD. Additionally, PTI #06-5543 specified PM10 and SO2 emission limitations that represented Plant 6's netting baseline minus the reductions needed to reduce the increase in SO2 and PM10 emissions associated with the installation of Plant 2 to below the applicable PSD major modification thresholds. In accordance with OAC rule 3745-31-01(YY), a contemporaneous decrease is only considered in a netting calculation if the decrease occurs prior to the date that the modification begins to emit air pollutants. Further, a reduction used in a PSD netting calculation has to be permanent and reflect a real reduction of actual baseline emissions. The permittee failed to reduce the netting baseline SO2 and PM10 emitted from Plant 6 prior to the startup of Plant 2. Further, based on Title V FERs, the permittee substantially increased Plant 6's actual SO2 annual emission rates. Without credible reductions, the PTE [actual emissions as defined in OAC rule 3745-31-01(B)(3)] of SO2 and PM10 associated with the installation of Plant 2 exceeds the respective "significant" net increase levels. Therefore, the permittee started construction of a major modification without applying for and obtaining a valid PSD PTI that demonstrates that the requirements of OAC rules 3745-31-11 through 3745-31-20 have been met.

Pursuant to discussions with Ohio EPA regarding the situation as described above, on September 15, 2000, Belden submitted a new PTI application. The application proposed retroactively netting the increases associated with the installation of Plant 2 out of PSD using a reduction in Plant 8's kilns (emissions units P801, P802 and P803) SO2 emissions. Plant 8's actual netting baseline emission rate was based on the average of 1999 and 2000 SO2 emissions. Belden claimed the 2-year average actual SO2 emissions to be approximately 966 tons.

On September 20, 2002, Ohio EPA issued PTI #06-06301 (administratively modified on January 7, 2003) which superseded PTI #06-5543 (Plant 2). PTI #06-06301 contained basically the same requirements as PTI #06-5543 except the reductions were to be from Plant 8. Plant 8's scrubber system became operational in June, 2003.

After the issuance of PTI #06-06301, Ohio EPA discovered that the permittee had reported an average of 157 tons of SO2 emissions for the years 1999 and 2000 and that the permit failed to specify SO2 and PM10 emission limitations that assured a reduction in the baseline.

3. Within 60 days of the effective date of this permit, the permittee shall submit to Ohio EPA, a detailed written explanation of why the Plant 8's kilns SO2 actual emission rates for 1999 and 2000 (netting baseline emissions) submitted in the PTI #06-06301 application are different from the SO2 actual emission rates reported on the permittee's FERs for the same 2 years. The explanation shall include detailed calculations on how each actual emission rate was determined. If it is determined that the actual emissions reported on the permittee's 1999 and 2000 FERs need to be revised, the permittee shall submit revised FERs that include Plant 8's actual emissions of SO2 for 1999 and 2000 and pay the assessed emission fees as indicated by an invoice from Ohio EPA. The revised FERs shall be submitted within sixty (60) days of any determination that the Plant 8's kilns' SO2 emission rates that were reported are incorrect. If it is determined that there was an error in Plant 8's netting baseline SO2 emission rate, the permittee shall submit within 180 days of the effective date of this permit, a PTI revision application for the installation of Plant 2 which, at a minimum, demonstrates that the requirements of OAC rules 3745-31-11 through 3745-31-20 have been met.
4. Compliance with the provisions of A.VI.1 through A.VI.3 above does not represent an admission by the permittee of any allegations contained above, nor does it waive the permittee's defenses to such allegations in any subsequent action.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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Gas fired tunnel kiln vented to a dry scrubber and fabric filter

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

1. The permit to install for this emissions unit (P201) was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: hydrogen fluoride

TLV (ug/m3): 2600

Maximum Hourly Emission Rate (lbs/hr): 1.41

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 20.89

MAGLC (ug/m3): 61.90

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

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:
  - a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
  - c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
  - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
  - c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

### Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** Plt 3 Tunnel Kiln #1 (P301)

**Activity Description:** Plt 3 Tunnel Kiln to P3SCRUBSTK - Undercar cooling bypass to P3UCSTK

#### A. State and Federally Enforceable Section

##### I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 3, natural gas-fired tunnel kiln #1 controlled with a dry scrubber and a baghouse	OAC rule 3745-31-05(A)(3) (PTI 06-06301, modified 1/7/03)	Particulate emissions shall not exceed 4.2 pounds per hour nor 18.4 tons per year.
		Emissions of sulfur dioxide shall not exceed 35.0 pounds per hour nor 153.3 tons per year.
		Emissions of nitrogen oxides shall not exceed 6.0 pounds per hour nor 26.3 tons per year.
		Emissions of carbon monoxide shall not exceed 22.1 pounds per hour nor 99.0 tons per year.
		Emissions of hydrogen fluoride shall not exceed 1.9 pounds per hour nor 8.3 tons per year.
		Emissions of hydrogen chloride shall not exceed 1.2 pounds per hour nor 5.4 tons per year.
		The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-21-08(B), and 3745-21-08(B), and 40 CFR 63.8380 through 63.8515.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.	
OAC rule 3745-17-11(B)	See section A.I.2.a.	
OAC rule 3745-18-06	See section A.I.2.a.	

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
	OAC rule 3745-21-08(B)	See section A.1.2.s.
	OAC rule 3745-23-06(B)	See section A.1.2.t.
	40 CFR Part 63, Subpart JJJJJ (63.8380 through 63.8515)	[40 CFR 63.8405] HF emissions must not exceed 0.029 kilogram per megagram (kg/Mg) (0.057 pound per ton (lb/ton)) of fired product or uncontrolled emissions must be reduced by at least 90%.  HCl emissions must not exceed 0.13 kg/Mg (0.26 lb/ton) of fired product or uncontrolled emissions must be reduced by at least 30%.  PM emissions must not exceed 0.21 kg/Mg (0.42 lb/ton) of fired product.

**2. Additional Terms and Conditions**

- 2.a** The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.b** The Belden Brick Company operates a brick making facility in Sugarcreek, Ohio consisting of several adjacent brick plants. Belden shall install control equipment on the three tunnel kilns at Plant 8 (P801 - P803) in order to reduce existing source emissions sufficiently to offset an increase in the allowable emissions rate for sulfur dioxide at Plant 3 (P301). Belden shall install a continuous emissions monitoring system on the existing Plant 8. This system shall be functionally equivalent to the system described in this permit for Plant 2 (P201). Adequate records shall be kept by the Plant 8 CEMS to document that the emissions increase at Plant 3 from 6.6 to 35.0 pounds per hour is being offset each year. The table below summarizes the average netted emission rates, in tons per year, for Plant 8 over the last two years (1999 and 2000), with reductions based on operating experience and testing of Plant 2 and Plant 3 scrubbers. The Plant 8 emission reduction for PE reflects the increased dust loading associated with the dry scrubber.

POLLUTANT	PLANT 2	PLANT 8	PLANT 8	PLANT 3	NET
		AVG. UNC.	REDUCTION	INCREASE	INCREASE
Particulate Matter	8.2	15.2	8.1		0.1
Sulfur Dioxide	88.5	966.3*	649.3	124.4	- 436.4
Nitrogen Oxides	23.7	36.0	0		23.7
Carbon Monoxide	74.5	140.0	0		74.5
Hydrogen Fluoride	6.2	86.2	75.3		- 69.1
Hydrogen Chloride	4.0	52.5	46.0		- 42.0

\* See the note in section A.V.1.b.

- 2.c** [40 CFR 63.8420(a)]  
You must be in compliance with the emission limitations (including operating limits) in this subpart at all times, except during periods of startup, shutdown, and malfunction and during periods of routine control device maintenance as specified in 40 CFR 63.8420(e).

## 2. Additional Terms and Conditions (continued)

- 2.d** [40 CFR 63.8420(b)]  
Except as specified in 40 CFR 63.8420(e), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in section 63.6(e)(1)(i). During the period between the compliance date specified for your affected source in section 63.8395 and the date upon which continuous monitoring systems (CMS) (e.g., continuous parameter monitoring systems) have been installed and verified and any applicable operating limits have been set, you must maintain a log detailing the operation and maintenance of the process and emissions control equipment.
- 2.e** [40 CFR 63.8420(c)]  
You must develop and implement a written startup, shutdown, and malfunction plan (SSMP) according to the provisions in section 63.6(e)(3).
- 2.f** [40 CFR 63.8420(d)]  
You must prepare and implement a written operation, maintenance, and monitoring (OM&M) plan according to the requirements in section 63.8425.
- 2.g** [40 CFR 63.8420(e)]  
If you own or operate an affected kiln and must perform routine maintenance on the control device for that kiln, you may bypass the kiln control device and continue operating the kiln upon approval by the Administrator provided you satisfy the conditions listed in 40 CFR 63.8420(e)(1) through (5).  
(1) You must request a routine control device maintenance exemption from the Administrator. Your request must justify the need for the routine maintenance on the control device and the time required to accomplish the maintenance activities, describe the maintenance activities and the frequency of the maintenance activities, explain why the maintenance cannot be accomplished during kiln shutdowns, describe how you plan to minimize emissions to the greatest extent possible during the maintenance, and provide any other documentation required by the Administrator.  
(2) The routine control device maintenance exemption must not exceed 4 percent of the annual operating uptime for each kiln.  
(3) The request for the routine control device maintenance exemption, if approved by the Administrator, must be incorporated by reference in and attached to the affected source's title V permit.  
(4) You must minimize HAP emissions during the period when the kiln is operating and the control device is offline.  
(5) You must minimize the time period during which the kiln is operating and the control device is offline.
- 2.h** [40 CFR 63.8420(f)]  
You must be in compliance with the provisions of subpart A of this part, except as noted in Table 7 to this subpart.
- 2.i** [40 CFR 63.8455(a)]  
You must demonstrate initial compliance with each emission limitation that applies to you according to Table 4 to this subpart.
- 2.j** [40 CFR 63.8455(b)]  
You must establish each site-specific operating limit in Table 2 to this subpart that applies to you according to the requirements in section 63.8445 and Table 3 to this subpart.
- 2.k** [40 CFR 63.8455(c)]  
You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in section 63.8480(e).
- 2.l** [40 CFR 63.8470(a)]  
You must demonstrate continuous compliance with each emission limit and operating limit in Tables 1 and 2 to this subpart that applies to you according to the methods specified in Table 5 to this subpart.
- 2.m** [40 CFR 63.8470(c)]  
You must report each instance in which you did not meet each emission limit and each operating limit in this subpart that applies to you. This includes periods of startup, shutdown, malfunction, and routine control device maintenance. These instances are deviations from the emission limitations in this subpart. These deviations must be reported according to the requirements in section 63.8485.

## 2. Additional Terms and Conditions (continued)

- 2.n** [40 CFR 63.8470(d)]  
During periods of startup, shutdown, and malfunction, you must operate according to your SSMP.
- 2.o** [40 CFR 63.8470(e)]  
Consistent with sections 63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating according to an SSMP that satisfies the requirements of section 63.6(e) and your OM&M plan. The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in section 63.6(e).
- 2.p** [40 CFR 63.8470(f)]  
Deviations that occur during periods of control device maintenance covered by an approved routine control device maintenance exemption according to section 63.8420(e) are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the approved routine control device maintenance exemption.
- 2.q** [40 CFR 63.8470(g)]  
You must demonstrate continuous compliance with the operating limits in Table 2 to this subpart for visible emissions (VE) from tunnel kilns equipped with DLA, DIFF, or DLS/FF by monitoring VE at each kiln stack according to the requirements in 40 CFR 63.8470(g)(1) through (3).  
(1) Perform daily VE observations of each kiln stack according to the procedures of Method 22 of 40 CFR part 60, appendix A. You must conduct the Method 22 test while the affected source is operating under normal conditions. The duration of each Method 22 test must be at least 15 minutes.  
(2) If VE are observed during any daily test conducted using Method 22 of 40 CFR part 60, appendix A, you must promptly initiate and complete corrective actions according to your OM&M plan. If no VE are observed in 30 consecutive daily Method 22 tests for any kiln stack, you may decrease the frequency of Method 22 testing from daily to weekly for that kiln stack. If VE are observed during any weekly test, you must promptly initiate and complete corrective actions according to your OM&M plan, resume Method 22 testing of that kiln stack on a daily basis, and maintain that schedule until no VE are observed in 30 consecutive daily tests, at which time you may again decrease the frequency of Method 22 testing to a weekly basis.  
(3) If VE are observed during any test conducted using Method 22 of 40 CFR part 60, appendix A, you must report these deviations by following the requirements in section 63.8485.
- 2.r** [40 CFR 63.8505]  
Table 7 to this subpart shows which parts of the General Provisions in sections 63.1 through 63.15 apply to you.
- 2.s** The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06301.  
  
On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.
- 2.t** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 06-06301.

## II. Operational Restrictions

1. During any period of CEMS downtime which exceeds 3 hours, all scrubber reagent feed rates shall be set to the maximum rates which were recorded for the same product during its most recent run.

## II. Operational Restrictions (continued)

2. [40 CFR 63.8405 (Table 2)]  
If you use a bag leak detection system, you must initiate corrective action within 1 hour of a bag leak detection system alarm and complete corrective actions in accordance with your OM&M plan; operate and maintain the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; or maintain no VE from the DIFF or DLS/FF stack.
3. [40 CFR 63.8405 (Table 2)]  
You must maintain free-flowing lime in the feed hopper or silo and to the APCD at all times for continuous injection systems; maintain the feeder setting at or above the level established during the performance test for continuous injection systems.

## 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 baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to eliminate the visible emissions.

2. For sulfur dioxide, nitrogen oxides, carbon monoxide and exhaust gas flow:

- a. The permittee shall operate and maintain equipment to continuously monitor and record SO<sub>2</sub>, NO<sub>x</sub>, CO, and exhaust gas flow data from this emissions unit in units of the applicable standards (pounds per hour and tons per year for SO<sub>2</sub>, NO<sub>x</sub>, and CO). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 6, and be operated in accordance with 40 CFR Part 60.13 unless otherwise specified in section A.III.2.b below.

The permittee shall maintain records of all data obtained by the continuous SO<sub>2</sub>, NO<sub>x</sub>, CO, and exhaust gas flow monitoring system including, but not limited to, minute-by-minute concentration data for SO<sub>2</sub>, NO<sub>x</sub>, and CO; minute-by-minute flow data in ACFM; SO<sub>2</sub>, NO<sub>x</sub> and CO data in pounds per hour; the results of all daily, weekly, and quarterly calibration checks; and the magnitude of any calibration adjustments.

Each CEMS consists of all the equipment used to acquire and record data and includes any sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The data recorded by the CEMS shall be used to determine compliance with the applicable emission limitations on an ongoing basis.

- b. Within 90 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO<sub>2</sub>, NO<sub>x</sub> CO and exhaust gas flow monitoring system designed to meet all requirements as listed in 40 CFR Part 60, Appendix F and ensure continuous valid and representative readings of SO<sub>2</sub>, NO<sub>x</sub>, CO and flow. The plan shall describe in detail, complete, step-by-step procedures and operations for each of the following activities:

- i. calibration of CEMS;
- ii. CD determination and adjustment of CEMS;
- iii. preventive maintenance of CEMS (including spare parts inventory);
- iv. data recording, calculations, and reporting;
- v. accuracy audit procedures including sampling and analysis methods; and
- vi. program of corrective action for malfunctioning CEMS.

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

The permittee shall be required to complete a CEMS certification relative accuracy test audit (RATA), in accordance with the procedures specified in 40 CFR Part 60, Appendix F, within 12 months after permit issuance (see section A.V.3). From the date of CEMS certification forward, the permittee may forego annual RATA requirements as listed in 40 CFR Part 60, Appendix F, by completing a quarterly cylinder gas or relative accuracy audit, in accordance with 40 CFR Part 60, Appendix F, for each quarter of the year. Should any CEMS not pass a cylinder gas or relative accuracy audit on the first attempt for two consecutive quarters (even though a recalibration or repair allows the second attempted cylinder gas or relative accuracy audit to pass), the permittee shall complete a RATA within 60 days of the second quarter's failed cylinder gas or relative accuracy audit. The permittee shall also complete a RATA for the CEMS within 6 months prior to the expiration of this permit. RATA testing may also be required if the CEMS as listed on the CEMS certification letter from Ohio EPA, Central Office, or any CEMS associated equipment, are changed or modified.

Beginning on the effective date of this permit, the permittee shall perform daily zero/span calibration drift checks on each SO<sub>2</sub>, NO<sub>x</sub>, CO, and flow CEMS for 60 consecutive operating days in accordance with the requirements specified in 40 CFR Part 60, Appendix F, section 4. If, on the first attempt, the results of each daily zero/span calibration drift check are less than the criteria for excessive calibration drift specified in 40 CFR Part 60, Appendix F, section 4.3 (as determined by the Ohio EPA, Southeast District Office), the permittee shall begin performing zero/span calibration drift checks on a weekly basis. If any CEMS should fail a weekly zero/span calibration drift check for 2 consecutive weeks (based on the criteria of being 2x over the limit as stated in Appendix F, section 4.3), the permittee shall perform daily zero/span calibration drift checks until such time as 60 consecutive daily zero/span calibration drift checks have been successfully completed within the criteria specified in Appendix F, section 4.3.

The quality assurance/quality control plan and a logbook dedicated to the SO<sub>2</sub>, NO<sub>x</sub>, CO, and flow CEMS must be kept on site and available for inspection during regular office hours.

**3.** For hydrogen fluoride and hydrogen chloride:

a. The permittee shall operate and maintain existing equipment to continuously monitor and record hydrogen fluoride and hydrogen chloride from this emissions unit in units of the applicable standards (pounds per hour and tons per year for both HF and HCl). The permittee shall maintain records of all data obtained by the HF and HCl CEMS including, but not limited to minute-by-minute concentration data for HF and HCl; HF and HCl data in pounds per hour; the results of all manufacturer's recommended calibration checks; and the magnitude of any calibration adjustments.

Each CEMS consists of all the equipment used to acquire and record data and includes any sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The data recorded by the CEMS shall be used to determine compliance with the applicable emission limitations on an ongoing basis.

b. Within 90 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the CEMS designed to ensure continuous valid and representative readings of HF and HCl. The plan shall follow all manufacturer's recommendations regarding maintaining the CEMS, and assuring accurate data measurements.

The permittee shall be required to complete a CEMS certification RATA within the first 12 months of the effective date of this permit. From the date of CEMS certification forward, the quality assurance/quality control plan developed for the CEMS shall be followed. The permittee shall also complete a RATA for the CEMS within 6 months prior to the expiration of this permit. RATA testing may also be required if CEMS as listed on the CEMS certification letter from Ohio EPA, Central Office, or CEMS associated equipment, are changed or modified.

The quality assurance/quality control plan and a logbook dedicated to the HF and HCl CEMS must be kept on site and available for inspection during regular office hours.

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

4. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.
5. The permittee shall maintain daily records of all scrubber reagent feed rates (maximum actual rates or set points) and the associated product in the kiln at the time.
6. For Plant 2 (P201), Plant 3 (P301) and Plant 8 (P801, P802, P803) the permittee shall maintain the following monthly records for each plant:
  - a. total SO<sub>2</sub> emissions for the month, including any emissions that occur during the bypassing of the control equipment and/or the continuous emission monitor;
  - b. total SO<sub>2</sub> emissions for the previous 12 months; and
  - c. the net SO<sub>2</sub> emissions increase, calculated in accordance with the equation in section A.V.1.b.
7. [40 CFR 63.8425(a)]  
You must prepare, implement, and revise as necessary an OM&M plan that includes the information in 40 CFR 63.8425(b). Your OM&M plan must be available for inspection by the permitting authority upon request.
8. [40 CFR 63.8425(b)]  
Your OM&M plan must include, as a minimum, the information in 40 CFR 63.8425(b)(1) through (13).
  - (1) Each process and APCD to be monitored, the type of monitoring device that will be used, and the operating parameters that will be monitored.
  - (2) A monitoring schedule that specifies the frequency that the parameter values will be determined and recorded.
  - (3) The limits for each parameter that represent continuous compliance with the emission limitations in section 63.8405. The limits must be based on values of the monitored parameters recorded during performance tests.
  - (4) Procedures for the proper operation and routine and long-term maintenance of each APCD, including a maintenance and inspection schedule that is consistent with the manufacturer's recommendations.
  - (5) Procedures for installing the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last APCD).
  - (6) Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction system.
  - (7) Continuous monitoring system performance evaluation procedures and acceptance criteria (e.g., calibrations).
  - (8) Procedures for the proper operation and maintenance of monitoring equipment consistent with the requirements in sections 63.8450 and 63.8(c)(1), (3), (4)(ii), (7), and (8).
  - (9) Continuous monitoring system data quality assurance procedures consistent with the requirements in section 63.8(d).
  - (10) Continuous monitoring system recordkeeping and reporting procedures consistent with the requirements in section 63.10(c), (e)(1), and (e)(2)(i).
  - (11) Procedures for responding to operating parameter deviations, including the procedures in 40 CFR 63.8425(b)(11)(i) through (iii).
    - (i) Procedures for determining the cause of the operating parameter deviation.
    - (ii) Actions for correcting the deviation and returning the operating parameters to the allowable limits.
    - (iii) Procedures for recording the times that the deviation began and ended and corrective actions were initiated and completed.
  - (12) Procedures for keeping records to document compliance.
  - (13) If you operate an affected kiln and you plan to take the kiln control device out of service for routine maintenance, as specified in section 63.8420(e), the procedures specified in 40 CFR 63.8425(b)(13)(i) and (ii).
    - (i) Procedures for minimizing HAP emissions from the kiln during periods of routine maintenance of the kiln control device when the kiln is operating and the control device is offline.
    - (ii) Procedures for minimizing the duration of any period of routine maintenance on the kiln control device when the kiln is operating and the control device is offline.

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

9. [40 CFR 63.8425(c)]  
Changes to the operating limits in your OM&M plan require a new performance test. If you are revising an operating limit parameter value, you must meet the requirements in paragraphs (c)(1) and (2) of this section.  
(1) Submit a notification of performance test to the Administrator as specified in section 63.7(b).  
(2) After completing the performance tests to demonstrate that compliance with the emission limits can be achieved at the revised operating limit parameter value, you must submit the performance test results and the revised operating limits as part of the Notification of Compliance Status required under section 63.9(h).
10. [40 CFR 63.8425(d)]  
If you are revising the inspection and maintenance procedures in your OM&M plan, you do not need to conduct a new performance test.
11. [40 CFR 63.8450(a)]  
You must install, operate, and maintain each CMS according to your OM&M plan and the requirements in 40 CFR 63.8450(a)(1) through (5).  
(1) Conduct a performance evaluation of each CMS according to your OM&M plan.  
(2) The CMS must complete a minimum of one cycle of operation for each successive 15-minute period. To have a valid hour of data, you must have at least three of four equally spaced data values (or at least 75 percent if you collect more than four data values per hour) for that hour (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in section 63.8420(e)).  
(3) Determine and record the 3-hour block averages of all recorded readings, calculated after every 3 hours of operation as the average of the previous 3 operating hours. To calculate the average for each 3-hour average period, you must have at least 75 percent of the recorded readings for that period (not including startup, shutdown, malfunction, out-of-control periods, or periods of routine control device maintenance covered by a routine control device maintenance exemption as specified in section 63.8420(e)).  
(4) Record the results of each inspection, calibration, and validation check.  
(5) At all times, maintain the monitoring equipment including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.
12. [40 CFR 63.8450(e)]  
For each bag leak detection system, you must meet the requirements in 40 CFR 63.8450(e)(1) through (11).  
(1) Each triboelectric bag leak detection system must be installed, calibrated, operated, and maintained according to the "Fabric Filter Bag Leak Detection Guidance," (EPA-454/R-98-015, September 1997). This document is available from the U.S. Environmental Protection Agency (U.S. EPA); Office of Air Quality Planning and Standards; Emissions, Monitoring and Analysis Division; Emission Measurement Center (MD-19), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Continuous Emission Monitoring. Other types of bag leak detection systems must be installed, operated, calibrated, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.  
(2) The bag leak detection system must be certified by the manufacturer to be capable of detecting PM emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grains per actual cubic foot) or less.  
(3) The bag leak detection system sensor must provide an output of relative PM loadings.  
(4) The bag leak detection system must be equipped with a device to continuously record the output signal from the sensor.  
(5) The bag leak detection system must be equipped with an audible alarm system that will sound automatically when an increase in relative PM emissions over a preset level is detected. The alarm must be located where it is easily heard by plant operating personnel.  
(6) For positive pressure fabric filter systems, a bag leak detector must be installed in each baghouse compartment or cell.

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

(7) For negative pressure or induced air fabric filters, the bag leak detector must be installed downstream of the fabric filter.

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

(9) The baseline output must be established by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time according to section 5.0 of the "Fabric Filter Bag Leak Detection Guidance."

(10) Following initial adjustment of the system, the sensitivity or range, averaging period, alarm set points, or alarm delay time may not be adjusted except as detailed in your OM&M plan. In no case may the sensitivity be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless such adjustment follows a complete fabric filter inspection that demonstrates that the fabric filter is in good operating condition. Record each adjustment.

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

**13.** [40 CFR 63.8450(f)]

For each lime or chemical feed rate measurement device, you must meet the requirements in 40 CFR 63.8450(a)(1) through (5) and 40 CFR 63.8450(f)(1) and (2).

(1) Locate the measurement device in a position that provides a representative feed rate measurement.

(2) At least semiannually, conduct a calibration check.

**14.** [40 CFR 63.8450(h)]

Requests for approval of alternate monitoring procedures must meet the requirements in 40 CFR 63.8445(i) and 63.8(f).

**15.** [40 CFR 63.8465(b)]

Except for periods of monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times that the affected source is operating. This includes periods of startup, shutdown, malfunction, and routine control device maintenance as specified in section 63.8420(e) when the affected source is operating.

**16.** [40 CFR 63.8465(c)]

You may not use data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities for purposes of calculating data averages. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. You must use all the valid data collected during all other periods in assessing compliance. Any averaging period for which you do not have valid monitoring data and such data are required constitutes a deviation from the monitoring requirements.

**17.** [40 CFR 63.8490(a)]

You must keep the records listed in 40 CFR 63.8490(a)(1) through (4).

(1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in section 63.10(b)(2)(xiv).

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

(3) Records of performance tests as required in section 63.10(b)(2)(viii).

(4) Records relating to control device maintenance and documentation of your approved routine control device maintenance exemption, if you request such an exemption under section 63.8420(e).

**18.** [40 CFR 63.8490(b)]

You must keep the records required in Table 5 to this subpart to show continuous compliance with each emission limitation that applies to you.

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

19. [40 CFR 63.8490(c)]  
You must also maintain the records listed in paragraphs (c)(1) through (6) of this section.  
(1) For each bag leak detection system, records of each alarm, the time of the alarm, the time corrective action was initiated and completed, and a brief description of the cause of the alarm and the corrective action taken.  
(2) For each deviation of an operating limit parameter value, the date, time, and duration of the deviation, a brief explanation of the cause of the deviation and the corrective action taken, and whether the deviation occurred during a period of startup, shutdown, or malfunction.  
(3) For each affected source, records of production rates on a fired-product basis.  
(4) Records for any approved alternative monitoring or test procedures.  
(5) Records of maintenance and inspections performed on the APCD.  
(6) Current copies of your SSMP and OM&M plan, including any revisions, with records documenting conformance.
20. [40 CFR 63.8495(a)]  
Your records must be in a form suitable and readily available for expeditious review, according to section 63.10(b)(1).
21. [40 CFR 63.8495(b)]  
As specified in section 63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
22. [40 CFR 63.8495(c)]  
You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to section 63.10(b)(1). You may keep the records offsite for the remaining 3 years.

### IV. Reporting Requirements

1. The permittee shall submit the results of the daily zero/span calibration draft checks required in section A.III.2.b to the Ohio EPA, Southeast District Office within 14 days after the drift checks are completed.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Southeast District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit deviation (excursion) reports that identify all periods of CEMS downtime during which the scrubber reagent feed rates were less than the maximum actual feed rate or set point which was previously associated with the product being run.
4. Pursuant to OAC rules 3745-15-04 and ORC sections 3704.03(l) and 3704.031, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO<sub>2</sub>, NO<sub>x</sub>, and CO values in excess of the applicable limits specified in this permit.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting any continuous SO<sub>2</sub>, NO<sub>x</sub>, CO, and exhaust gas flow monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

#### **IV. Reporting Requirements (continued)**

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to OAC rules 3745-15-04 and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report. The summary shall be submitted to the Ohio EPA, Southeast District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

5. The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting all instances of hydrogen fluoride and hydrogen chloride values in excess of the limitations specified in the terms and conditions of this permit, detailing the date, commencement and completion times, duration, magnitude, reason (if known) and corrective actions taken (if any) of all values above the applicable emission limitations.

The permittee shall submit reports within thirty (30) days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting any continuous hydrogen fluoride and hydrogen chloride monitoring system downtime while the emissions unit was on-line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of source and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall be included in the quarterly report. If there are no excess emissions during the calendar quarter, then the permittee shall submit a statement to that effect along with the emissions unit and monitor operating times. These quarterly excess emission reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during previous calendar quarter.

Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report. The summary shall be submitted to the Ohio EPA, Southeast District Office within thirty (30) days following the end of each calendar quarter in a manner prescribed by the Director.

6. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month, net SO<sub>2</sub> emissions increase exceeded the SO<sub>2</sub> significance level, as calculated in section A.V.1.b. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
7. [40 CFR 63.8480(a)]  
You must submit all of the notifications in sections 63.7(b) and (c), 63.8(f)(4), and 63.9 (b) through (e), (g)(1), and (h) that apply to you, by the dates specified.
8. [40 CFR 63.8480(b)]  
As specified in section 63.9(b)(2) and (3), if you start up your affected source before May 16, 2003, you must submit an Initial Notification not later than 120 calendar days after May 16, 2003.
9. [40 CFR 63.8480(d)]  
If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin, as required in section 63.7(b)(1).

#### IV. Reporting Requirements (continued)

- 10.** [40 CFR 63.8480(e)]  
If you are required to conduct a performance test as specified in Table 3 to this subpart, you must submit a Notification of Compliance Status as specified in section 63.9(h) and 40 CFR 63.8480(e)(1) and (2).  
(1) For each compliance demonstration that includes a performance test conducted according to the requirements in Table 3 to this subpart, you must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test, according to section 63.10(d)(2).  
(2) In addition to the requirements in section 63.9(h)(2)(i), you must include the information in 40 CFR 63.8480(e)(2)(i) and (ii) in your Notification of Compliance Status.  
(i) The operating limit parameter values established for each affected source with supporting documentation and a description of the procedure used to establish the values.  
(ii) For each APCD that includes a fabric filter, if a bag leak detection system is used, analysis and supporting documentation demonstrating conformance with EPA guidance and specifications for bag leak detection systems in section 63.8450(e).
- 11.** [40 CFR 63.8480(f)]  
If you request a routine control device maintenance exemption according to section 63.8420(e), you must submit your request for the exemption no later than 30 days before the compliance date.
- 12.** [40 CFR 63.8485(a)]  
You must submit each report in Table 6 to this subpart that applies to you.
- 13.** [40 CFR 63.8485(b)]  
Unless the Administrator has approved a different schedule for submission of reports under section 63.10(a), you must submit each report by the date in Table 6 to this subpart and as specified in 40 CFR 63.8485(b)(1) through (5).  
(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in section 63.8395 and ending on June 30 or December 31, and lasting at least 6 months, but less than 12 months. For example, if your compliance date is March 1, then the first semiannual reporting period would begin on March 1 and end on December 31.  
(2) The first compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.  
(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.  
(4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31 for compliance periods ending on June 30 and December 31, respectively.  
(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 CFR 63.8485(b)(1) through (4).

#### IV. Reporting Requirements (continued)

14. [40 CFR 63.8485(c)]

The compliance report must contain the information in 40 CFR 63.8485(c)(1) through (7).

(1) Company name and address.

(2) Statement by a responsible official with that official's name, title, and signature, certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

(4) If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP and OM&M plan, the compliance report must include the information specified in section 63.10(d)(5)(i).

(5) A description of control device maintenance performed while the control device was offline and the kiln controlled by the control device was operating, including the information specified in 40 CFR 63.8485(c)(5)(i) through (iii).

(i) The date and time when the control device was shutdown and restarted.

(ii) Identification of the kiln that was operating and the number of hours that the kiln operated while the control device was offline.

(iii) A statement of whether or not the control device maintenance was included in your approved routine control device maintenance exemption developed as specified in section 63.8420(e). If the control device maintenance was included in your approved routine control device maintenance exemption, then you must report the information in 40 CFR 63.8485(c)(5)(iii)(A) through (C).

(A) The total amount of time that the kiln controlled by the control device operated during the current semiannual compliance period and during the previous semiannual compliance period.

(B) The amount of time that each kiln controlled by the control device operated while the control device was offline for maintenance covered under the routine control device maintenance exemption during the current semiannual compliance period and during the previous semiannual compliance period.

(C) Based on the information recorded under 40 CFR 63.8485(c)(5)(iii)(A) and (B), compute the annual percent of kiln operating uptime during which the control device was offline for routine maintenance using Equation 1 of this section:

$$RM = [(DTp + DTc) / (KUp + KUc)] \times 100$$

where:

RM = Annual percentage of kiln uptime during which control device was offline for routine control device maintenance;

DTp = Control device downtime claimed under the routine control device maintenance exemption for the previous semiannual compliance period;

DTc = Control device downtime claimed under the routine control device maintenance exemption for the current semiannual compliance period;

KUp = Kiln uptime for the previous semiannual compliance period; and

KUc = Kiln uptime for the current semiannual compliance period.

(6) If there are no deviations from any emission limitations (emission limits or operating limits) that apply to you, the compliance report must contain a statement that there were no deviations from the emission limitations during the reporting period.

(7) If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the compliance report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.

#### IV. Reporting Requirements (continued)

15. [40 CFR 63.8485(e)]  
For each deviation from an emission limitation (emission limit or operating limit) occurring at an affected source where you are using a CMS to comply with the emission limitations in this subpart, you must include the information in 40 CFR 63.8485(c)(1) through (5) and 40 CFR 63.8485(e)(1) through (13). This includes periods of startup, shutdown, malfunction, and routine control device maintenance.
- (1) The total operating time of each affected source during the reporting period.
  - (2) The date and time that each malfunction started and stopped.
  - (3) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
  - (4) The date, time, and duration that each CMS was out-of-control, including the pertinent information in your OM&M plan.
  - (5) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction; during routine control device maintenance covered in your approved routine control device maintenance exemption; or during another period.
  - (6) A description of corrective action taken in response to a deviation.
  - (7) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
  - (8) A breakdown of the total duration of the deviations during the reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
  - (9) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.
  - (10) A brief description of the process units.
  - (11) A brief description of the CMS.
  - (12) The date of the latest CMS certification or audit.
  - (13) A description of any changes in CMS, processes, or control equipment since the last reporting period.
16. [40 CFR 63.8485(f)]  
If you have obtained a title V operating permit according to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report according to Table 6 to this subpart along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any emission limitation (including any operating limit), then submitting the compliance report will satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submitting a compliance report will not otherwise affect any obligation you may have to report deviations from permit requirements to the permitting authority.
17. [40 CFR 63.8485 (Table 6)]  
You must submit a compliance report semiannually according to the requirements in section 63.8485(b).
- a. If there are no deviations from any emission limitations (emission limits, operating limits) that apply to you, the report must contain a statement that there were no deviations from the emission limitations during the reporting period. If there were no periods during which the CMS was out-of-control as specified in your OM&M plan, the report must contain a statement that there were no periods during which the CMS was out-of-control during the reporting period.
  - b. If you have a deviation from any emission limitation (emission limit, operating limit) during the reporting period, the report must contain the information in section 63.8485(d) or (e). If there were periods during which the CMS was out-of-control, as specified in your OM&M plan, the report must contain the information in section 63.8485(e).
  - c. If you had a startup, shutdown or malfunction during the reporting period and you took actions consistent with your SSMP, the compliance report must include the information in section 63.10(d)(5)(i).
18. [40 CFR 63.8485 (Table 6)]  
You must submit an immediate startup, shutdown, and malfunction report if you took actions during a startup, shutdown, or malfunction during the reporting period that are not consistent with your SSMP. The report must contain:
- a. actions taken for the event according to the requirements in section 63.10(d)(5)(ii) by fax or telephone within 2 working days after starting actions inconsistent with the plan..
  - b. the information in 63.10(d)(5)(ii) by letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority.

## V. Testing Requirements

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

**1.a** Emission Limitations:

Particulate emissions shall not exceed 4.2 pounds per hour nor 18.4 tons per year.

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

The allowable ton per year limit was determined by multiplying the allowable emission rate, in pounds per hour, by 8760 hours per year, then dividing by 2000 pounds per ton. Therefore, compliance with the pound per hour limit will result in compliance with the ton per year limit.

**1.b** Emission Limitations:

Emissions of sulfur dioxide shall not exceed 35.0 pounds per hour nor 153.3 tons per year.

Applicable Compliance Method:

Compliance with the sulfur dioxide emission limitations shall be based upon the records and report data specified in sections A.III.2 and A.III.3. If required, the permittee shall demonstrate compliance with the allowable mass emission rate for sulfur dioxide in accordance with the methods and procedures specified in 40 CFR Part 60 Appendix A.

Data required by section A.III.6 shall be used in the following equation. If true, the calculation demonstrates that there has been no net increase from the former 6.6 lb/hr allowable emissions rate and the PSD significance level has not been exceeded.

$$P2 + P3 + P8 - 966.3 \text{ TPY} < 40 \text{ TPY} + (6.6 \text{ lbs/hr} \times \text{hr}/12\text{-month} \times 0.0005 \text{ ton/lb})$$

where: P2, P3 and P8 = Plant 2, 3 and 8 emissions in tons/12-month period.

NOTE: The 966.3 TPY value in the equation is from PTI # 06-06301 and will be revised to a value consistent with the requirements of OAC rules 3745-31-10 through 20.

**1.c** Emission Limitations:

Emissions of nitrogen oxides shall not exceed 6.0 pounds per hour nor 26.3 tons per year.

Emissions of carbon monoxide shall not exceed 22.1 pounds per hour nor 99.0 tons per year.

Emissions of hydrogen fluoride shall not exceed 1.9 pounds per hour nor 8.3 tons per year.

Emissions of hydrogen chloride shall not exceed 1.2 pounds per hour nor 5.4 tons per year.

Applicable Compliance Method:

Compliance with the nitrogen oxides, carbon monoxide, hydrogen fluoride, and hydrogen chloride emission limitations shall be based upon the records and report data specified in sections A.III.2 and A.III.3. Data from the Plant # 8 continuous emissions monitors shall be used, as necessary, to demonstrate that the emission limits have not been exceeded. If required, the permittee shall demonstrate compliance with the allowable mass emission rate for nitrogen oxides, carbon monoxide, hydrogen fluoride, and hydrogen chloride in accordance with the methods and procedures specified in 40 CFR Part 60 Appendix A.

## V. Testing Requirements (continued)

### 1.d Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance with the visible particulate emission limit shall be determined through visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible particulate emission testing is specifically required to demonstrate compliance with this limit, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

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

a. The emission testing shall be conducted within 12 months after permit issuance.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for particulates, sulfur dioxide, nitrogen oxides, carbon monoxide, hydrogen fluoride, and hydrogen chloride.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:

for particulates - Method 5 of 40 CFR Part 60, Appendix A;  
for sulfur dioxide - Method 6 of 40 CFR Part 60, Appendix A;  
for nitrogen oxides - Method 7 of 40 CFR Part 60, Appendix A;  
for carbon monoxide - Method 10 of 40 CFR Part 60, Appendix A;  
for exhaust gas flow - Methods 1 through 4 of 40 CFR Part 60, Appendix A;  
for hydrogen fluoride - Method 26A of 40 CFR Part 60, Appendix A; and  
for hydrogen chloride - Method 26 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

In addition, during each test run for PE, visible emission readings shall be performed in accordance with USEPA Method 9.

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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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)

3. During the emission test required to be conducted within 12 months after permit issuance, the permittee shall conduct certification tests for each CEMS specified in sections A.III.2 and A.III.3 pursuant to ORC section 3704.03(I) and the appropriate performance specifications as designated below. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of each CEMS specified in sections A.III.2 and A.III.3 shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and the appropriate performance specification as designated below:

for sulfur dioxide - Performance Specifications 2 and 6 of 40 CFR Part 60, Appendix B;  
for nitrogen oxides - Performance Specifications 2 and 6 of 40 CFR Part 60, Appendix B;  
for carbon monoxide - Performance Specifications 4 and 6 of 40 CFR Part 60, Appendix B;  
for exhaust gas flow - Performance Specification 6 of 40 CFR Part 60, Appendix B;  
for hydrogen fluoride - Performance Specifications 6 and 15 of 40 CFR Part 60, Appendix B; and  
for hydrogen chloride - Performance Specifications 6 and 15 of 40 CFR Part 60, Appendix B.

4. [40 CFR 63.8435]  
You must conduct performance tests within 180 calendar days after the compliance date that is specified for your source in section 63.8395 and according to the provisions in section 63.7(a)(2).
5. [40 CFR 63.8440(a)]  
You must conduct a performance test before renewing your 40 CFR part 70 operating permit or at least every 5 years following the initial performance test.
6. [40 CFR 63.8440(b)]  
You must conduct a performance test when you want to change the parameter value for any operating limit specified in your OM&M plan.
7. [40 CFR 63.8445(a)]  
You must conduct each performance test in Table 3 to this subpart that applies to you.
8. [40 CFR 63.8445(b)]  
Before conducting the performance test, you must install and calibrate all monitoring equipment.
9. [40 CFR 63.8445(c)]  
Each performance test must be conducted according to the requirements in section 63.7 and under the specific conditions in Table 3 to this subpart.
10. [40 CFR 63.8445(d)]  
You must test while operating at the maximum production level.
11. [40 CFR 63.8445(e)]  
You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in section 63.7(e)(1).
12. [40 CFR 63.8445(f)]  
You must conduct at least three separate test runs for each performance test required in this section, as specified in section 63.7(e)(3). Each test run must last at least 1 hour.

## V. Testing Requirements (continued)

**13.** [40 CFR 63.8445(g)]

You must use the data gathered during the performance test and the equations in 40 CFR 63.8445(g)(1) and (2) to determine compliance with the emission limitations.

(1) To determine compliance with the production-based hydrogen fluoride (HF), hydrogen chloride (HCl), and particulate matter (PM) emission limits in Table 1 to this subpart, you must calculate your mass emissions per unit of production for each test run using Equation 1 of this section:

$$MP = ER / P \quad (\text{Eq. 1})$$

Where:

MP=mass per unit of production, kilograms (pounds) of pollutant per megagram (ton) of fired product

ER=mass emission rate of pollutant (HF, HCl, or PM) during each performance test run, kilograms (pounds) per hour

P=production rate during each performance test run, megagrams (tons) of fired product per hour.

(2) To determine compliance with the percent reduction HF and HCl emission limits in Table 1 to this subpart, you must calculate the percent reduction for each test run using Equation 2 of this section:

$$PR = [(ER_i - ER_o) / ER_i] \times 100 \quad (\text{Eq. 2})$$

Where:

PR=percent reduction, percent

ER<sub>i</sub>=mass emission rate of specific HAP (HF or HCl) entering the APCD, kilograms (pounds) per hour

ER<sub>o</sub>=mass emission rate of specific HAP (HF or HCl) exiting the APCD, kilograms (pounds) per hour.

**14.** [40 CFR 63.8445(h)]

You must establish each site-specific operating limit in Table 2 to this subpart that applies to you as specified in Table 3 to this subpart.

**15.a** [40 CFR 63.8405 (Table 3)]

For each kiln, you must select locations of sampling ports and the number of traverse points using Method 1 or 1A of 40 CFR part 60, appendix A according to the following requirements: Sampling sites must be located at the outlet of the APCD and prior to any releases to the atmosphere for affected sources. If you choose to meet the percent emission reduction requirements for HF or HCl, a sampling site must also be located at the APCD inlet.

**15.b** For each kiln, you must determine velocities and volumetric flow rate using Method 2 of 40 CFR part 60, appendix A according to the following requirements: You may use Method 2A, 2C, 2D, 2F, or 2G of 40 CFR part 60, appendix A, as appropriate, as an alternative to using Method 2 of 40 CFR part 60, appendix A.

**15.c** For each kiln, you must conduct gas molecular weight analysis using Method 3 of 40 CFR part 60, appendix A according to the following requirements: You may use Method 3A or 3B of 40 CFR part 60, appendix A, as appropriate, as an alternative to using Method 3 of 40 CFR part 60, appendix A.

**15.d** For each kiln, you must measure moisture content of the stack gas using Method 4 of 40 CFR part 60, appendix A.

**15.e** For each kiln, you must measure HF and HCl emissions using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A according to one of the following requirements:

(1) Conduct the Method 26A test while operating at the maximum production level. You may use Method 26 of 40 CFR part 60, appendix A, as an alternative to using Method 26A of 40 CFR part 60, appendix A, when no acid PM (e.g., HF or HCl dissolved in water droplets emitted by sources controlled by a WS) is present.

(2) Conduct the Method 320 test while operating at the maximum production level. You must follow the analyte spiking procedures of section 13 of Method 320 of 40 CFR part 63 appendix A, unless you can demonstrate that the complete spiking procedure has been conducted at a similar source.

**15.f** For each kiln, you must measure PM emissions using Method 5 of 40 CFR part 60, appendix A according to the following requirements: Conduct the test while operating at the maximum production level.

## V. Testing Requirements (continued)

- 16.** [40 CFR 63.8405 (Table 3)]  
For each kiln equipped with a DIFF or DLS/FF, you must establish the operating limit for the lime feeder setting using data from the lime feeder during the performance test according to the following requirements: For continuous lime injection systems, you must ensure that lime in the feed hopper or silo and to the APCD is free-flowing at all times during the performance test and record the feeder setting during the three test runs. If the feed rate setting varies during the three test runs, determine and record the average feed rate from the three test runs.
- 17.a** [40 CFR 63.8455 (Table 4)]  
For each Existing large tunnel kiln, for the limitation that HF emissions must not exceed 0.029 kg/Mg (0.057 lb/ton) of fired product; or uncontrolled HF emissions must be reduced by at least 90 percent, you have demonstrated initial compliance if (i) the HF emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test, according to the calculations in section 63.8445(g)(1), do not exceed 0.029 kg/Mg (0.057 lb/ton); or uncontrolled HF emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test are reduced by at least 90 percent, according to the calculations in section 63.8445(g)(2); and (ii) you establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which HF emissions did not exceed 0.029 kg/Mg (0.057 lb/ton) or uncontrolled HF emissions were reduced by at least 90 percent.
- 17.b** For each Existing large tunnel kiln, for the limitation that HCl emissions must not exceed 0.13 kg/Mg (0.26 lb/ton) of fired product; or uncontrolled HCl emissions must be reduced by at least 30 percent, you have demonstrated initial compliance if:  
(1) emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test, according to the calculations in section 63.8445(g)(1), do not exceed 0.13 kg/Mg (0.26 lb/ton); or uncontrolled HCl emissions measured using Method 26A of 40 CFR part 60, appendix A or Method 320 of 40 CFR part 63, appendix A over the period of the initial performance test are reduced by at least 30 percent, according to the calculations in section 63.8445(g)(2);  
(2) You establish and have a record of the operating limits listed in Table 2 to this subpart over the 3-hour performance test during which HCl emissions did not exceed 0.13 kg/Mg (0.26 lb/ton) or uncontrolled HCl emissions were reduced by at least 30 percent.
- 18.** [40 CFR 63.8470 (Table 5)]  
For each kiln equipped with a DIFF or DLS/FF, for each emission limit in Table 1 to this subpart and each operating limit in Item 2 of Table 2 to this subpart, you must demonstrate continuous compliance by (i) if you use a bag leak detection system, initiating corrective action within 1 hour of a bag leak detection system alarm and completing corrective actions in accordance with your OM&M plan; operating and maintaining the fabric filter such that the alarm is not engaged for more than 5 percent of the total operating time in a 6-month block reporting period; in calculating this operating time fraction, if inspection of the fabric filter demonstrates that no corrective action is required, no alarm time is counted; if corrective action is required, each alarm is counted as a minimum of 1 hour; if you take longer than 1 hour to initiate corrective action, the alarm time is counted as the actual amount of time taken by you to initiate corrective action; or performing VE observations of the DIFF or DLS/FF stack at the frequency specified in section 63.8470(g) using Method 22 of 40 CFR part 60, appendix A; maintaining no VE from the DIFF or DLS/FF stack; and (ii) Verifying that lime is free-flowing via a load cell, carrier gas/lime flow indicator, carrier gas pressure drop measurement system, or other system; recording all monitor or sensor output, and if lime is found not to be free flowing, promptly initiating and completing corrective actions in accordance with your OM&M plan; recording the feeder setting once during each shift of operation to verify that the feeder setting is being maintained at or above the level established during the performance test.

## **VI. Miscellaneous Requirements**

1. The permittee submitted a Fee Emission Report for 2000 that stated emissions unit P301 emitted approximately 265 tons of SO<sub>2</sub>. This demonstrates that the permittee violated the requirements of a preconstruction PSD review. Specifically, the 265 tons per year annual SO<sub>2</sub> emission rate, emitted by emissions unit P301, exceeded the 40 tons per year PSD major modification applicability threshold and represents a relaxation of the PTI 06-695 synthetic minor SO<sub>2</sub> emission limitation. In accordance with the requirements of OAC rule 3745-31-10(B), at such time a "minor modification" becomes a major modification through relaxation of federally enforceable limitations that lowered its PTE, the requirements of OAC rules 3745-31-10 through 3745-31-27 shall apply to the stationary source or modification as though construction had not yet commenced. Therefore, the permittee began construction of a major modification without obtaining a PSD PTI and demonstrating that the requirements of OAC rules 3745-31-11 through 3745-31-20 have been met.

On September 20, 2002, Ohio EPA issued PTI #06-06301 (administratively modified on January 7, 2003) which superseded PTI #06-695. The PTI required Plant 8 to reduce baseline SO<sub>2</sub> emission rate to retroactively allow Plant 3 and Plant 2 to net out of a PSD major modification review. Plant 8's scrubber system became operational in June, 2003.

After the issuance of PTI #06-06301, Ohio EPA discovered that the permittee reported, in its Title V fee emission reports, Plant 8's actual SO<sub>2</sub> emissions as an average of 157 tons for the baseline years used in the netting calculation while claiming an average of 966 tons for the netting baseline. For a reduction to be considered in a PSD netting calculation the reduction must be contemporaneous with the modification increase and must represent a reduction of actual emissions.

2. Within 60 days of the effective date of this permit, the permittee shall submit to Ohio EPA, a detailed written explanation of why the Plant 8's kilns SO<sub>2</sub> actual emission rates for 1999 and 2000 (netting baseline emissions) submitted in the PTI #06-06301 application are different from the SO<sub>2</sub> actual emission rates reported on the permittee's FERs for the same 2 years. The explanation shall include detailed calculations on how each actual emission rate was determined. If it is determined that the actual emissions reported on the permittee's 1999 and 2000 FERs need to be revised, the permittee shall submit revised FERs that include Plant 8's actual emissions of SO<sub>2</sub> for 1999 and 2000 and pay the assessed emission fees as indicated by an invoice from Ohio EPA. The revised FERs shall be submitted within sixty (60) days of any determination that the Plant 8's kilns' SO<sub>2</sub> emission rates that were reported are incorrect. If it is determined that there was an error in Plant 8's netting baseline SO<sub>2</sub> emission rate, the permittee shall submit within 180 days of the effective date of this permit, a PTI revision application for the installation of Plant 2 which, at a minimum, demonstrates that the requirements of OAC rules 3745-31-11 through 3745-31-20 have been met.
3. Compliance with the provisions of A.VI.1 and A.VI.2 above does not represent an admission by the permittee of any allegations contained above, nor does it waive the permittee's defenses to such allegations in any subsequent action.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #1 (P401)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 1	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #2 (P402)

**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 2	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #3 (P403)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 3	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #4 (P404)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 4	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #5 (P405)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 5	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #6 (P406)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 6	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #7 (P407)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 7	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #8 (P408)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 8	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #9 (P409)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 9	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #10 (P410)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KSSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 10	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #11 (P411)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 11	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #12 (P412)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 12	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #13 (P413)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 13	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #14 (P414)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 14	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #15 (P415)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 15	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #16 (P416)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 16	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #17 (P417)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 17	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #18 (P418)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 18	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #19 (P419)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 19	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Periodic Kiln #20 (P420)  
**Activity Description:** Plt 4-2 Periodic Kiln to P42KNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2, natural gas-fired periodic kiln # 20	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 45.3 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions units P401 - P420 (weight of green brick fired);
- d. the total combined firing time for emissions units P401 - P420; and
- e. the average hourly emission rate calculated using the following equation:  $(\text{sulfur content of raw material, lb/lb})(\text{total raw material usage, lbs})(2 \text{ lb of SO}_2 / \text{lb of S}) / (\text{total firing time, hr}) = \text{average SO}_2 \text{ emission rate, lb/hr.}$

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 45.3 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

45.3 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6, and the record keeping required pursuant to section A.III.2 of this permit.

## **V. Testing Requirements (continued)**

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit for the stack serving kilns 1 through 10 or the stack serving kilns 11 through 20.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide and for particulate emissions.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A and for particulate emissions, Methods 1 through 5 of 40 CFR Part 60. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## **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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 4-2 Dryer (P462)  
**Activity Description:** Plt 4-2 Dryer to P41D1,2,3STK

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 4-2 Dryer	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.

**2. Additional Terms and Conditions**

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 6 Tunnel Kiln #1 (P601)  
**Activity Description:** Plt 6 Tunnel Kiln # 1 to P6KILNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 6, natural gas-fired tunnel kiln # 1	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 91.9 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions unit P601 (weight of green brick fired);
- d. the total combined firing time for emissions unit P601; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 91.9 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

91.9 lbs/hr of sulfur dioxide

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 and the record keeping required pursuant to section A.III.2 of this permit.

### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 6 Tunnel Kiln #2 (P602)  
**Activity Description:** Plt 6 Tunnel Kiln # 2 to P6KILNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 6, natural gas-fired tunnel kiln # 2	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 91.9 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions unit P601 (weight of green brick fired);
- d. the total combined firing time for emissions unit P601; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 91.9 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

91.9 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 and the record keeping required pursuant to section A.III.2 of this permit.

## V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted by not later than the end of the third year of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

## 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 6 Tunnel Kiln #3 (P603)

**Activity Description:** Plt 6 Tunnel Kiln # 3 to P6KILNSTK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 6, natural gas-fired tunnel kiln # 3	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 91.9 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall collect a minimum of 15 daily grab samples per month of the clay/shale raw materials to determine the sulfur content. Each grab sample shall be taken from the conveyor ahead of the pug mill. No more than one grab sample need be collected during any one day of operation. The test method for determining the sulfur content in the raw materials shall be that method specified by Belden Lab Procedure ISO Work Instruction #824.005.

The permittee shall maintain the following records:

- a. the sulfur content of each individual sample collected during the month;
- b. the monthly average sulfur content of all samples collected during the month;
- c. the monthly combined production rate for emissions unit P601 (weight of green brick fired);
- d. the total combined firing time for emissions unit P601; and
- e. the average hourly emission rate calculated using the following equation: (sulfur content of raw material, lb/lb)(total raw material usage, lbs)(2 lb of SO<sub>2</sub> / lb of S) / (total firing time, hr) = average SO<sub>2</sub> emission rate, lb/hr.

### IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the hourly average SO<sub>2</sub> emission rate exceeded the SO<sub>2</sub> emission limitation of 91.9 lbs/hr. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

**1.a** Emission Limitation:

91.9 lbs/hr of sulfur dioxide

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing requirements specified in OAC rule 3745-18-04 and the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6 and the record keeping required pursuant to section A.III.2 of this permit.

### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Tunnel Kiln #1 (P801)

**Activity Description:** Plt 8 Tunnel Kiln # 1 to P8SCRUBSTK. Ware Cool bypass to P8WC!STK. Kiln bypass to P8K1STK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 8, natural gas-fired tunnel kiln # 1 controlled with a lime slurry spray tower and an electrostatic precipitator	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 118.5 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. For sulfur dioxide and exhaust gas flow:

a. The permittee shall operate and maintain equipment to continuously monitor and record SO<sub>2</sub> and exhaust gas flow data from this emissions unit in units of the applicable standard (pounds per hour for SO<sub>2</sub>). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 6, and be operated in accordance with 40 CFR Part 60.13 unless otherwise specified in section A.III.2.b below.

The permittee shall maintain records of all data obtained by the continuous SO<sub>2</sub> and exhaust gas flow monitoring system including, but not limited to, minute-by-minute concentration data for SO<sub>2</sub>; minute-by-minute flow data in ACFM; SO<sub>2</sub> data in pounds per hour; the results of all daily, weekly, and quarterly calibration checks; and the magnitude of any calibration adjustments.

Each CEMS consists of all the equipment used to acquire and record data and includes any sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The data recorded by the CEMS shall be used to determine compliance with the applicable emission limitations on an ongoing basis.

b. Within 90 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO<sub>2</sub> and exhaust gas flow monitoring system designed to meet all requirements as listed in 40 CFR Part 60, Appendix F and ensure continuous valid and representative readings of SO<sub>2</sub> and flow. The plan shall describe in detail, complete, step-by-step procedures and operations for each of the following activities:

- i. calibration of CEMS;
- ii. CD determination and adjustment of CEMS;
- iii. preventive maintenance of CEMS (including spare parts inventory);
- iv. data recording, calculations, and reporting;
- v. accuracy audit procedures including sampling and analysis methods; and
- vi. program of corrective action for malfunctioning CEMS.

The permittee shall be required to complete a CEMS certification relative accuracy test audit (RATA), in accordance with the procedures specified in 40 CFR Part 60, Appendix F, within 12 months after permit issuance (see section A.V.4). From the date of CEMS certification forward, the permittee may forego annual RATA requirements as listed in 40 CFR Part 60, Appendix F, by completing a quarterly cylinder gas or relative accuracy audit, in accordance with 40 CFR Part 60, Appendix F, for each quarter of the year. Should any CEMS not pass a cylinder gas or relative accuracy audit on the first attempt for two consecutive quarters (even though a recalibration or repair allows the second attempted cylinder gas or relative accuracy audit to pass), the permittee shall complete a RATA within 60 days of the second quarter's failed cylinder gas or relative accuracy audit. The permittee shall also complete a RATA for the CEMS within 6 months prior to the expiration of this permit. RATA testing may also be required if the CEMS as listed on the CEMS certification letter from Ohio EPA, Central Office, or any CEMS associated equipment, are changed or modified.

Beginning on the effective date of this permit, the permittee shall perform daily zero/span calibration drift checks on the SO<sub>2</sub> and flow CEMS for 60 consecutive operating days in accordance with the requirements specified in 40 CFR Part 60, Appendix F, section 4. If, on the first attempt, the results of each daily zero/span calibration drift check are less than the criteria for excessive calibration drift specified in 40 CFR Part 60, Appendix F, section 4.3 (as determined by the Ohio EPA, Southeast District Office), the permittee shall begin performing zero/span calibration drift checks on a weekly basis. If any CEMS should fail a weekly zero/span calibration drift check for 2 consecutive weeks (based on the criteria of being 2x over the limit as stated in Appendix F, section 4.3), the permittee shall perform daily zero/span calibration drift checks until such time as 60 consecutive daily zero/span calibration drift checks have been successfully completed within the criteria specified in Appendix F, section 4.3.

The quality assurance/quality control plan and a logbook dedicated to the SO<sub>2</sub> and flow CEMS must be kept on site and available for inspection during regular office hours.

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

3. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.
4. For Plant 2 (P201), Plant 3 (P301) and Plant 8 (P801, P802, P803) the permittee shall maintain the following monthly records for each plant:
  - a. total SO<sub>2</sub> emissions for the month, including any emissions that occur during the bypassing of the control equipment and/or the continuous emission monitor;
  - b. total SO<sub>2</sub> emissions for the previous 12 months; and
  - c. the net SO<sub>2</sub> emissions increase, calculated in accordance with the equation in section A.V.1.a.

### IV. Reporting Requirements

1. The permittee shall submit the results of the daily zero/span calibration draft checks required in section A.III.2.b to the Ohio EPA, Southeast District Office within 14 days after the drift checks are completed.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO<sub>2</sub> values in excess of the applicable limit specified in this permit.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting any continuous SO<sub>2</sub> and exhaust gas flow monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report. The summary shall be submitted to the Ohio EPA, Southeast District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

4. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month, net SO<sub>2</sub> emissions increase exceeded the SO<sub>2</sub> significance level, as calculated in section A.V.1.a. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

## V. Testing Requirements (continued)

### 1.a Emission Limitation:

118.5 lbs/hr of sulfur dioxide

### Applicable Compliance Method:

Compliance with the sulfur dioxide emission limitation shall be based upon the records and report data specified in section A.III.2. If required, the permittee shall demonstrate compliance with the allowable mass emission rate for sulfur dioxide in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

Data required by section A.III.4 shall be used in the following equation. If true, the calculation demonstrates that the PSD significance level has not been exceeded.

$$P2 + P3 + P8 - 966.3 \text{ TPY} < 40 \text{ TPY} + (6.6 \text{ lbs/hr} \times \text{hr}/12\text{-month} \times 0.0005 \text{ ton/lb})$$

where: P2, P3 and P8 = Plant 2, 3 and 8 emissions in tons/12-month period.

NOTE: The 966.3 TPY value in the equation is from PTI # 06-06301 and will be revised to a value consistent with the requirements of OAC rules 3745-31-10 through 20.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 12 months after permit issuance.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

**V. Testing Requirements (continued)**

4. During the emission test required to be conducted within 12 months after permit issuance, the permittee shall conduct certification tests for each CEMS specified in section A.III.2 pursuant to ORC section 3704.03(I) and the appropriate performance specifications as designated below. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of each CEMS specified in section A.III.2 shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and the appropriate performance specification as designated below:

for sulfur dioxide - Performance Specifications 2 and 6 of 40 CFR Part 60, Appendix B; and  
for exhaust gas flow - Performance Specification 6 of 40 CFR Part 60, Appendix B.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Tunnel Kiln #2 (P802)

**Activity Description:** Plt 8 Tunnel Kiln # 2 to P8SCRUBSTK. Ware Cool bypass to P8WC2STK. Kiln bypass to P8K23STK

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 8, natural gas-fired tunnel kiln # 2 controlled with a lime slurry spray tower and an electrostatic precipitator	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 118.5 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. For sulfur dioxide and exhaust gas flow:

a. The permittee shall operate and maintain equipment to continuously monitor and record SO<sub>2</sub> and exhaust gas flow data from this emissions unit in units of the applicable standard (pounds per hour for SO<sub>2</sub>). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 6, and be operated in accordance with 40 CFR Part 60.13 unless otherwise specified in section A.III.2.b below.

The permittee shall maintain records of all data obtained by the continuous SO<sub>2</sub> and exhaust gas flow monitoring system including, but not limited to, minute-by-minute concentration data for SO<sub>2</sub>; minute-by-minute flow data in ACFM; SO<sub>2</sub> data in pounds per hour; the results of all daily, weekly, and quarterly calibration checks; and the magnitude of any calibration adjustments.

Each CEMS consists of all the equipment used to acquire and record data and includes any sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The data recorded by the CEMS shall be used to determine compliance with the applicable emission limitations on an ongoing basis.

b. Within 90 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO<sub>2</sub> and exhaust gas flow monitoring system designed to meet all requirements as listed in 40 CFR Part 60, Appendix F and ensure continuous valid and representative readings of SO<sub>2</sub> and flow. The plan shall describe in detail, complete, step-by-step procedures and operations for each of the following activities:

- i. calibration of CEMS;
- ii. CD determination and adjustment of CEMS;
- iii. preventive maintenance of CEMS (including spare parts inventory);
- iv. data recording, calculations, and reporting;
- v. accuracy audit procedures including sampling and analysis methods; and
- vi. program of corrective action for malfunctioning CEMS.

The permittee shall be required to complete a CEMS certification relative accuracy test audit (RATA), in accordance with the procedures specified in 40 CFR Part 60, Appendix F, within 12 months after permit issuance (see section A.V.4). From the date of CEMS certification forward, the permittee may forego annual RATA requirements as listed in 40 CFR Part 60, Appendix F, by completing a quarterly cylinder gas or relative accuracy audit, in accordance with 40 CFR Part 60, Appendix F, for each quarter of the year. Should any CEMS not pass a cylinder gas or relative accuracy audit on the first attempt for two consecutive quarters (even though a recalibration or repair allows the second attempted cylinder gas or relative accuracy audit to pass), the permittee shall complete a RATA within 60 days of the second quarter's failed cylinder gas or relative accuracy audit. The permittee shall also complete a RATA for the CEMS within 6 months prior to the expiration of this permit. RATA testing may also be required if the CEMS as listed on the CEMS certification letter from Ohio EPA, Central Office, or any CEMS associated equipment, are changed or modified.

Beginning on the effective date of this permit, the permittee shall perform daily zero/span calibration drift checks on the SO<sub>2</sub> and flow CEMS for 60 consecutive operating days in accordance with the requirements specified in 40 CFR Part 60, Appendix F, section 4. If, on the first attempt, the results of each daily zero/span calibration drift check are less than the criteria for excessive calibration drift specified in 40 CFR Part 60, Appendix F, section 4.3 (as determined by the Ohio EPA, Southeast District Office), the permittee shall begin performing zero/span calibration drift checks on a weekly basis. If any CEMS should fail a weekly zero/span calibration drift check for 2 consecutive weeks (based on the criteria of being 2x over the limit as stated in Appendix F, section 4.3), the permittee shall perform daily zero/span calibration drift checks until such time as 60 consecutive daily zero/span calibration drift checks have been successfully completed within the criteria specified in Appendix F, section 4.3.

The quality assurance/quality control plan and a logbook dedicated to the SO<sub>2</sub> and flow CEMS must be kept on site and available for inspection during regular office hours.

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

3. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.
4. For Plant 2 (P201), Plant 3 (P301) and Plant 8 (P801, P802, P803) the permittee shall maintain the following monthly records for each plant:
  - a. total SO<sub>2</sub> emissions for the month, including any emissions that occur during the bypassing of the control equipment and/or the continuous emission monitor;
  - b. total SO<sub>2</sub> emissions for the previous 12 months; and
  - c. the net SO<sub>2</sub> emissions increase, calculated in accordance with the equation in section A.V.1.a.

### IV. Reporting Requirements

1. The permittee shall submit the results of the daily zero/span calibration draft checks required in section A.III.2.b to the Ohio EPA, Southeast District Office within 14 days after the drift checks are completed.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO<sub>2</sub> values in excess of the applicable limit specified in this permit.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting any continuous SO<sub>2</sub> and exhaust gas flow monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report. The summary shall be submitted to the Ohio EPA, Southeast District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

4. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month, net SO<sub>2</sub> emissions increase exceeded the SO<sub>2</sub> significance level, as calculated in section A.V.1.a. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

## V. Testing Requirements (continued)

### 1.a Emission Limitation:

118.5 lbs/hr of sulfur dioxide

Applicable Compliance Method:

Compliance with the sulfur dioxide emission limitation shall be based upon the records and report data specified in section A.III.2. If required, the permittee shall demonstrate compliance with the allowable mass emission rate for sulfur dioxide in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

Data required by section A.III.4 shall be used in the following equation. If true, the calculation demonstrates that the PSD significance level has not been exceeded.

$$P2 + P3 + P8 - 966.3 \text{ TPY} < 40 \text{ TPY} + (6.6 \text{ lbs/hr} \times \text{hr}/12\text{-month} \times 0.0005 \text{ ton/lb})$$

where: P2, P3 and P8 = Plant 2, 3 and 8 emissions in tons/12-month period.

NOTE: The 966.3 TPY value in the equation is from PTI # 06-06301 and will be revised to a value consistent with the requirements of OAC rules 3745-31-10 through 20.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 12 months after permit issuance.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

**V. Testing Requirements (continued)**

4. During the emission test required to be conducted within 12 months after permit issuance, the permittee shall conduct certification tests for each CEMS specified in section A.III.2 pursuant to ORC section 3704.03(I) and the appropriate performance specifications as designated below. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of each CEMS specified in section A.III.2 shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and the appropriate performance specification as designated below:

for sulfur dioxide - Performance Specifications 2 and 6 of 40 CFR Part 60, Appendix B; and  
for exhaust gas flow - Performance Specification 6 of 40 CFR Part 60, Appendix B.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Tunnel Kiln #3 (P803)

**Activity Description:** Plt 8 Tunnel Kiln # 3 to P8SCRUBSTK. Ware Cool bypass to P8WC3STK. Kiln bypass to P8K23STK.

#### 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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 8, natural gas-fired tunnel kiln # 3 controlled with a lime slurry spray tower and an electrostatic precipitator	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.
	OAC rule 3745-18-06(E)(2)	Emissions of sulfur dioxide shall not exceed 118.5 lbs/hr.

##### 2. Additional Terms and Conditions

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour as determined using the particulate emission factor of 0.37 lb/ton obtained from AP42, Volume I, 5th Edition, Chapter 11, Section 11.3, Table 11.3-1, dated August, 1997. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply pursuant to OAC rule 3745-17-11(A)(2)(b)(ii).
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

##### II. Operational Restrictions

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

##### III. Monitoring and/or Record Keeping Requirements

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

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

2. For sulfur dioxide and exhaust gas flow:

a. The permittee shall operate and maintain equipment to continuously monitor and record SO<sub>2</sub> and exhaust gas flow data from this emissions unit in units of the applicable standard (pounds per hour for SO<sub>2</sub>). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60, Appendix B, Performance Specification 6, and be operated in accordance with 40 CFR Part 60.13 unless otherwise specified in section A.III.2.b below.

The permittee shall maintain records of all data obtained by the continuous SO<sub>2</sub> and exhaust gas flow monitoring system including, but not limited to, minute-by-minute concentration data for SO<sub>2</sub>; minute-by-minute flow data in ACFM; SO<sub>2</sub> data in pounds per hour; the results of all daily, weekly, and quarterly calibration checks; and the magnitude of any calibration adjustments.

Each CEMS consists of all the equipment used to acquire and record data and includes any sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

The data recorded by the CEMS shall be used to determine compliance with the applicable emission limitations on an ongoing basis.

b. Within 90 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous SO<sub>2</sub> and exhaust gas flow monitoring system designed to meet all requirements as listed in 40 CFR Part 60, Appendix F and ensure continuous valid and representative readings of SO<sub>2</sub> and flow. The plan shall describe in detail, complete, step-by-step procedures and operations for each of the following activities:

- i. calibration of CEMS;
- ii. CD determination and adjustment of CEMS;
- iii. preventive maintenance of CEMS (including spare parts inventory);
- iv. data recording, calculations, and reporting;
- v. accuracy audit procedures including sampling and analysis methods; and
- vi. program of corrective action for malfunctioning CEMS.

The permittee shall be required to complete a CEMS certification relative accuracy test audit (RATA), in accordance with the procedures specified in 40 CFR Part 60, Appendix F, within 12 months after permit issuance (see section A.V.4). From the date of CEMS certification forward, the permittee may forego annual RATA requirements as listed in 40 CFR Part 60, Appendix F, by completing a quarterly cylinder gas or relative accuracy audit, in accordance with 40 CFR Part 60, Appendix F, for each quarter of the year. Should any CEMS not pass a cylinder gas or relative accuracy audit on the first attempt for two consecutive quarters (even though a recalibration or repair allows the second attempted cylinder gas or relative accuracy audit to pass), the permittee shall complete a RATA within 60 days of the second quarter's failed cylinder gas or relative accuracy audit. The permittee shall also complete a RATA for the CEMS within 6 months prior to the expiration of this permit. RATA testing may also be required if the CEMS as listed on the CEMS certification letter from Ohio EPA, Central Office, or any CEMS associated equipment, are changed or modified.

Beginning on the effective date of this permit, the permittee shall perform daily zero/span calibration drift checks on the SO<sub>2</sub> and flow CEMS for 60 consecutive operating days in accordance with the requirements specified in 40 CFR Part 60, Appendix F, section 4. If, on the first attempt, the results of each daily zero/span calibration drift check are less than the criteria for excessive calibration drift specified in 40 CFR Part 60, Appendix F, section 4.3 (as determined by the Ohio EPA, Southeast District Office), the permittee shall begin performing zero/span calibration drift checks on a weekly basis. If any CEMS should fail a weekly zero/span calibration drift check for 2 consecutive weeks (based on the criteria of being 2x over the limit as stated in Appendix F, section 4.3), the permittee shall perform daily zero/span calibration drift checks until such time as 60 consecutive daily zero/span calibration drift checks have been successfully completed within the criteria specified in Appendix F, section 4.3.

The quality assurance/quality control plan and a logbook dedicated to the SO<sub>2</sub> and flow CEMS must be kept on site and available for inspection during regular office hours.

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

3. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings, if a strip-chart recorder is employed for continuous monitoring instrumentation, and copies of all reports required by the permit. Such records may be maintained in computerized form.
4. For Plant 2 (P201), Plant 3 (P301) and Plant 8 (P801, P802, P803) the permittee shall maintain the following monthly records for each plant:
  - a. total SO<sub>2</sub> emissions for the month, including any emissions that occur during the bypassing of the control equipment and/or the continuous emission monitor;
  - b. total SO<sub>2</sub> emissions for the previous 12 months; and
  - c. the net SO<sub>2</sub> emissions increase, calculated in accordance with the equation in section A.V.1.a.

### IV. Reporting Requirements

1. The permittee shall submit the results of the daily zero/span calibration draft checks required in section A.III.2.b to the Ohio EPA, Southeast District Office within 14 days after the drift checks are completed.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. Pursuant to OAC rule 3745-15-04 and ORC sections 3704.03(I) and 3704.031, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of SO<sub>2</sub> values in excess of the applicable limit specified in this permit.

The permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Southeast District Office documenting any continuous SO<sub>2</sub> and exhaust gas flow monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.

If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by February 1, May 1, August 1, and November 1 of each year and shall address the data obtained during the previous calendar quarter.

Pursuant to OAC rules 3745-15-04, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report. The summary shall be submitted to the Ohio EPA, Southeast District Office within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

4. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which the rolling, 12-month, net SO<sub>2</sub> emissions increase exceeded the SO<sub>2</sub> significance level, as calculated in section A.V.1.a. All quarterly deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

### V. Testing Requirements

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

## V. Testing Requirements (continued)

### 1.a Emission Limitation:

118.5 lbs/hr of sulfur dioxide

### Applicable Compliance Method:

Compliance with the sulfur dioxide emission limitation shall be based upon the records and report data specified in section A.III.2. If required, the permittee shall demonstrate compliance with the allowable mass emission rate for sulfur dioxide in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 6.

Data required by section A.III.4 shall be used in the following equation. If true, the calculation demonstrates that the PSD significance level has not been exceeded.

$$P2 + P3 + P8 - 966.3 \text{ TPY} < 40 \text{ TPY} + (6.6 \text{ lbs/hr} \times \text{hr}/12\text{-month} \times 0.0005 \text{ ton/lb})$$

where: P2, P3 and P8 = Plant 2, 3 and 8 emissions in tons/12-month period.

NOTE: The 966.3 TPY value in the equation is from PTI # 06-06301 and will be revised to a value consistent with the requirements of OAC rules 3745-31-10 through 20.

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 12 months after permit issuance.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for sulfur dioxide.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: for sulfur dioxide, Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - 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, and the "worst case" raw materials for emissions.

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

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

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the 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.

3. During the sulfur dioxide emission testing required in section A.V.2, the permittee shall also measure and record the sulfur content and raw material usage, in pounds per hour, during each test run.

**V. Testing Requirements (continued)**

4. During the emission test required to be conducted within 12 months after permit issuance, the permittee shall conduct certification tests for each CEMS specified in section A.III.2 pursuant to ORC section 3704.03(I) and the appropriate performance specifications as designated below. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of each CEMS specified in section A.III.2 shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and the appropriate performance specification as designated below:

for sulfur dioxide - Performance Specifications 2 and 6 of 40 CFR Part 60, Appendix B; and  
for exhaust gas flow - Performance Specification 6 of 40 CFR Part 60, Appendix B.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Dryer # 2 (P861)  
**Activity Description:** Plt 8 Dryer #2 to P8D2STK

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 8 Dryer #2	OAC rule 3745-17-11(A)	See section A.I.2.a.
	OAC rule 3745-17-07(A)	See section A.I.2.b.

**2. Additional Terms and Conditions**

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Dryer # 3 (P862)  
**Activity Description:** Plt 8 Dryer #3 to P8D3STK

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
Plant 8 Dryer #3	OAC rule 3745-17-11(A)	See section A.1.2.a.
	OAC rule 3745-17-07(A)	See section A.1.2.b.

**2. Additional Terms and Conditions**

- 2.a The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14), is equal to zero.
- 2.b This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

**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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**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:** Plt 8 Sand Dryer (P870)  
**Activity Description:** Plt 8 Sand Dryer to P8SANDSTK

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
2 tons per hour sand dryer with baghouse	OAC rule 3745-17-11(B)  OAC rule 3745-17-07(A)	Particulate emissions shall not exceed 6.65 lbs/hr.  Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

**2. Additional Terms and Conditions**

None

**II. Operational Restrictions**

None

**III. Monitoring and/or Record Keeping Requirements**

- The permittee shall check for the presence of any visible particulate emissions from the sand dryer each day when the sand dryer is in operation. The presence of any visible emissions from the sand dryer shall be noted in an operations log along with the date and time that the visible emissions were observed.

**IV. Reporting Requirements**

- The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the sand dryer 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 15 and July 15 of each year and shall cover the previous 6-month period.

**V. Testing Requirements**

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

## **V. Testing Requirements (continued)**

### **1.a** Emission Limitation:

6.65 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the methods and procedures in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10). No testing is specifically required to demonstrate compliance with this emission limit, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

### **1.b** Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1). No visible particulate emission testing is specifically required to demonstrate compliance with this limit, but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A).

## **VI. Miscellaneous Requirements**

**None**

**B. State Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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**2. Additional Terms and Conditions**

**None**

**II. Operational Restrictions**

**None**

**III. Monitoring and/or Record Keeping Requirements**

**None**

**IV. Reporting Requirements**

**None**

**V. Testing Requirements**

**None**

**VI. Miscellaneous Requirements**

**None**

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