OhioEPA

State of Ohio Environmental Protection Agency

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P.O. Box 1049
Columbus, OH 43216-1049

07/31/01

**CERTIFIED MAIL**

**RE: Draft Title V Chapter 3745-77 permit**

15-76-00-0074
ESSROC Cement Corp
Dale A. Lewis Mr.
8282 Middlebranch Ave., NE
Middlebranch, OH 44652

Dear Dale A. Lewis:

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

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

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

Very truly yours,

Thomas G. Rigo

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

cc: USEPA (electronically submitted)
Michael Ahern, DAPC PMU
Canton Division of Air Pollution Control
Pennsylvania
West Virginia

State of Ohio Environmental Protection Agency

# DRAFT TITLE V PERMIT

| Issue Date: 07/31/01 | Effective Date: To be entered upon final issuance | Expiration Date: To be entered upon final issuance |
|---|---|---|

This document constitutes issuance of a Title V permit for Facility ID: 15-76-00-0074 to:

ESSROC Cement Corp
8282 Middlebranch Ave., NE
Middlebranch, OH 44652

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

F001 (EU20 and EU21) UNPAVED AND PAVED HAUL ROADS, THE AREA OF EMISSIONS IS 144,500 SQ. FT.

F002 (EU04) CRANE STORAGE BUILDING

F003 (EU01, EU13, EU18, EU19, EU35) AGGREGATE STORAGE PILES

F004 (EU02) RAIL UNLOADING

F008 (EU03) CONVEYOR #1 & #2 (FORMER OHIO EPA ID NO. F004)

F009 (EU05) GRAVITY FED HOPPERS #2

F010 (EU06) GRAVITY FED HOPPERS #1

F011 (EU27) SCREW CONVEYOR AND TRUCK TRANSFER (FORMER OHIO EPA ID NO. P902)

F012 (EU34) WOBBLER FEEDER

P003 (EU08) FINISH GRINDING MILL #1 CIRCUIT

P004 (EU11) BULK LOADOUT #4D / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P012 (EU07) FINISH GRINDING MILL #2 CIRCUIT (OHIO EPA ID NO. P012) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P016 (EU33) RAILCAR LOADOUT (DID NOT OPERATE IN 1999)

P017 (EU09) SEPARATOR #2 (FORMER OHIO EPA ID NO. P012) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P018 (EU10) SEPARATOR #1 (FORMER OHIO EPA ID NO. P003) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P019 (EU14) LOADING STATION #4 / STORAGE SILOS (6) (FORMER OHIO EPA ID NO. P004) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P020 (EU16) BULK LOADOUT #4C (FORMER OHIO EPA ID NO. P004) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P901 (EU22) CRUSHER/CONVEYOR SYSTEM / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P902 (EU25) DRYER / Control efficiencies for the control devices connected to this unit are estimated or based on manufacturer's specifications.

P903 (EU23) DRYER FEED BIN (FORMER OHIO EPA ID NO. P902) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

P904 (EU24 and EU26) BYPASS AND DISCHARGE CONVEYORS (FORMER OHIO EPA ID NO. P902) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

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

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

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

OHIO ENVIRONMENTAL PROTECTION AGENCY

_____

Christopher Jones
Director

# PART I - GENERAL TERMS AND CONDITIONS

## A. State and Federally Enforceable Section

### 1. Monitoring and Related Recordkeeping and Reporting Requirements

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

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

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

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

i. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
ii. Quarterly written reports of (i) any deviations from federally enforceable <u>emission limitations</u>, <u>operational restrictions</u>, <u>and control device operating parameter limitations</u>, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.8 below if no deviations occurred during the quarter.
iii. Written reports, which identify any deviations from the federally enforceable <u>monitoring</u>, <u>recordkeeping</u>, <u>and reporting requirements</u> contained in this permit shall be submitted to

the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. These semi-annual written reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the reporting of any deviations related to the monitoring, recordkeeping, and reporting requirements. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

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

## 2. Scheduled Maintenance/Malfunction Reporting

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

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

## 3. Risk Management Plans

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

## 4. Title IV Provisions

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

## 5. Severability Clause

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

## 6. General Requirements

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

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

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

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

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

## 7. Fees

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

## 8. Marketable Permit Programs

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

## 9. Reasonably Anticipated Operating Scenarios

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

## 10. Reopening for Cause

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

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

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

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

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

## 11. Federal and State Enforceability

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

## 12. Compliance Requirements

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

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

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

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

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

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

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

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

ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

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

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

ii. Compliance certifications shall include the following:

(a) An identification of each term or condition of this permit that is the basis of the certification.

(b) The permittee's current compliance status.

(c) Whether compliance was continuous or intermittent.

(d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.

(e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

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

## 13. Permit Shield

a. Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but

excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

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

## 14. Operational Flexibility

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

## 15. Emergencies

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

## 16. Off Permit Changes

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

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

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

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

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

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

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

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

## 17. Compliance Method Requirements

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

## 18. Insignificant Activity

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

# B. State Only Enforceable Section

## 1. Permit to Install Requirement

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

## 2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

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

## 3. Records Retention Requirements

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

## 4. Inspections and Information Requests

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

this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

## 5. Scheduled Maintenance/Malfunction Reporting

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

## 6. Permit Transfers

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

## 7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

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

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

# Part II - Specific Facility Terms and Conditions

## A. State and Federally Enforcable Section

**1.** This facility is subject to the applicable requirements specified in OAC Chapter 3745-25. In accordance with Ohio EPA Engineering Guide #64, the emission control action programs, as specified in OAC rule 3745-25-03, shall be developed and submitted within 60 days after receiving notification from the Ohio EPA.

## B. State Only Enforceable Section

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

G001 - 1,000-gallon diesel fuel tank (EU31);
L001 - degreaser (EU32);
Z001 - pneumatic unloading into silos (EU29); and
Z002 - 10,000-gallon grinding aid tank (EU30).

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

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU20 and EU21 (F001)

**Activity Description:** UNPAVED AND PAVED HAUL ROADS, THE AREA OF EMISSIONS IS 144,500 SQ. FT.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| paved roadways and parking areas (EU21), 60,000 sq.ft. (see section A.I.2.a.) | OAC rule 3745-17-07(B)(4) | no visible particulate emissions except for 6 minutes during any 60-minute period |
| | OAC rule 3745-17-08(B), (B)(7), (B)(8) & (B)(9) | reasonably available control measures (see sections A.I.2.c, A.I.2.d, and A.I.2.f through A.I.2.k) |
| unpaved roadways and parking areas (EU20), 144,000 sq.ft. (see section A.I.2.b.) | OAC rule 3745-17-07(B)(5) | no visible particulate emissions except for 13 minutes during any 60-minute period |
| | OAC rule 3745-17-08(B), (B)(2) | reasonably available control measures (see sections A.I.2.e through A.I.2.k) |

**2. Additional Terms and Conditions**

**2.a** The paved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

paved roadways:

paved 1: plant entrance and silos' loading areas/roadways (0.2 mi)

paved parking areas:

paved 2: parking area in front (north) of Axim building (0.4 mi)

paved 2A: roadway and concrete slab parking, north of office building (0.2 mi)

## 2. Additional Terms and Conditions (continued)

**2.b** The unpaved roadways and parking areas that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

unpaved roadways and parking areas:

unpaved 1: roadway southside of plant to slag piles area (1.4 mi)

unpaved 2: west-east roadway to finish mills building and truck transfer to fringe bin(s) area (0.08 mi)

unpaved 3: clinker and gypsum pile(s) areas north and west of crane storage building (0.1 mi)

unpaved 4: roadway going north of plant and east, with a branch road to a reservior and screw conveyor truck loading area (0.5 mi)

**2.c** The permittee shall employ reasonably available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the paved roadways and parking areas by self-propelled vacuum broom sweeping or by flushing with water at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2.d** The permittee shall employ reasonably available control measures on the unpaved shoulders of all paved roadways for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved shoulders of all paved roadways with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2.e** The permittee shall employ reasonably available control measures on all unpaved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the unpaved roadways and parking areas with water and/or any other suitable dust suppression chemicals at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2.f** The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved or unpaved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

**2.g** Any unpaved roadway or parking area, which during the term of this permit is paved or takes the characteristics of a paved surface due to the application of certain types of dust suppressants, may be controlled with the control measure(s) specified above for paved surfaces. Any unpaved roadway or parking area that takes the characteristics of a paved roadway or parking area due to the application of certain types of dust suppressants shall remain subject to the visible emission limitation for unpaved roadways and parking areas. Any unpaved roadway or parking area that is paved shall be subject to the visible emission limitation for paved roadways and parking areas.

**2.h** The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

**2.i** Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

**2.j** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

**2.k** A maximum speed limit of 15 miles per hour on unpaved roads shall be posted and enforced on the property.

## II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform inspections of the roadways and parking areas in accordance with the following frequencies:

| paved roadways and parking areas | minimum inspection frequency |
|---|---|
| all | weekly |

| unpaved roadways and parking areas | minimum inspection frequency |
|---|---|
| all | daily |

The purpose of the inspections is to determine the need for implementing the control measures specified in section A.I.2. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations. Any required inspection that is not performed due to any of the above identified events shall be performed as soon as such event(s) has(have) ended, except if the next required inspection is within one week

The permittee may, upon receipt of written approval from the Canton City Health Department, Air Pollution Control Division, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to minimize or eliminate visible emissions of fugitive dust generated by vehicular traffic and to ensure compliance with the above-mentioned visible emission limitations.

**2.** The permittee shall maintain records of the following information:

a. The date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. The date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. The dates the control measures were implemented; and

d. On a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in section A.III.2.d shall be kept separately for (i) the paved roadways and parking areas and (ii) the unpaved roadways and parking areas and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

## IV. Reporting Requirements

**1.** The permittee shall submit deviation reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

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

## V. Testing Requirements

**1.** Compliance with the emission limitations for the paved and unpaved roadways and parking areas identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources," as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| paved roadways and parking areas | none | none |
| unpaved roadways and parking areas | none | none |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**1.** If there are no deviations during a calendar quarter that must be reported pursuant to section A.IV of this permit, the permittee shall submit a quarterly report, in accordance with paragraph B.8 of the General Terms and Conditions, which states that no deviations occurred during that quarter.

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU04 (F002)

**Activity Description:** CRANE STORAGE BUILDING

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| portland cement plant- material handling operations (F002) including front-end loaders, dump trucks, conveyor systems and and a 3 cu. yd./ 17-ton overhead crane for transfer of clinker, gypsum or slag material inside a 3-sided crane storage building ( 100' x 300' w/ 10 bays @ 30' storage) | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of dust (see sections A.I.2.b, A.I.2.c, and A.I.2.d) |

## 2. Additional Terms and Conditions

**2.a** The material handing operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

i. transfer of clinker or gypsum using front-end loaders and/or dump truck from clinker storage pile EU13 (F003), gypsum storage pile EU33 (F013) or offsite to inside crane storage building EU04 (F002);

ii. transfer of slag from dryer discharge belt conveyor EU26 (Z012), vented to baghouse #10 (CD14), to crane storage building EU04 (F002) ladder chute and into storage bay pile;

iii. slag drop transfer from railcar unloading conveyor belts #1 and #2 EU03 (F008) to crane storage building pile; and

iv. transfer of material (slag, clinker or gypsum) by 6 cu. yd. (17-ton) crane to other parts of crane storage building (100' x 300' w/ 10 bays @ 30' storage), to include gravity fed hoppers #1 EU06 (F010) and #2 EU05 (F009).

**2.b** The permittee shall employ reasonably available control measures for the above-identified material handing operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to perform the following control measures to ensure compliance:

i. for the transfer of clinker or gypsum, the fugitive particulate emissions shall be minimized or eliminated by an appropriate manner of material handling, including the minimizing the drop height from the front end loader and/or dump truck onto the pile;

ii. for the transfer of slag from dryer discharge belt conveyor to the crane storage building ladder chute into a storage bay pile, the fugitive particulate emissions will be minimized or eliminated use of hood(s), minimizing the drop height and covering of building opening(s) of the partially 3-sided building with roof;

iii. for the transfer of slag from the railcar unloading conveyor belts #1 and #2 to storage pile(s) in the crane storage building, fugitive particulate emissions shall be minimized or eliminated by an appropriate manner of material handling, including the minimizing of the drop height from the from the conveyor onto the piles; and

iv. for the tranfer of slag, clinker or gypsum by overhead crane to other parts of the crane storage building, the fugitive emissions will be minimized or eliminated by minimizing the crane bucket drop height.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to insure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

**2.d** Implementation of the above-mentioned control measures(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack egress point (e.g. openings in 3-sided building, windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible particulate emissions of fugitive dust shall be noted in an operations log. If visible particulate emissions of fugitive dust 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 particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**2.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible particulate emissions of fugitive dust shall include any non-stack egress points from the building. Such egress points shall include, but are not limited to, openings in 3-sided buildings, doorways, windows, and roof monitors.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU01, EU13, EU18, EU19, EU35 (F003)

**Activity Description:** AGGREGATE STORAGE PILES

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| load-in and load-out of storage piles (see section A.I.2.a for identification of storage piles) | OAC rule 3745-17-07(B)(6) | no visible emissions except for 13 minutes during any 60-minute observation period |
| | OAC rule 3745-17-08(B), (B)(6) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.b, A.I.2.c, and A.I.2.f) |
| wind erosion from of storage piles (see section A.I.2.a for identification of storage piles) | OAC rule 3745-17-07(B)(6) | no visible emissions except for 13 minutes during any 60-minute observation period |
| | OAC rule 3745-17-08(B), (B)(6) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see sections A.I.2.d through A.I.2.f) |

**2. Additional Terms and Conditions**

**2.a** The storage piles that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

i. raw slag aggregate stockpiles (EU19) from 25-ton truck unloading area #2 (EU18) - large field of slag storage piles, approx. 20,000 sq. ft. area, 6' - 12' high, near building housing wobbler feeder (EU36);

ii. clinker raw material piles (EU13) from 25-ton truck unloading area #1 (EU01) - clinker storage pile #1 is adjacent to the crane storage building and clinker storage pile #2 is across the access road from first storage pile; and

iii. gypsum aggregate pile (EU35) from 25-ton truck unloading area #1 (EU01) - one storage pile (6' -12' feet high) partially enclosed by two walls of the crane storage building (EU04).

**2. Additional Terms and Conditions (continued)**

**2.b** The permittee shall employ reasonably available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to water spray application on the gypsum and slag storage piles, and the use of partial enclosure walls where practical and drop-height control during load-in and load-out to minimize or eliminate fugitive emissions. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2.c** The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are neccessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of that measure is unnecessary.

**2.d** The permittee shall employ reasonably available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to treat the gypsum and slag storage piles with water and/or any other suitable dust suppression chemicals via spraying and keep each clinker storage pile covered with tarps, except during load-in and load-out operations, to ensure compliance.

**2.e** The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements.

**2.f** Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

| storage pile identification | minimum load-in inspection frequency |
|---|---|
| slag storage piles | daily |
| clinker storage pile #1 | daily |
| clinker storage pile #2 | daily |
| gypsum storage pile | daily |

**2.** Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

| storage pile identification | minimum load-out inspection frequency |
|---|---|
| slag storage piles | daily |
| clinker storage pile #1 | daily |
| clinker storage pile #2 | daily |
| gypsum storage pile | daily |

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

**3.** Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

| storage pile identification | minimum wind erosion inspection frequency |
|---|---|
| slag storage piles | daily |
| clinker storage pile #1 | daily |
| clinker storage pile #2 | daily |
| gypsum storage pile | daily |

**4.** No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

**5.** The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

**6.** The permittee may, upon receipt of written approval from the appropriate Ohio EPA District Office or local air agency, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

**7.** The permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and, for wind erosion from pile surfaces, the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in section A.III.7.d shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

## IV. Reporting Requirements

**1.** The permittee shall submit quarterly deviation (exceedance) reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

**2.** The deviation reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702 in accordance with the reporting requirements of General Term and Condition A.1.c.ii of this permit.

## V. Testing Requirements

**1.** Compliance with the visible emission limitations for the storage piles identified above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(c) of OAC rule 3745-17-03.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| load-in and load-out of storage piles (see section A.I.2.a for identification of storage piles) | | |

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**1.** If there are no deviations during a calendar quarter that must be reported pursuant to section A.IV of this permit, the permittee shall submit a quarterly report, in accordance with paragraph B.8 of the General Terms and Conditions, which states that no deviations occurred during that quarter.

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU02 (F004)

**Activity Description:** RAIL UNLOADING

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| slag unloading from railcar bottom dumping (EU02) into 36" x 30" | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| Jeffrey vibrating feeder, 200 tph capacity, open at bottom to conveyor #1 (EU03) | OAC rule 3745-17-08(B) | See A.I.2.b below. |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate fugitive particulate emissions by an appropriate manner of material handling, including a 3-sided building enclosure, water spray application, and minimizing drop height when unloading and transfering slag. The slag shall have a minimum moisture content of 7%.

### II. Operational Restrictions

**None**

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

**1.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack egress point (e.g. openings in 3-sided building, windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible particulate emissions of fugitive dust shall be noted in an operations log. If visible particulate emissions of fugitive dust 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 particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**2.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.2 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC Rule 3745-17-03(B)(3). The points of observation for visible particulate emissions of fugitive dust shall include any non-stack egress points from the building. Such egress points shall include, but are not limited to, openings in 3-sided buildings, doorways, windows, and roof monitors.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU03 (F008)

**Activity Description:** CONVEYOR #1 & #2 (FORMER OHIO EPA ID NO. F004)

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| slag transfer drop from underground 24" x 516' conveyor #1 (03A) to 24" x 30' conveyor #2 (03B) to inside crane storage building (SW corner) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate fugitive particulate emissions by an appropriate manner of material handling, including a 3-sided building enclosure, water spray application, and minimizing drop height when unloading and transfering slag. The slag shall have a minimum moisture content of 7%.

### II. Operational Restrictions

**None**

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

**1.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack egress point (e.g. openings in 3-sided building, windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible particulate emissions of fugitive dust shall be noted in an operations log. If visible particulate emissions of fugitive dust 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 particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**2.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.2 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible particulate emissions of fugitive dust shall include any non-stack egress points from the building. Such egress points shall include, but are not limited to, openings in 3-sided buildings, doorways, windows, and roof monitors.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU05 (F009)

**Activity Description:** GRAVITY FED HOPPERS #2

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| gravity fed hoppers #2 - material handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of dust (see sections A.I.2.b, A.I.2.c, and A.I.2.d) |

**2. Additional Terms and Conditions**

**2.a** The material handing operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

i. transfer of material (clinker, gypsum, or slag) from crane (EU04C) to gravity fed hopper #2 (EU05); and

ii. transfer of material (clinker, gypsum, or slag) from hopper #2(EU05) to Merrick weigh feeders (EU07A).

**2.b** The permittee shall employ reasonably available control measures for the above-identified material handing operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to perform the following control measures to ensure compliance:

i. for the transfer of clinker, gypsum or slag, the fugitive particulate emissions shall be minimized or eliminated by an appropriate manner of material handling, including minimizing the drop height from the crane transfer bucket; and

ii. for the transfer of clinker, gypsum, or slag from the hopper #1 to weigh feeders, the fugitive particulate emissions will be minimized or eliminated by minimizing the drop height, use of hood(s), and covering of the belt conveyors.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2. Additional Terms and Conditions (continued)**

**2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to insure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

**2.d** Implementation of the above-mentioned control measures(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack egress point (e.g. openings in 3-sided building, windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible particulate emissions of fugitive dust shall be noted in an operations log. If visible particulate emissions of fugitive dust 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 particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**2.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible particulate emissions of fugitive dust shall include any non-stack egress points from the building. Such egress points shall include, but are not limited to, openings in 3-sided buildings, doorways, windows, and roof monitors.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU06 (F010)

**Activity Description:** GRAVITY FED HOPPERS #1

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| gravity fed hoppers #1 - material handling operations | OAC rule 3745-17-07(B)(1) | Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. |
| | OAC rule 3745-17-08(B) | reasonably available control measures that are sufficient to minimize or eliminate visible emissions of dust (see sections A.I.2.b, A.I.2.c, and A.I.2.d) |

**2. Additional Terms and Conditions**

**2.a** The material handing operations that are covered by this permit and subject to the requirements of OAC rules 3745-17-07 and 3745-17-08 are listed below:

i. transfer of material (clinker, gypsum, or slag) from crane (EU04C) to gravity fed hopper #1 (EU06); and

ii. transfer of material (clinker, gypsum, or slag) from hopper #1 (EU06) to Merrick weigh feeders (EU08A).

**2.b** The permittee shall employ reasonably available control measures for the above-identified material handing operations for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to perform the following control measures to ensure compliance:

i. for the transfer of clinker, gypsum or slag, the fugitive particulate emissions shall be minimized or eliminated by an appropriate manner of material handling, including minimizing the drop height from the crane transfer bucket; and

ii. for the transfer of clinker, gypsum, or slag from the hopper #1 to weigh feeders, the fugitive particulate emissions will be minimized or eliminated by minimizing the drop height, use of hood(s), and covering of the belt conveyors.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

**2. Additional Terms and Conditions (continued)**

**2.c** For each material handling operation that is not adequately enclosed, the above-identified control measure(s) shall be implemented if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) is (are) necessary to insure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during the operation of the material handling operation(s) until further observation confirms that use of the control measure(s) is unnecessary.

**2.d** Implementation of the above-mentioned control measures(s) in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-17-08.

## II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack egress point (e.g. openings in 3-sided building, windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible particulate emissions of fugitive dust shall be noted in an operations log. If visible particulate emissions of fugitive dust 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 particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**2.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible particulate emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible particulate emissions of fugitive dust shall include any non-stack egress points from the building. Such egress points shall include, but are not limited to, openings in 3-sided buildings, doorways, windows, and roof monitors.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU27 (F011)

**Activity Description:** SCREW CONVEYOR AND TRUCK TRANSFER (FORMER OHIO EPA ID NO. P902)

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| slag transfer from series of three 12" screw conveyors [discharges from cylcones #1 and 2 (CD15) receiving exhaust from raw slag dryer (EU25); and discharge from ESP fields #1 and #2 (CD16) receiving exhaust from cylcones outlet] discharging via enclosed removable spout to mobile bulk tanker (EU27) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate fugitive particulate emissions by an appropriate manner of material handling, including a leaktight seal of the transfer enclosure.

### II. Operational Restrictions

**None**

## III. Monitoring and/or Record Keeping Requirements

**1.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack egress point (e.g. openings in 3-sided building, windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible particulate emissions of fugitive dust shall be noted in an operations log. If visible particulate emissions of fugitive dust 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 particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**2.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.2 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible particulate emissions of fugitive dust shall include all points of the transfer operation.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU34 (F012)

**Activity Description:** WOBBLER FEEDER

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| raw slag drop from universal wobbler feeder (EU34) to crusher discharge belt (22B); and transfer from wobbler feeder to crusher (EU22) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate fugitive particulate emissions by an appropriate manner of material handling, including a 3-sided building enclosure, water spray application, and minimizing drop height when unloading and transfering slag. The slag shall have a minimum moisture content of 7%.

### II. Operational Restrictions

**None**

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

**1.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack egress point (e.g. openings in 3-sided building, windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible particulate emissions of fugitive dust shall be noted in an operations log. If visible particulate emissions of fugitive dust 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 particulate emission incident; and
e. any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions.

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

## IV. Reporting Requirements

**1.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**2.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitation in section A.I.2 of these terms and conditions shall be determined in accordance with the following method:

**1.a** Emission Limitation:

20% opacity as a 3-minute average for fugitive emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3). The points of observation for visible particulate emissions of fugitive dust shall include any non-stack egress points from the building. Such egress points shall include, but are not limited to, openings in 3-sided buildings, doorways, windows, and roof monitors.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU08 (P003)

**Activity Description:** FINISH GRINDING MILL #1 CIRCUIT

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| finish grinding mill circuit #1 for slag (SIC 3295) or alternatively clinker-gypsum (SIC 3241), all vented to baghouse #3 short (CD02), as follows: | OAC rule 3745-17-07(A) | See A.I.2.a below. |
| | OAC rule 3745-17-07(B)(1) | See A.I.2.b below. |
| | OAC rule 3745-17-08(B) | See A.I.2.c below. |
| 3 material weigh feeders, 10' open belt conveyors (08A), dropping onto 30' partially covered elevator feed belt (08B), dropping into 25' high mill feed bucket elevator (08C), into #1 F. L. Smidth ball finish mill (08D), to 16"x 50' canvas Airslide conveyor (08E), to 50' high recirculating feed bucket elevator (08F); | OAC rule 3745-17-11(B) | 9.7 lbs/hr of particulate emissions when grinding slag<br><br>14.6 lbs/hr of particulate emissions when grinding clinker-gypsum<br><br>See A.I.2.e below. |
| and, mobile bulk tanker (EU27) with pneumatic transfer to 10' x 10' dia. mill fringe/surge bin (08G) to 50' high recirculating feed bucket elevator (08F) | | |

**2. Additional Terms and Conditions**

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

**2.b** Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

**2. Additional Terms and Conditions (continued)**

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

i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and

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

At a minimum, the permittee's employment of RACM shall include localized hooding over each transfer point.

**2.d** If the permittee can demonstrate compliance with the visible particulate emission restriction contained in section A.I.2.b above, the employment of the permittee's RACM, in accordance with the requirements of section A.I.2.c above, shall be deemed adequate.

**2.e** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the 1990 clinker-gypsum process (at 33.77 tons/hr) tested emission rate of 0.74 lb of particulates per hour, divided by an assumed (1 - BH Eff.) or 0.005, to give an UMRE of 148 lbs of particulates per hour. Having no emission test data to date for the alternative slag process, it's UMRE may be approximated by multiplying the clinker-gypsum UMRE of 148 lbs of particulates per hour by the ratio of the process rate of 18 tons of slag per hour to 33.77 tons clinker-gypsum per hour to give an approximate UMRE of 78.89 lbs of particulates per hour. The allowable particulate limitations were determined from Figure II of OAC rule 3745-17-11.

## II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation, until a pressure drop range can be established during the next emissions testing required in section A.V.2.

## III. Monitoring and/or Record Keeping Requirements

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

**2.** The permittee shall perform daily checks when this emissions unit is in operation and when weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

**2.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed using 40 CFR Part 60, Appendix A, Method 9 and procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitations:

7.9 lbs/hr of particulate emissions when grinding slag (SIC 3295)
14.6 lbs/hr of particulate emissions when grinding clinker-gypsum (SIC 3241)

Applicable Compliance Method:

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

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 18 months after issuance of the permit for grinding of clinker-gypsum, SIC 3241, and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and visible limitation for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and the current 3.0 to 6.0 inches of water operational requirement shall be adjusted, if necessary, to a more representative range by written notification to Canton City Health Department (CCHD), Air Pollution Control Division (APCD) within 60 days.

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

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 36 TPH clinker-gypsum, or alternatively, of 18 TPH slag, unless otherwise specified or approved by the CCHD, APCD.

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

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

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

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU11 (P004)

**Activity Description:** BULK LOADOUT #4D / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| transfer of bulk slag/cement via retractable loading spout from one of six Station #4 silos to tanker truck at Bay D scale vented to baghouse #7 (CD05) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 5.8 lbs/hr of particulate emissions |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate visible particulate emissions of fugitive dust by an appropriate manner of material handling, including the silo loadout spout covering and minimizing drop height when transfering slag or cement to a bulk tanker truck.

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

**2.d** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the FIRE version 5.0 emission factor of 0.2 lb of PM10 particulates per ton of cement loadout material transfer from SCC 3-05-006-19, SIC 3241. (No emission factor could be found for granulated blast furnace slag glass, SIC 3295 minerals, ground or treated.) Multiplying this factor by the maximum process rate of 150 tons per hour, and correcting to PM from PM10 by dividing by 0.85, results in an UMRE of 36 lbs of particulates per hour. The allowable particulate limitation was determined from Figure II of OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation.

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

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

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

**2.** The permittee shall perform daily checks when this emissions unit is in operation and when weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

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

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 and A.I.2 shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

5.8 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed using 40 CFR Part 60, Appendix A, Method 9 and procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU07 (P012)

**Activity Description:** FINISH GRINDING MILL #2 CIRCUIT (OHIO EPA ID NO. P012) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| finish grinding mill circuit #2 for slag (SIC 3295) or alternatively clinker-gypsum (SIC 3241), all vented to baghouse #1 short (CD01), as follows: | OAC rule 3745-17-07(A) | See A.I.2.a below. |
| | OAC rule 3745-17-07(B)(1) | See A.I.2.b below. |
| | OAC rule 3745-17-08(B) | See A.I.2.c below. |
| 3 material weigh feeders, 10' open belt conveyors (07A), dropping onto 30' partially covered elevator feed belt (07B), dropping into 25' high mill feed bucket elevator (07C), into #1 F. L. Smidth ball finish mill (07D), to 16"x 50' canvas Airslide conveyor (07E), to 50' high recirculating feed bucket elevator (07F); | OAC rule 3745-17-11(B) | 9.7 lbs/hr of particulate emissions when grinding slag<br><br>14.6 lbs/hr of particulate emissions when grinding clinker-gypsum<br><br>See A.I.2.e below. |
| and, mobile bulk tanker (EU27) with pneumatic transfer to 10' x 10' dia. mill fringe/surge bin (07G) to 50' high recirculating feed bucket elevator (07F) | | |

**2. Additional Terms and Conditions**

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

**2.b** Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

**2. Additional Terms and Conditions (continued)**

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

i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and

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

At a minimum, the permittee's employment of RACM shall include localized hooding over each transfer point.

**2.d** If the permittee can demonstrate compliance with the visible particulate emission restriction contained in section A.I.2.b above, the employment of the permittee's RACM, in accordance with the requirements of section A.I.2.c above, shall be deemed adequate.

**2.e** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the 1990 clinker-gypsum process (at 33.77 tons per hour) tested emission rate of 0.74 lb of particulates per hour, divided by an assumed (1 - BH Eff.) or 0.005, to give an UMRE of 148 lbs of particulates per hour. Having no emission test data to date for the alternative slag process, it's UMRE may be approximated by multiplying the clinker-gypsum UMRE of 148 lbs of particulates per hour by the ratio of the process rate of 18 tons of slag per hour to 33.77 tons clinker-gypsum per hour to give an approximate UMRE of 78.89 lbs of particulates per hour. The allowable particulate limitations were determined from Figure II of OAC rule 3745-17-11.

## II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation, until a pressure drop range can be established during the next emission testing required in section A.V.2.

## III. Monitoring and/or Record Keeping Requirements

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

**2.** The permittee shall perform daily checks when this emissions unit is in operation and when weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

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

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed using 40 CFR Part 60, Appendix A, Method 9 and procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitations:

7.9 lbs/hr of particulate emissions when grinding slag (SIC 3295)
14.6 lbs/hr of particulate emissions when grinding clinker-gypsum (SIC 3241)

Applicable Compliance Method:

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

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 6 months after issuance of the permit for grinding of slag, SIC 3295, and within 18 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and visible emission limitations for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and the current 3.0 to 6.0 inches of water operational requirement shall be adjusted, if necessary, to a more representative range by written notification to Canton City Health Department (CCHD), Air Pollution Control Division (APCD) within 60 days.

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

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 36 TPH clinker-gypsum, or alternatively, of 18 TPH slag, unless otherwise specified or approved by the CCHD, APCD.

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

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

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

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU33 (P016)

**Activity Description:** RAILCAR LOADOUT (DID NOT OPERATE IN 1999)

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| 21.4 tons/hr pneumatic transfer of cement/slag from bulk tanker truck to rail car controlled by a portable Pulsair fabric filter baghouse CD17 | OAC rule 3745-31-05(A)(3) (PTI 15-1381) | 0.02 grain of particulate emissions per actual cubic foot of exhaust gases |
| | | 0.34 lb/hr of particulate emissions |
| | | 1.49 tpy of particulate emissions |
| | | See A.I.2.a and A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-07(B)(1) | See A.I.2.c below. |
| | OAC rule 3745-17-08(B) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B)(1) | See A.I.2.c below. |
| | 40 CFR Part 60, Subpart F | See A.I.2.c below. |

**2. Additional Terms and Conditions**

**2.a** There shall be no visible particulate emissions of fugitive dust from this emissions unit.

**2.b** Visible particulate emissions from any stack shall not exceed 5% opacity as a 6-minute average.

**2.c** The emission limitation(s) required by this applicable rule is (are) less stringent than the emission limitation established pursuant to the best available technology requirement specified in OAC rule 3745-31-05(A)(3).

### II. Operational Restrictions

**1.** The pressure drop across the fabric filter baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

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

**2.** The permittee shall perform daily checks when this emissions unit is in operation and when weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

## IV. Reporting Requirements

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

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

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

**4.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

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

## V. Testing Requirements

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

**1.a** Emission Limitations:

0.02 grain of particulate emissions per actual cubic foot of exhaust gases
0.34 lb/hr of particulate emissions

Applicable Compliance Method:

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

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

1.49 tpy of particulate emissions

Applicable Compliance Method:

This emission limitation was established by multiplying the hourly allowable particulate emission limitation by 8760 hours of operation during the year, and then dividing by 2000 lbs/ton. Compliance with this emission limitation can be assumed provided that the permittee complies with the hourly particulate emission limitation.

**1.c** Emission Limitation:

no visible particulate emissions of fugitive dust

Applicable Conpliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 22.

**1.d** Emission Limitation:

5% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU09 (P017)

**Activity Description:** SEPARATOR #2 (FORMER OHIO EPA ID NO. P012) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| air separator west #2 (09A), Sturtevant (16' dia.) supplied with finish mill slag (SIC 3295) or finish mill clinker- gypsum (SIC 3241) via a recirculating feed bucket elevator (07F) and discharging into a finish mill cement cooler tank #2 (09B), supplying #2 F-K pneumatic pump (14A); and | OAC rule 3745-17-07(A) | See A.I.2.a below. |
| | OAC rule 3745-17-07(B)(1) | See A.I.2.b below. |
| | OAC rule 3745-17-08(B) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 8.2 lbs/hr of particulate emissions when grinding slag (SIC 3295)<br><br>12.3 lbs/hr of particulate emissions when grinding clinker-gypsum (SIC 3241) |
| air separator west #2 (09A), Sturtevant (16' dia.) transfer to #2 finish grinding mill (07D), all vented to baghouse #2 long (CD03) | | See A.I.2.e below. |

**2. Additional Terms and Conditions**

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

**2.b** Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

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

i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and

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

At a minimum, the permittee's employment of RACM shall include localized hooding over each transfer point.

**2. Additional Terms and Conditions (continued)**

**2.d** If the permittee can demonstrate compliance with the visible emissions restriction contained in section A.I.2.b above, the employment of the permittee's RACM, in accordance with the requirements of section A.I.2.c above, will be deemed adequate.

**2.e** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the 1990 clinker-gypsum process (at 33.77 tons per hour) tested emission rate of 0.57 lb of particulates per hour, divided by an assumed (1 - BH Eff.) or 0.005, to give an UMRE of 114 lbs of particulates per hour. Having no emission test data to date for the alternative slag process, it's UMRE may be approximated by multiplying the clinker-gypsum UMRE of 114 lbs of particulates per hour by the ratio of the process rate of 18 tons of slag per hour to 33.77 tons of clinker-gypsum per hour to give an approximate UMRE of 60.8 lbs of particulates per hour. The allowable particulate limitations were determined from Figure II of OAC rule 3745-17-11.

## II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation, until a pressure drop range can be established during the next emission testing required in section A.V.2.

## III. Monitoring and/or Record Keeping Requirements

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

**2.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

**2.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

## IV. Reporting Requirements (continued)

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitations:

8.2 lbs/hr particulate emissions from grinding slag, SIC 3295
12.3 lbs/hr particulate emissions from grinding clinker-gypsum, SIC 3241

Applicable Compliance Method:

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

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 6 months after issuance of the permit for grinding of slag, SIC 3295, and within 18 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and visible emission limitations for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and the current 3.0 to 6.0 inches of water operational requirement shall be adjusted, if necessary, to a more representative range by written notification to CCHD, APCD within 60 days.

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

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 18 TPH of slag, or alternatively, of 36 TPH of clinker-gypsum, unless otherwise specified or approved by the CCHD, APCD.

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

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

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

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU10 (P018)

**Activity Description:** SEPARATOR #1 (FORMER OHIO EPA ID NO. P003) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| air separator east #1 (10A), Sturtevant (16' dia.) supplied with finish mill slag (SIC 3295) or finish mill clinker- gypsum (SIC 3241) via a recirculating feed bucket elevator (08F) and discharging into a finish mill cement cooler tank #1 (10B), supplying #1 F-K pneumatic pump (15A); and | OAC rule 3745-17-07(A) | See A.I.2.a below. |
| | OAC rule 3745-17-07(B)(1) | See A.I.2.b below. |
| | OAC rule 3745-17-08(B) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 8.2 lbs/hr of particulate emissions when grinding slag (SIC 3295)<br><br>12.3 lbs/hr of particulate emissions when grinding clinker-gypsum (SIC 3241) |
| air separator east #1 (10A), Sturtevant (16' dia.) transfer to #1 finish grinding mill (08D), all vented to baghouse #4 long (CD04) | | See A.I.2.e below. |

**2. Additional Terms and Conditions**

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

**2.b** Visible particulate emissions of fugitive dust shall not exceed 20% opacity as a 3-minute average. For purposes of verifying compliance with this requirement, the visible particulate emissions shall be observed at any non-stack egress point from the building housing this emissions unit. These egress points shall include, but not be limited to, doorways, windows, and roof monitors.

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

i. the installation and use of hoods, fans, and other equipment to adequately enclose, contain, capture, and vent the fugitive dust; and

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

At a minimum, the permittee's employment of RACM shall include localized hooding over each transfer point.

**2. Additional Terms and Conditions (continued)**

**2.d** If the permittee can demonstrate compliance with the visible emissions restriction contained in section A.I.2.b above, the employment of the permittee's RACM, in accordance with the requirements of section A.I.2.c above, will be deemed adequate.

**2.e** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the 1990 clinker-gypsum process (at 33.77 tons per hour) tested emission rate of 0.57 lb of particulates per hour, divided by an assumed (1 - BH Eff.) or 0.005, to give an UMRE of 114 lbs of particulates per hour. Having no emission test data to date for the alternative slag process, it's UMRE may be approximated by multiplying the clinker-gypsum UMRE of 114 lbs of particulates per hour by the ratio of the process rate of 18 tons of slag per hour to 33.77 tons of clinker-gypsum per hour to give an approximate UMRE of 60.8 lbs of particulates per hour. The allowable particulate limitations were determined from Figure II of OAC rule 3745-17-11.

## II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation, until a pressure drop range can be established during the next emission testing required in section A.V.2.

## III. Monitoring and/or Record Keeping Requirements

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

**2.** The permittee shall perform daily checks when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

**2.** The permittee shall submit semiannual written reports which (a) identify all days during which any visible particulate emissions of fugitive dust were observed from this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions of fugitive dust. These reports shall be submitted to the Canton City Health Department (CCHD), Air Pollution Control Division (APCD) by January 31 and July 31 of each year and shall cover the previous 6-month period.

## IV. Reporting Requirements (continued)

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

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

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitations:

8.2 lbs/hr particulate emissions from grinding slag, SIC 3295
12.3 lbs/hr particulate emissions from grinding clinker-gypsum, SIC 3241

Applicable Compliance Method:

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

## V. Testing Requirements (continued)

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

a. The emission testing shall be conducted within 18 months after issuance of the permit for grinding of clinker-gypsum, SIC 3241, and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and visible emission limitations for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and the current 3.0 to 6.0 inches of water operational requirement shall be adjusted, if necessary, to a more representative range by written notification to CCHD, APCD within 60 days.

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

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 18 TPH of slag, or alternatively, of 36 TPH of clinker-gypsum, unless otherwise specified or approved by the CCHD, APCD.

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

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

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

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU14 (P019)

**Activity Description:** LOADING STATION #4 / STORAGE SILOS (6) (FORMER OHIO EPA ID NO. P004) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| transfer of bulk slag and/or cement using F-K pneumatic pump #1 (and/or pump #2) and Bessemer cement truck unloading to six Station #4 storage silos vented to baghouse # 5 (CD08) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 3.2 lbs/hr of particulate emissions for slag processing<br><br>4.5 lbs/hr of particulate emissions for cement processing<br><br>See A.I.2.d below. |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate visible particulate emissions of fugitive dust by an appropriate manner of material handling, including the full enclosure of transfer lines.

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

**2.d** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the AP-42, Table 11.12-2 emission factor of 0.27 lb of particulates per ton of cement loadout material transfer from SCC 3-05-011-07, SIC 3241. (No emission factor could be found for granulated blast furnace slag glass, SIC 3295 minerals, ground or treated.) Multiplying this factor by the maximum cement process rate of 72 tons per hour plus 16.7 tons per hour truck cement (88.7 total) results in an UMRE of 23.9 lbs of particulates per hour for cement processing. Multiplying this factor by the maximum slag process rate of 36 tons per hour plus 16.7 tons/hr truck cement (total 52.7) results in an UMRE of 14.2 lbs of particulates per hour. The allowable particulate limitations were determined from Figure II of OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation.

## III. Monitoring and/or Record Keeping Requirements

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

**2.** The permittee shall perform daily checks when this emissions unit is in operation and when weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

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

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 and A.I.2 shall be determined in accordance with the following methods:

**1.a** Emission Limitations:

3.2 lbs/hr of particulate emissions for slag processing
4.5 lbs/hr of particulate emissions for cement processing

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU16 (P020)

**Activity Description:** BULK LOADOUT #4C (FORMER OHIO EPA ID NO. P004) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| transfer of bulk slag/cement via retractable loading spout from one of six Station #4 silos to tanker truck at Bay C scale vented to baghouse #6 (CD10) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 5.8 lbs/hr of particulate emissions |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate visible particulate emissions of fugitive dust by an appropriate manner of material handling, including the silo loadout spout covering and minimizing drop height when transfering slag or cement to a bulk tanker truck.

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

**2.d** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the FIRE version 5.0 emission factor of 0.2 lb of PM10 particulates per ton of cement loadout material transfer from SCC 3-05-006-19, SIC 3241. (No emission factor could be found for granulated blast furnace slag glass, SIC 3295 minerals, ground or treated.) Multiplying this factor by the maximum process rate of 150 tons per hour, and correcting to PM from PM10 by dividing by 0.85, results in an UMRE of 36 lbs of particulates per hour. The allowable particulate limitation was determined from Figure II of OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation.

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

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

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

**2.** The permittee shall perform daily checks when this emissions unit is in operation and when weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

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

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 and A.I.2 shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

5.8 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU22 (P901)

**Activity Description:** CRUSHER/CONVEYOR SYSTEM / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| slag crushing (80 tph max) in Hammermill crusher (D2), transfer to Jeffrey 36" x 72' belt conveyor (D4) and transfer to dryer feed 30" x 536' outside belt conveyor (D5), partially covered approx. 90% of length, vented to baghouse #8 (CD12) wall vent (west) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 11.8 lbs/hr of particulate emissions |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate visible particulate emissions of fugitive dust by an appropriate manner of material handling, including the full enclosure of transfer lines.

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

**2.d** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the FIRE version 5.0 emission factor of 0.26 lb of PM10 particulates per ton of raw material crushing from SCC 3-05-007-09, SIC 3241. (No emission factor could be found for granulated blast furnace slag glass, SIC 3295 minerals, ground or treated.) Multiplying this factor by the maximum process rate of 150 tons per hour, and correcting to PM from PM10 by dividing by 0.85, results in an UMRE of 24.8 lbs of particulates per hour. The allowable particulate limitation was determined from Figure II of OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation.

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

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

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

**2.** The permittee shall perform daily checks when this emissions unit is in operation and when weather conditions allow, for any visible particulate emissions of fugitive dust from any non-stack (i.e., windows, doors, roof monitors) egress points in the building housing this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

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

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 and A.I.2 shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

11.8 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5 and OAC rule 3745-17-03(B)(10).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU25 (P902)

**Activity Description:** DRYER / Control efficiencies for the control devices connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| rotary slag dryer, 80 tph, Hardinge model XH-14, direct heat parallel concurrent flow, Hauck NG/Oil burner (25 mmBtu/hr capacity), vented to cyclones #1 and #2 (CD15), which exhaust into a 28 kva electrostatic precipitator (ESP) (CD16) | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 15.3 lbs/hr of particulate emissions<br><br>See A.I.2.d below. |
| | OAC rule 3745-18-06(E)(1) | 376.8 lbs/hr of sulfur dioxide emissions |
| | 40 CFR Part 52.1881(b)(27)(viii) | The emission limitation specified in this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-18-06(E). |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate particulate emissions of fugitive dust by an appropriate manner of material handling, including material transfer enclosures and minimizing material drop heights.

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

**2.d** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the AP-42 emission factor of 2.0 lbs of particulates per ton of sand and gravel from Table 11.19.1-1, SCC 3-05-027-20. (No emission factor could be found for granulated blast furnace slag glass, SIC 3295 minerals, ground or treated.) Multiplying this factor by the maximum process rate of 80 tons per hour results in an UMRE of 160 lbs of particulates per hour. The allowable particulate limitation was determined from Figure II of OAC rule 3745-17-11.

## II. Operational Restrictions

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

**2.** The permittee shall operate the ESP during any operation of this emissions unit, except the ESP is not required to be operated during periods of start-up until the exhaust gases have achieved a temperature of 250 degrees Fahrenheit at the inlet of the ESP or during periods of shutdown when the temperature of the exhaust gases has dropped below 250 degrees Fahrenheit at the inlet of the ESP.

**3.** The average total combined power input (in kilowatts) to all fields of the ESP, during any of the eight 3-hour blocks of time during each day and when the emissions unit is in operation, shall be no less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation.

## III. Monitoring and/or Record Keeping Requirements

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

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**2.** The permittee shall monitor and record the following on an hourly basis during any operation of the ESP:

a. the secondary voltage, in kilovolts (kV), and the secondary current, in amps, for each transformer rectifier (TR) set in the ESP;

b. the power input, in kilowatts, of each TR set for each hour (calculated by multiplying the secondary voltage, in kilovolts, by the secondary current, in amps, for each TR set); and

c. the total power input to the ESP for each hour (add together the power inputs for the TR sets operating during the hour).

**3.** The permittee shall record the following information for each day:

a. all 3-hour blocks of time during which the average total combined power input to the ESP, when the emissions unit was in operation, was less than 90 percent of the total combined power input, as a 3-hour average, during the most recent emission tests that demonstrated the emissions unit was in compliance with the particulate emission limitation; and

b. the duration of the downtime for the monitoring equipment specified in section A.III.4 above, the ESP sections that are out of service, and the duration of the downtime for each section when the associated emissions unit was in operation.

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

**4.** The permittee shall operate and maintain a temperature monitor and recorder that measures and records the temperature of the dryer exhaust gases entering the ESP as follows:

a. during all periods of start-up until the ESP is operational or until the inlet temperature of the ESP achieves the temperature level specified in OAC rule 3745-17-07(A)(3)(a)(i); and

b. during all periods of shutdown until the inlet temperature to the ESP drops below the temperature level specified in OAC rule 3745-17-07(A)(3)(b)(i).

The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee, and shall be capable of accurately measuring the temperature of the dryer exhaust gases in degrees Fahrenheit.

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

## IV. Reporting Requirements

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

**2.** The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during start-up and shutdown of the emissions unit when the ESP was not in operation and the temperature of the dryer exhaust gases exceeded the temperature levels specified in OAC rule 3745-17-07(A)(3)(a)(i) and (b)(i).

**3.** The permittee shall submit quarterly deviation (excursion) reports that identify all 3-hour blocks of time during which the average total combined power input to all fields of the ESP did not comply with the operational restriction specified in section A.II.3 of this permit.

**4.** The permittee shall submit quarterly reports that identify the sections of the ESP that were out of service along with the time period(s) involved.

**5.** 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 in writing within 30 days after the deviation.

**6.** The permittee shall submit the quarterly deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**7.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

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

**1.a** Emission Limitation:

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

Applicable Compliance Method:

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

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitation:

15.3 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emission testing procedures specified in section A.V.2.

**1.d** Emission Limitation:

376.8 lbs/hr of sulfur dioxide emissions

Applicable Compliance Method:

The SO2 emissions generated by this emissions unit are due solely to the combustion of natural gas. The process materials employed in this emissions unit do not generate SO2 emissions during the heating process.

Compliance with this limitation will be assumed due to the negligible percent sulfur, by weight, in the fuel.

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

a. The emission testing shall be conducted within 6 months after issuance of this permit, approximately 2.5 years after permit issuance, and within 6 months prior to permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and visible emission limitations for particulates. Additionally, the secondary voltage and secondary current values for the ESP during the test for this emissions unit shall fall within the acceptable operating ranges established in the manufacturer's specifications.

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

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 80 TPH, unless otherwise specified or approved by the Canton City Health Department (CCHD), Air Pollution control Division (APCD).

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

## V. Testing Requirements (continued)

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the CCHD, APCD, 420 Market Avenue North, Canton, Ohio 444702-1544. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit's operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the CCHD, APCD's refusal to accept the results of the emission test(s).

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

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU23 (P903)

**Activity Description:** DRYER FEED BIN (FORMER OHIO EPA ID NO. P902) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| slag material transfer (80 tph max) from dryer feed belt | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| conveyor D5 to dryer feed (10' high x 6' dia.) bin D21 (vents 1500 cfm to baghouse # 9, CD13) with rotating disc table feeder D22 at base (vents 4000 cfm to baghouse # 9, CD13) that discharges to the NG fired dryer (EU25) and/or bypass conveyor (EU24) that vents 1500 cfm to baghouse # 9, CD13 | OAC rule 3745-17-08(B) | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 2.8 lbs/hr of particulate emissions |
| | | See A.I.2.d below. |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate visible particulate emissions of fugitive dust by an appropriate manner of material handling, including the full enclosure of transfer lines.

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

**2.d** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the FIRE version 5.0 emission factor of 015 lb of PM10 particulates per ton of cement raw material transfer from SCC 3-05-027-20, SIC 3241. (No emission factor could be found for granulated blast furnace slag glass, SIC 3295 minerals, ground or treated.) Multiplying this factor by the maximum process rate of 80 tons per hour, and correcting to PM from PM10 by dividing by 0.85, results in an UMRE of 14.12 lbs of particulates per hour. The allowable particulate limitation was determined from Figure II of OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established during the next emission testing required in section A.V.2.

## III. Monitoring and/or Record Keeping Requirements

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

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

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

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

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 and A.I.2 shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

2.8 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

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

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

a. The emission testing shall be conducted if required.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and visible emission limitations for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and the current 3.0 to 6.0 inches of water operational requirement shall be adjusted, if necessary, to a more representative range by written notification to Canton City Health Department (CCHD), Air Pollution Control Division (APCD) within 60 days.

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

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 80 TPH, unless otherwise specified or approved by the CCHD, APCD.

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

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

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

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

# Part III - Terms and Conditions for Emissions Units

**Emissions Unit ID:** EU24 and EU26 (P904)

**Activity Description:** BYPASS AND DISCHARGE CONVEYORS (FORMER OHIO EPA ID NO. P902) / Control efficiencies for the baghouse connected to this unit are estimated or based on manufacturer's specifications.

## A. State and Federally Enforceable Section

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

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

| Operations, Property, and/or Equipment | Applicable Rules/ Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| slag material transfer (80 tph max) from Jeffrey 24" x 133' bypass belt conveyor D27 (vents 1000 cfm to baghouse #10, CD14) to Jeffrey 24" x 180' discharge belt conveyor (1/3 inside dryer discharge building) D25 (vents 3000 cfm to baghouse #10, CD14) to ladder chute discharging inside crane storage building | OAC rule 3745-17-07(B)(1) | See A.I.2.a below. |
| | OAC rule 3745-17-08(B) | See A.I.2.b below. |
| | OAC rule 3745-17-07(A) | See A.I.2.c below. |
| | OAC rule 3745-17-11(B) | 2.8 lbs/hr of particulate emissions |
| | | See A.I.2.d below. |

**2. Additional Terms and Conditions**

**2.a** Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

**2.b** The permittee shall employ reasonably available control measures in order to minimize or eliminate visible particulate emissions of fugitive dust by an appropriate manner of material handling, including the full enclosure of transfer lines.

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

**2.d** The uncontrolled mass rate of emissions (UMRE) for this emissions unit was determined by using the FIRE version 5.0 emission factor of 015 lb of PM10 particulates per ton of cement raw material transfer from SCC 3-05-027-20, SIC 3241. (No emission factor could be found for granulated blast furnace slag glass, SIC 3295 minerals, ground or treated.) Multiplying this factor by the maximum process rate of 80 tons per hour, and correcting to PM from PM10 by dividing by 0.85, results in an UMRE of 14.12 lbs of particulates per hour. The allowable particulate limitation was determined from Figure II of OAC rule 3745-17-11.

### II. Operational Restrictions

**1.** The pressure drop across the baghouse shall be maintained within the range of 3.0 to 6.0 inches of water while the emissions unit is in operation, until a pressure drop range that is more representative of actual operating conditions can be established during the next emission testing required in section A.V.2.

## III. Monitoring and/or Record Keeping Requirements

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

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

a. the location and color of the emissions;
b. whether the emissions are representative of normal operations;
c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
d. the total duration of any visible emission incident; and
e. any corrective actions taken to minimize or eliminate the visible emissions.

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

**3.** The permittee shall maintain a maintenance log book that includes the following information:

a. the dates when the baghouse was checked for proper operation;
b. the dates when maintenance was performed and what the maintenance involved;
c. the dates of repairs made and what these repairs entailed;
d. a record of daily checks of pressure drops across the baghouse compartments when unit is in operation; an
e. a record of all deviations (excursions).

## IV. Reporting Requirements

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

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

**3.** The permittee shall submit deviation reports in accordance with the requirements specified in Part I - General Term and Condition A.1.c.

**4.** All reports shall be submitted to the Canton City Health Department, Air Pollution Control Division, 420 Market Avenue North, Canton, Ohio 44702.

## V. Testing Requirements

**1.** Compliance with the emission limitations in section A.I.1 and A.I.2 shall be determined in accordance with the following methods:

**1.a** Emission Limitation:

2.8 lbs/hr of particulate emissions

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon the emission testing procedures specified in section A.V.2 and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

## V. Testing Requirements (continued)

**1.b** Emission Limitation:

Visible particulate emissions of fugitive dust from this emissions unit shall not exceed 20% opacity as a 3-minute average.

Applicable Compliance Method:

Compliance shall be demonstrated based upon visible emission evaluations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(3).

**1.c** Emission Limitation:

20% opacity as a 6-minute average for stack emissions

Applicable Compliance Method:

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

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

a. The emission testing shall be conducted if required.

b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate and visible emission limitations for particulates. Additionally, the pressure drop range across the baghouse shall be recorded and the current 3.0 to 6.0 inches of water operational requirement shall be adjusted, if necessary, to a more representative range by written notification to Canton City Health Department (CCHD), Air Pollution Control Division (APCD) within 60 days.

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

d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity of 80 TPH, unless otherwise specified or approved by the CCHD, APCD.

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

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

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

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

## VI. Miscellaneous Requirements

**None**

## B. State Enforceable Section

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

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

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

**2. Additional Terms and Conditions**

**None**

### II. Operational Restrictions

**None**

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

**None**

### IV. Reporting Requirements

**None**

### V. Testing Requirements

**None**

### VI. Miscellaneous Requirements

**None**

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