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

1/25/2011

Certified Mail

| | |
|---|---|
| No | TOXIC REVIEW |
| No | PSD |
| Yes | SYNTHETIC MINOR TO AVOID MAJOR NSR |
| No | CEMS |
| Yes | MACT/GACT |
| Yes | NSPS |
| No | NESHAPS |
| No | NETTING |
| No | MAJOR NON-ATTAINMENT |
| No | MODELING SUBMITTED |

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

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0679000118
Permit Number: P0105813
Permit Type: Initial Installation
County: Tuscarawas

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Times-Reporter. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Southeast District Office
2195 Front Street
Logan, OH 43138

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 - *Via E-Mail Notification*
Ohio EPA-SEDO; Pennsylvania; West Virginia

# Permit Strategy Write-Up

1. Check all that apply:

   X Synthetic Minor Determination

   ___ Netting Determination

2. Source Description:

   The Belden Brick Company is a brick manufacturer. It is subject to PSD and Title V requirements, and is a major source of hazardous air pollutants (HAPs). When the company mines clay from its mine areas for use in the brick making process, it also extracts limestone and small amounts of coal. Although the processing and sale of these byproducts has been contracted out in the past, the company is planning to acquire the equipment to process and sell this material itself. This permits covers limestone/coal processing equipment (one 450 ton crusher, two 450 ton per hour screeners and five conveyors), three diesel-fired engines (505, 237 and 90 HP), and up to five storage piles (limestone and/or coal).

3. Facility Emissions and Attainment Status:

   The Belden Brick Company is located in Sugarcreek, Ohio (Tuscarawas County). Tuscarawas County is in attainment for all criteria pollutants.

4. Source Emissions:

   The Belden Brick Company has requested restrictions on material throughput for the aggregate/coal processing equipment and storage piles, and operating hours for the engines, to restrict potential $NO_x$, PM, $PM_{10}/PM_{2.5}$ emissions for the project to below the PSD significance levels of 40, 25 and 15 tons per year, respectively. The total aggregate and/or coal throughput of the processing equipment and storage piles is being limited to 440,000 tons per rolling, 12-month period, the 505 HP engine is being limited to 1,900 hours per rolling, 12-month period, and the 90 HP engine is being limited to 3,500 hours per rolling 12-month period. No restriction is needed for the 237 HP engine, as it is required to be certified to the Tier III emission levels per 40 CFR Part 60, Subpart IIII and 40 CFR Part 89, which sufficiently limit the rolling, 12-month $NO_x$, PM and $PM_{10}/PM_{2.5}$ emissions from this engine. Fugitive PM and $PM_{10}/PM_{2.5}$ emissions are also limited by the use of water sprays and by maintaining sufficient moisture in the storage piles. The PSD applicability determination for PM and $PM_{10}/PM_{2.5}$ does not need to include fugitive dust emissions from the aggregate/coal processing equipment and the storage piles when limestone is processed and stored because fugitive emissions currently do not count for NSR purposes for this source category (brick manufacturing) and NSPS Subpart OOO was promulgated after 1980. However, the PSD applicability determination for PM and $PM_{10}/PM_{2.5}$ must include fugitive emissions when coal is processed and stored because NSPS Subpart Y was promulgated before 1980.

5. Conclusion:

   The production and operating hour limitations, along with the fugitive dust controls and the monitoring, recordkeeping and reporting required by the terms and conditions of this permit, should be sufficient to ensure compliance with the allowable emission rates in this permit established to avoid PSD new source review for $NO_x$ and $PM_{10}/PM_{2.5}$.

6. Please provide additional notes or comments as necessary:

   None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

| Pollutant | Tons Per Year |
|---|---|
| PE/$PM_{10}$/$PM_{2.5}$ (stack) | 1.85 |
| PE (fugitive) | 22.99 |
| $PM_{10}$/$PM_{2.5}$ (fugitive) | 7.35 |
| $NO_x$ | 24.92 |
| CO | 10.26 |
| $SO_2$ | 3.60 |
| OC | 3.33 |

Tuscarawas County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install
The Belden Brick Company

Issue Date: 1/25/2011
Permit Number: P0105813
Permit Type: Initial Installation
Permit Description: New installation of a limestone and coal crushing, screening and conveying plant, storage piles, and three diesel-fired generators
Facility ID: 0679000118
Facility Location: The Belden Brick Company
475 Dover Road,
Sugarcreek, OH 44681-0430
Facility Description: Brick and Structural Clay Tile Manufacturing

Scott J. Nally, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio, has issued a draft action of an air pollution control permit-to-install (PTI) for an air contaminant source at the location identified above on the date indicated. Installation of the air contaminant source may proceed upon final issuance of the PTI. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Cara Cherry at Ohio EPA DAPC, Southeast District Office, 2195 Front Street, Logan, OH 43138 or (740)385-8501. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio | Environmental Protection Agency

# DRAFT

# Division of Air Pollution Control
# Permit-to-Install
for
The Belden Brick Company

| | |
|---|---|
| Facility ID: | 0679000118 |
| Permit Number: | P0105813 |
| Permit Type: | Initial Installation |
| Issued: | 1/25/2011 |
| Effective: | To be entered upon final issuance |

Ohio Environmental Protection Agency

**Division of Air Pollution Control**
**Permit-to-Install**
for
The Belden Brick Company

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# Authorization

Facility ID: 0679000118
Facility Description: The Belden Brick Company Plants 2, 3, 4, 6, 8, and 9.
Application Number(s): A0038787, A0039539
Permit Number: P0105813
Permit Description: New installation of a limestone and coal crushing, screening and conveying plant, storage piles, and three diesel-fired generators
Permit Type: Initial Installation
Permit Fee: $1,700.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 1/25/2011
Effective Date: To be entered upon final issuance

This document constitutes issuance to:

The Belden Brick Company
475 Dover Road
Sugarcreek, OH 44681-0430

of a Permit-to-Install for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

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

The above named entity is hereby granted a Permit-to-Install for the emissions unit(s) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

# Authorization (continued)

Permit Number: P0105813
Permit Description: New installation of a limestone and coal crushing, screening and conveying plant, storage piles, and three diesel-fired generators

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

| | |
|---|---|
| **Emissions Unit ID:** | **F707** |
| Company Equipment ID: | F707 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **F708** |
| Company Equipment ID: | F708 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **P701** |
| Company Equipment ID: | P701 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **P702** |
| Company Equipment ID: | P702 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |
| **Emissions Unit ID:** | **P703** |
| Company Equipment ID: | P703 |
| Superseded Permit Number: | |
| General Permit Category and Type: | Not Applicable |

# A. Standard Terms and Conditions

## 1. Federally Enforceable Standard Terms and Conditions

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

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e) General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

## 2. Severability Clause

a) 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.

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they 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 and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

## 3. 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 re-issuance, or modification.

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, 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 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.

**4. Monitoring and Related Record Keeping and Reporting Requirements**

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

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, 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.

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:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations,

excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Southeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Ohio EPA DAPC, Southeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. 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.

(4) This permit is for an emissions unit located at a Title V facility. 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.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

**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, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Ohio EPA DAPC, Southeast District Office 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 shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

**6. Compliance Requirements**

a) The emissions unit(s) identified in this Permit shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

b) Any document (including reports) required to be submitted and required by a federally applicable requirement in this 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.

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

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

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

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

(4) 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.

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

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

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

**7. Best Available Technology**

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

**8. 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.

**9. Reporting Requirements**

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Southeast District Office.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the Ohio EPA DAPC, Southeast District Office. If no deviations occurred during a calendar quarter, the permittee

shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**10. Applicability**

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**11. Construction of New Sources(s) and Authorization to Install**

a) This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as “permanently shut down” in Ohio EPA’s “Air Services” along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All

records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

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

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

**12. Permit-To-Operate Application**

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

**13. Construction Compliance Certification**

The applicant shall identify the following dates in the online facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be entered upon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

**14. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

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

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**16. 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. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

**17. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the “Owner/Contact Change” functionality in Air Services once the transfer is legally completed. The change must be submitted through Air Services within thirty days of the ownership transfer date.

**18. 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.

**19. 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.

# B. Facility-Wide Terms and Conditions

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

   a) None.

2. Emissions unit F707 contained in this permit is subject to 40 CFR Part 60, Subpart OOO when limestone is processed. The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

3. Emissions units F707 and F708 contained in this permit are subject to 40 CFR Part 60, Subpart Y when coal is processed. The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

4. Emissions unit P702 contained in this permit are subject to 40 CFR Part 60, Subpart IIII. The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

5. Emissions units P701, P702 and P703 contained in this permit are subject to 40 CFR Part 63, Subpart ZZZZ. The complete MACT requirements, including the MACT General Provisions, may be accessed via the internet from the Electronic Code of Federal Regulation (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the appropriate Ohio EPA District office or local air agency.

# C. Emissions Unit Terms and Conditions

**1. F707, Aggregate processing plant**

**Operations, Property and/or Equipment Description:**

450 ton per hour limestone and/or coal processing plant consisting of one primary Norberg crusher controlled with water sprays, one primary Powerscreens of America screen, one secondary Masterskreen screen, and five conveyors; maximum annual throughput (all materials) of 440,000 tons

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | ORC 3704.03(T) | The requirements of this rule are equivalent to the requirements of 40 CFR 60.250 – 60.258 when coal is processed and 40 CFR 60.670-676 when limestone is processed. |
| b. | OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD requirements for PM and $PM_{10}$ and state modeling for $PM_{10}$) | Emissions of particulate matter (PM) shall not exceed 21.71 tons based on a rolling, 12-month summation.<br><br>Emissions of particulate matter less than 10 microns ($PM_{10}$) shall not exceed 6.62 tons based on a rolling, 12-month summation.<br><br>See c)(1) below. |
| c. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | Emissions of particulate matter less than 2.5 microns ($PM_{2.5}$) shall not exceed 6.38 tons per year.<br><br>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.<br><br>See b)(2)a.-d. below.<br><br>The requirements of this rule also include compliance with the requirements of 40 |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | CFR 60.250 – 60.258 when coal is processed, 40 CFR 60.670 - 60.676 when limestone is processed, and OAC rule 3745-31-05(D) and (E). |
| d. | OAC rule 3745-31-05(E), as effective 12/01/06<br>(Voluntary restriction to avoid BAT for $PM_{2.5}$) | See b)(2)e. below. |
| e. | OAC rule 3745-17-07(B) | See b)(2)f. below. |
| f. | OAC rule 3745-17-08(B) | See b)(2)g. below. |
| g. | 40 CFR Part 60, Subpart Y<br>(40 CFR 60.250 – 60.258)<br><br>[In accordance with 40 CFR 60.250, this emissions unit contains affected facilities in a coal preparation plant which processes more than 200 tons of coal per day and includes coal processing and conveying equipment installed after May 27, 2009 when processing coal. This rule is applicable only when coal is processed.] | No discharge into the atmosphere from the affected facility of any gases which exhibit 10 percent opacity or greater.<br>[40 CFR 60.254(b)(1)]<br><br>See b)(2)h. and i. below. |
| h. | 40 CFR 60.1-19<br>(40 CFR 60.1a) | The provisions of Subpart A apply to the owner or operator of any stationary source which contains an affected facility that commenced construction or modification after the date of publication in 40 CFR Part 60 that is applicable to that facility. |
| i. | 40 CFR Part 60, Subpart OOO<br>(40 CFR 60.670 - 60.676)<br><br>[In accordance with 40 CFR 60.670(a)(1), this emissions unit is a fixed nonmetallic mineral processing plant when processing limestone. When limestone is processed, all operations are subject to the emissions limitations specified in this section except for truck dumping of nonmetallic minerals into the feed hopper per 40 CFR 60.672(d). This rule is applicable only when limestone is processed.] | Visible emissions of fugitive dust discharging from the screeners, hopper, transfer points or conveyors shall not exceed 7% opacity.<br>[40 CFR 60.672(b)]<br><br>Visible emissions of fugitive dust discharging from the uncontrolled crusher shall not exceed 12% opacity.<br>[40 CFR 60.672(b)]<br><br>See b)(2)h. and j. below. |
| j. | 40 CFR 60.1-19<br>(40 CFR 60.670(f)) | Table 1 of Subpart OOO of 40 CFR Part 60 – Exceptions to Applicability of |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | Subpart A to Subpart OOO, specifies the provisions of Subpart A that do not apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions. |

(2) Additional Terms and Conditions

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

b. The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

   i. Norberg primary crusher (1)
   ii. Powerscreens of America scalping screen (1)
   iii. Masterskreen secondary screen (1)
   iv. Conveyor transfer points (13)

c. The permittee shall employ best available control measures for the material handling operations listed above, 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 maintain sufficient moisture content of the material, using water sprays as necessary, to maintain compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

d. For each material handling operation that is not adequately enclosed, the above-identified control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary.

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

Permit to Install P0105813 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) for $PM_{2.5}$:

i. the permittee must maintain the moisture carried over from the water spray at the crusher as needed to control fugitive dust generated from this emissions source;

ii. the maximum annual production rate (limestone and coal, combined) for this emissions unit shall not exceed 440,000 tons.

iii. $PM_{2.5}$ emissions shall not exceed 6.38 tons per year.

f. This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

g. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

h. In accordance with 40 CFR, Part 60 Subpart OOO, the following pieces of equipment are affected facilities constructed, modified, or reconstructed after April 22, 2008 when processing limestone and when co-located at an affected facility as defined in 40 CFR 60.670. In accordance with 40 CFR Part 60 Subpart Y, the following pieces of equipment are affected facilities constructed, modified, or reconstructed after May 27, 2009 when processing coal. The material handling operations that are covered by this permit and subject to the above-mentioned requirements are listed below:

Norberg primary crusher (1)
Powerscreens of America scalping screen (1)
Masterskreen secondary screen (1)
Conveyor transfer points (13)

i. See 40 CFR Part 60, Subpart Y [40 CFR 60.250-258].

j. See 40 CFR Part 60, Subpart OOO [40 CFR 60.670-676].

c) Operational Restrictions

(1) The permittee has requested a federally enforceable limitation on production rate for the purposes of limiting potential to emit to avoid PSD requirements for PM and $PM_{10}$. Therefore, the maximum production rate shall not exceed 440,000 tons as a rolling, 12-month summation. To ensure compliance during the first 12 calendar months of

operation following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

| Months(s) | Maximum Cumulative Production Rate (Tons) |
|---|---|
| 1-1 | 70,000 |
| 1-2 | 140,000 |
| 1-3 | 210,000 |
| 1-4 | 280,000 |
| 1-5 | 300,000 |
| 1-6 | 320,000 |
| 1-7 | 340,000 |
| 1-8 | 360,000 |
| 1-9 | 380,000 |
| 1-10 | 400,000 |
| 1-11 | 420,000 |
| 1-12 | 440,000 |

After the first 12 calendar months of operation following the startup of emissions unit F707, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rate.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the coal production rate for each month;

b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the coal production rate; and

c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative coal production rate for each calendar month.

(2) Except as otherwise provided in this section, for material handling operations that are not adequately enclosed, the permittee shall perform inspections of such operations in accordance with the following minimum frequencies:

| material handling operation(s) | minimum inspection frequency |
|---|---|
| Norberg primary crusher (1) | Daily |
| Powerscreens of America scalping screen (1) | Daily |
| Masterskreen secondary screen (1) | Daily |
| Conveyor transfer points (13) | Daily |

(3) The above-mentioned inspections shall be performed during representative, normal operating conditions.

For material handling operations, the permittee shall maintain records of the following information:

a. the date and reason any required inspection was not performed;

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.

The information in d)(3)d. shall be kept separately for each material handling operation identified above, and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

(4) The permittee shall maintain monthly records of all materials produced in this emissions unit.

(5) See 40 CFR Part 60, Subpart Y [40 CFR 60.250-258].

(6) See 40 CFR Part 60, Subpart OOO [40 CFR 60.670-676]

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month coal production rate limitation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels;

b. any exceedance of the annual production rate limitation for limestone and coal production (combined);

c. 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

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

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

(3) See 40 CFR Part 60, Subpart Y [40 CFR 60.250-258].

(4) See 40 CFR Part 60, Subpart OOO [40 CFR 60.670-676].

f) Testing Requirements

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

a. Emissions Limitation:
PM emissions shall not exceed 21.71 tons based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limitation for PM shall be demonstrated by the following one-time calculations based on the emission factors in AP-42 Section 13.2.4 (11/06) for crusher load-in and the emission factors in the FIRE database (9/04) for coal crushing, screening, and conveyor transfer points and a maximum annual throughput of 440,000 tons per year:

<u>Crusher load-in:</u>

$E = k \times (0.0032) \times [(U/5)^{1.3}/(M/2)^{1.4}]$

Where:

E = PM emission factor expressed in pounds per ton
k = particle size multiplier for TSP (dimensionless) = 0.74
U = mean wind speed expressed in miles per hour (MPH) = 9.9
M = material moisture content (%) = 2.1

Therefore, E = 0.005 lb PM/ton

PM = [(# load-in points)(maximum annual throughput)(load-in EF)]/2,000 lbs/ton
= [(1)(440,000 tons)(0.005 lb PM/ton)]/2,000 lb/ton
= 1.18 tons per year uncontrolled PM

Assume 50% control efficiency for watering at crusher

1.18 tons per year X (1 - 0.50) = 0.59 ton per year controlled PM

<u>Crushing, screening, and conveyor transfer points:</u>

PM = [(# of crushers, screens and conveyor transfer points)(maximum annual throughput)(PM EF)]/2,000 lbs/ton

PM = [(16)(0.02 lb/ton)(440,000 tons per year] X 1 ton/2,000 lbs

= 70.40 tons per year uncontrolled PM

Assume 70% control efficiency for water sprays

70.40 tons per year X (1 - 0.70) = 21.12 tons per year controlled PM

Totals:
0.59 + 21.12 = 21.71 tons per year PM

b. Emissions Limitations:
$PM_{10}$ emissions shall not exceed 6.62 tons based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limitation for $PM_{10}$ shall be demonstrated by the following one-time calculations based on the emission factors in AP-42 Section 13.2.4 (11/06) for crusher load-in and the emission factors in the FIRE database (9/04) for crushing, screening, and conveyor transfer points and a maximum annual throughput of 440,000 tons per year:

Crusher load-in:

$E = k \times (0.0032) \times [(U/5)^{1.3}/(M/2)^{1.4}]$

Where:

E = $PM_{10}$ emission factor expressed in pounds per ton
k = particle size multiplier for $PM_{10}$ (dimensionless) = 0.35
U = mean wind speed expressed in miles per hour (MPH) = 9.9
M = material moisture content (%) = 2.1

Therefore, E = 0.0025 lb $PM_{10}$/ton

$PM_{10}$ = [(# load-in points)(maximum annual throughput)(load-in EF)]/2,000 lbs/ton
= [(1)(440,000 tons)(0.0025 lb $PM_{10}$/ton)]/2,000 lb/ton
= 0.56 ton per year uncontrolled $PM_{10}$

Assume 50% control efficiency for watering at crusher

0.56 ton per year X (1 - 0.50) = 0.28 ton per year controlled $PM_{10}$

Crushing, screening, and conveyor transfer points:

$PM_{10}$ = [(# of crushers, screens and conveyor transfer points)(maximum annual throughput)($PM_{10}$ EF)]/2,000 lbs/ton

$PM_{10}$ = [(16)(0.006 lb/ton)(440,000 tons per year] X 1 ton/2,000 lbs

= 21.12 tons per year uncontrolled $PM_{10}$

Assume 70% control efficiency for water sprays

21.12 tons per year X (1 - 0.70) = 6.34 tons per year controlled $PM_{10}$

Totals:
0.28 + 6.34 = 6.62 tons per year $PM_{10}$

c. Emissions Limitation:
$PM_{2.5}$ emissions shall not exceed 6.38 tons per year.

Applicable Compliance Method:
Compliance with the annual emissions limitation for $PM_{2.5}$ shall be demonstrated by the following one-time calculations based on the emission factors in AP-42 Section 13.2.4 (11/06) for crusher load-in and the emission factors in the FIRE database (9/04) for crushing, screening, and conveyor transfer points and a maximum annual throughput of 440,000 tons per year:

<u>Crusher load-in:</u>

$E = k \times (0.0032) \times [(U/5)^{1.3}/(M/2)^{1.4}]$

Where:

E = $PM_{2.5}$ emission factor expressed in pounds per ton
k = particle size multiplier for $PM_{2.5}$ (dimensionless) = 0.053
U = mean wind speed expressed in miles per hour (MPH) = 9.9
M = material moisture content (%) = 2.1

Therefore, E = 0.0004 lb $PM_{2.5}$/ton

$PM_{10}$ = [(# load-in points)(maximum annual throughput)(load-in EF)]/2,000 lbs/ton
= [(1)(440,000 tons)(0.0004 lb $PM_{2.5}$/ton)]/2,000 lb/ton
= 0.08 ton per year uncontrolled $PM_{2.5}$

Assume 50% control efficiency for watering at crusher

0.08 ton per year X (1 - 0.50) = 0.04 ton per year controlled $PM_{2.5}$

<u>Crushing, screening, and conveyor transfer points:</u>

$PM_{2.5}$ = [(# of crushers, screens and conveyor transfer points)(maximum annual throughput)($PM_{2.5}$ EF)]/2,000 lbs/ton

$PM_{2.5}$ = [(16)(0.006 lb/ton)(440,000 tons per year] X 1 ton/2,000 lbs

= 21.12 tons per year uncontrolled $PM_{2.5}$

Assume 70% control efficiency for water sprays

21.12 tons per year X (1 - 0.70) = 6.34 tons per year controlled $PM_{2.5}$

<u>Totals:</u>
0.04 + 6.34 = 6.38 tons per year $PM_{2.5}$

d. Emissions Limitation:
No discharge into the atmosphere from the affected facility of any gases which exhibit 10 percent opacity or greater when coal is processed.

Applicable Compliance Method:
If required, visible particulate emissions shall be determined according to USEPA Method 9. See f)(2).

e. Emissions Limitation:
Visible emissions of fugitive dust discharging from the screeners, hopper, transfer points or conveyors shall not exceed 7% opacity when limestone is processed.

Applicable Compliance Method:
Visible particulate emissions shall be determined according to USEPA Method 9. See f)(2).

f. Emissions Limitation:
Visible emissions of fugitive dust discharging from the uncontrolled crusher shall not exceed 12% opacity when limestone is processed.

Applicable Compliance Method:
Visible particulate emissions shall be determined according to USEPA Method 9. See f)(2).

(2) Performance testing shall be conducted as required in 40 CFR Part 60 Subpart OOO pursuant to 40 CFR 60.670 when processing limestone, and 40 CFR Part 60 Subpart Y pursuant to 40 CFR 60.255 when processing coal. 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 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility.

b. When limestone is processed, the emissions testing shall be conducted to demonstrate compliance with the visible emission limitations for fugitive emissions for each crusher, screening operation, transfer point, and conveyor as specified in b)(2)c. of this permit, and in accordance with the requirements of 40 CFR Part 60.675. When coal is processed, the emissions testing shall be conducted to demonstrate compliance with the visible emission limitations for fugitive emissions for each affected facility as specified in b)(2)b. of this permit, and in accordance with the requirements of 40 CFR Part 60.255(b), unless the permittee opts to demonstrate compliance with the alternative requirements in 40 CFR 60.255(f) or (g).

c. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s): for visible emissions, Method 9 of 40 CFR 60, Appendix A.

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

e. No later than seven (7) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office's refusal to accept the results of the emissions test(s).

f. Personnel from the Ohio EPA, Southeast District 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.

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

g) Miscellaneous Requirements

(1) The Norberg primary crusher portion of this emissions unit will be operated at a location in the state of Maryland as well as at the permittee's facility. The permittee shall notify the Ohio EPA, Southeast District Office, within thirty (30) days of moving the crusher out of Ohio and within thirty (30) days of moving the crusher back to the permittee's Sugarcreek facility. The permittee must comply with the recordkeeping and reporting requirements of this permit at all times, including when the emissions unit is operated outside Ohio.

**2. F708, Limestone storage piles**

**Operations, Property and/or Equipment Description:**

Load-out and wind erosion from five limestone and/or coal storage piles; maximum annual throughput (all materials) of 440,000 tons and maximum surface area of 0.4 acres

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD requirements for PM and $PM_{10}$ and state modeling for $PM_{10}$) | Emissions of particulate matter (PM) shall not exceed 1.28 tons based on a rolling, 12-month summation.<br><br>Emissions of particulate matter less than 10 microns ($PM_{10}$) shall not exceed 0.73 ton based on a rolling, 12-month summation.<br><br>See c)(1) below. |
| b. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | Emissions of particulate matter less than 2.5 microns ($PM_{2.5}$) shall not exceed 0.32 ton per year.<br><br>No visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.<br><br>Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust.<br><br>See b)(2)a.-f. below.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and (E). |
| c. | OAC rule 3745-31-05(E), as | See b)(2)g. below. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | effective 12/01/06<br>(Voluntary restriction to avoid BAT for $PM_{2.5}$) | |
| d. | OAC rule 3745-17-07(B) | See b)(2)h. below. |
| e. | OAC rule 3745-17-08(B) | See b)(2)i. below. |
| f. | 40 CFR Part 60, Subpart Y<br>(40 CFR 60.250 – 60.258)<br><br>[In accordance with 40 CFR 60.250, this emissions unit contains affected facilities in a coal preparation plant which processes more than 200 tons of coal per day and includes open storage piles installed after May 27, 2009 when processing coal. This rule is applicable only when coal is processed.] | No discharge into the atmosphere from the affected facility of any gases which exhibit 10 percent opacity or greater.<br>[40 CFR 60.254(b)(1)]<br><br>See b)(2)j. below. |
| g. | 40 CFR 60.1-19<br>(40 CFR 60.1a) | The provisions of Subpart A apply to the owner or operator of any stationary source which contains an affected facility that commenced construction or modification after the date of publication in 40 CFR Part 60 that is applicable to that facility. |

(2) Additional Terms and Conditions

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

b. The storage piles that are covered by this permit and subject to the above-mentioned requirements are listed below:

i. All limestone and coal storage piles (up to five total piles)

c. The permittee shall employ best available control measures on all 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 maintain sufficient moisture carry over from the crusher water spray to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

d. The above-mentioned control measures shall be employed for each 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during any such operation until further observation confirms that use of the measures is unnecessary.

e. The permittee shall employ best 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 maintain sufficient moisture carry over from the crusher water spray to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

f. For each storage pile, the above-identified control measures 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 measures are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measures shall continue during the operation of the material handling operations until further observation confirms that use of the control measures is unnecessary. 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.

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

Permit to Install P0105813 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. the permittee must maintain the moisture in the storage piles carried over from the water spray at the crusher as needed to achieve 65% control efficiency of fugitive dust generated from this emissions source.

ii. $PM_{2.5}$ emissions shall not exceed 0.32 ton per year.

h. This emissions unit is exempt from the visible emissions limitations for fugitive dust, specified in OAC rule 3745-17-07(B), pursuant to OAC rule 3745-17-

07(B)(11)(e), because the emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08.

i. This emissions unit is not located within areas identified in "Appendix A" of OAC rule 3745-17-08, therefore, the requirements of OAC rule 3745-17-08(B), which requires the installation of reasonably available control measures to prevent fugitive dust, do not apply to this emissions unit pursuant to OAC rule 3745-17-08(A)(1).

j. See 40 CFR Part 60, Subpart Y [40 CFR 60.250-258].

c) Operational Restrictions

(1) The permittee has requested a federally enforceable limitation on production rate for the purposes of limiting potential to emit to avoid PSD requirements for PM and $PM_{10}$. Therefore, the maximum production rate shall not exceed 440,000 tons as a rolling, 12-month summation. To ensure compliance during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

| Months(s) | Maximum Cumulative Production Rate (Tons) |
|---|---|
| 1-1 | 70,000 |
| 1-2 | 140,000 |
| 1-3 | 210,000 |
| 1-4 | 280,000 |
| 1-5 | 300,000 |
| 1-6 | 320,000 |
| 1-7 | 340,000 |
| 1-8 | 360,000 |
| 1-9 | 380,000 |
| 1-10 | 400,000 |
| 1-11 | 420,000 |
| 1-12 | 440,000 |

After the first 12 calendar months of operation following the startup of emissions unit F708, compliance with the annual production rate limitation shall be based upon a rolling, 12-month summation of the production rate.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. the production rate for each month;

b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the production rate; and

c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative production rate for each calendar month.

(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 |
|---|---|
| All limestone and coal storage piles (up to 5 total piles) | Daily |

(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 |
|---|---|
| All limestone and coal storage piles (up to 5 total piles) | 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-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 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 d)(6)d. shall be kept separately for (i) the load-out operations and (ii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

(7) The permittee shall maintain monthly records of all materials produced in this emissions unit.

(8) See 40 CFR Part 60, Subpart Y [40 CFR 60.250-258].

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

(2) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month production rate limitation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative production rate levels;

b. any exceedance of the annual production rate limitation for limestone and coal production (combined);

c. 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

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

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

(3) See 40 CFR Part 60, Subpart Y [40 CFR 60.250-258].

f) Testing Requirements

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

a. Emissions Limitation:
PM emissions shall not exceed 1.28 tons based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limitation for PM shall be determined by using AP-42, Equation 13.2.4.3-1 (11/06) for load-out operations and U.S.EPA: Control of Open Fugitive Dust Sources Equation 4-9 (9/88) for wind erosion. These emission limits were based on a restricted maximum production of 440,000 tons per year, a maximum storage surface area less than or equal to 0.4 acres, and a 65% overall control efficiency for PM.

Load out emissions:
EF = k X 0.0032 X $(U/5)^{1.3}/(M/2)^{1.4}$

Where:

k = particle size multiplier for PM = 0.74
U = mean wind speed = 9.9 mph
M = moisture content of material = 3.44%

EF = 0.003 pound PM/ton

Load out points = 5
Throughput = 440,000
Control efficiency = 65%

PM (ton per year) = 0.003 X 440,000 X 5 X (1-0.65)/2,000 lbs/ton = 1.04

Wind erosion:

EF = 1.7 X (s/1.5) X((365-p)/235) X (f/15)

Where:

s = silt content of stored material, wt. % = 1.6
p = days/yr with > 0.01 inch precipitation = 150
f = % of time wind speed exceeds 12 mph = 30
A = total surface area of piles, acres = 0.4
Control efficiency = 0%

PM (ton per year) = (3.318 pounds/day/acre X 365 days X 0.4 acres/2,000 lbs/ton = 0.24

Total fugitive PM from storage piles:
1.04 tons per year for load out + 0.24 ton per year for wind erosion = 1.28 tons PM per year

b. Emissions Limitation:
$PM_{10}$ emissions shall not exceed 0.73 ton based on a rolling, 12-month summation.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limitations for $PM_{10}$ shall be determined by using AP-42, Equation 13.2.4.3-1 (11/06) for load-out operations and U.S.EPA: Control of Open Fugitive Dust Sources Equation 4-9 (9/88) for wind erosion. These emission limits were based on a restricted maximum production of 440,000 tons per year, a maximum storage surface area less than or equal to 0.4 acres, and a 65% overall control efficiency for $PM_{10}$.

Load out emissions:
EF = k X 0.0032 X $(U/5)^{1.3}/(M/2)^{1.4}$

Where:

k = particle size multiplier for $PM_{10}$ = 0.35
U = mean wind speed = 9.9 mph
M = moisture content of material = 3.44%

EF = 0.0013 pound $PM_{10}$/ton

Load out points = 5
Throughput = 440,000
Control efficiency = 65%

$PM_{10}$ (ton per year) = 0.0013 X 440,000 X 5 X (1-0.65)/2,000 lbs/ton = 0.49

<u>Wind erosion</u>:

EF = 1.7 X (s/1.5) X((365-p)/235) X (f/15)

Where:

s = silt content of stored material, wt. % = 1.6
p = days/yr with > 0.01 inch precipitation = 150
f = % of time wind speed exceeds 12 mph = 30
A = total surface area of piles, acres = 0.4
Control efficiency = 0%

$PM_{10}$ (ton per year) = (3.318 pounds/day/acre X 365 days X 0.4 acres/2,000 lbs/ton = 0.24

<u>Total fugitive $PM_{10}$ from storage piles</u>:
0.49 ton per year for load out + 0.24 ton per year for wind erosion = 0.84 ton $PM_{10}$ per year

c. Emissions Limitation:
$PM_{2.5}$ emissions shall not exceed 0.32 ton per year.

Applicable Compliance Method:
Compliance with fugitive $PM_{2.5}$ limitation shall be determined by using AP-42, Equation 13.2.4.3-1 (11/06) for load-out operations and U.S.EPA: Control of Open Fugitive Dust Sources Equation 4-9 (9/88) for wind erosion. These emission limits were based on a maximum production of 440,000 tons per year, a maximum storage surface area less than or equal to 0.4 acres, and a 65% overall control efficiency for $PM_{2.5}$.

<u>Load out emissions</u>:
$EF = k \times 0.0032 \times (U/5)^{1.3}/(M/2)^{1.4}$

Where:

k = particle size multiplier for $PM_{2.5}$ = 0.053
U = mean wind speed = 9.9 mph

M = moisture content of material = 3.44%

EF = 0.0002 pound $PM_{2.5}$/ton

Load out points = 5
Throughput = 440,000
Control efficiency = 65%

Fugitive $PM_{2.5}$ (tons per year) = 0.0027 X 440,000 X 5 X (1-0.65)/2,000 lbs/ton = 0.07

Wind erosion:

EF = 1.7 X (s/1.5) X((365-p)/235) X (f/15)

Where:

s = silt content of stored material, wt. % = 1.6
p = days/yr with > 0.01 inch precipitation = 150
f = % of time wind speed exceeds 12 mph = 30
A = total surface area of piles, acres = 0.4
Control efficiency = 0%

Fugitive $PM_{2.5}$ (tons per year) = (3.318 pounds/day/acre X 365 days X 0.4 acres/2,000 lbs/ton = 0.24

Total fugitive $PM_{2.5}$ from storage piles:
0.07 ton per year for load out + 0.24 tons per year for wind erosion = 0.32 ton per year

d. Emissions Limitation:
No visible particulate emissions except for a period of time not to exceed one minute during any sixty-minute observation period.

Applicable Compliance Method:
If required, visible emissions of fugitive dust shall be determined according to USEPA Method 22, with the modifications found in OAC rule 3745-17-03(B)(4).

g) Miscellaneous Requirements

(1) None.

**3. P701, 505 HP diesel-fired generator**

**Operations, Property and/or Equipment Description:**

505 HP Caterpillar C-12 diesel-fired generator manufactured in 2004; maximum of 1,900 hours of operation per rolling, 12-month period

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

(1) g)(2)

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | ORC 3704.03(T) | Nitrogen oxides ($NO_x$) emissions shall not exceed 0.031 lb/HP-hr. |
| b. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | Carbon monoxide (CO) emissions shall not exceed 3.37 lbs/hr.<br><br>Sulfur dioxide ($SO_2$) emissions shall not exceed 1.04 lbs/hr.<br><br>Organic compound (OC) emissions shall not exceed 1.28 lbs/hr.<br><br>Emissions of particulate matter less than 2.5 microns ($PM_{2.5}$) shall not exceed 1.06 tons per year.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B)(5)(a) and 3745-31-05(D) and 40 CFR 63. 6580 - 63.6675.<br><br>See b)(2)a. below. |
| c. | OAC rule 3745-31-05(E), as effective 12/01/06<br>(Voluntary restriction to avoid BAT for CO) | See b)(2)b. below. |
| d. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)c. below. |
| e. | OAC rule 3745-31-05(D) | $NO_x$ emissions shall not exceed 14.87 |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | (Synthetic minor to avoid PSD requirements for $NO_x$ and $PM/PM_{10}$ and voluntary restriction to avoid state modeling for $NO_x$ and $PM_{10}$) | tons per rolling, 12-month period.<br><br>CO emissions shall not exceed 3.20 tons per rolling, 12-month period.<br><br>$SO_2$ emissions shall not exceed 0.95 ton per rolling, 12-month period.<br><br>OC emissions shall not exceed 1.20 tons per rolling, 12-month period.<br><br>Emissions of particulate matter (PM) and emissions of particulate matter less than 10 microns ($PM_{10}$) shall not exceed 1.06 tons per rolling, 12-month period.<br><br>See c)(2) below. |
| f. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| g. | OAC rule 3745-17-11(B)(5)(a) | PE shall not exceed 0.310 pound/million Btu of actual heat input. |
| h. | OAC rule 3745-18-06(G) | This emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) pursuant to OAC rule 3745-18-06(B). |
| i. | OAC rule 3745-110-03(F) | This emissions unit is exempt from the requirements of OAC rule 3745-110-03(F) pursuant to OAC rule 3745-110-03(J)(3). |
| j. | 40 CFR Part 63, Subpart ZZZZ<br>(40 CFR 63.6580 - 63.6675)<br><br>[In accordance with 40 CFR 63.6590(a)(2)(i), this emissions unit is a new stationary compression ignition internal combustion engine with a site rating of greater than 500 HP located at a major source of HAP emissions subject to the emissions limitations/control measures specified in this section.] | CO emissions shall be reduced by 70% or more, or the concentration of formaldehyde in the stationary RICE exhaust shall be limited to 580 mmbvd or less (at 15% $O_2$).<br>[40 CFR 63.6600(b)]<br><br>See b)(2)d. below. |
| k. | 40 CFR 63.1-15<br>(40 CFR 63.6665) | Table 8 to Subpart ZZZZ of 40 CFR Part 63 – Applicability of General Provisions to Subpart ZZZZ, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart. |

(2) Additional Terms and Conditions

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

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

Permit to Install P0105813 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. The maximum annual operating hours for this emissions unit shall not exceed 1,900.

ii. CO shall not exceed 3.20 tons per year.

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the $SO_2$, OC, and particulate emissions from this air contaminant source since the uncontrolled potential to emit for $SO_2$, OC, and particulate is less than 10 tons/yr.

d. See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

c) Operational Restrictions

(1) The permittee shall burn only diesel fuel in this emissions unit.

(2) The permittee has requested a federally enforceable limitation on operating hours for the purposes of limiting potential to emit to avoid PSD requirements and state modeling for NOx and $PM_{10}$. Therefore, the maximum number of operating hours for emissions unit P701 shall not exceed 1,900 hours as a rolling, 12-month summation. To ensure compliance during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours specified in the following table:

<u>Maximum Cumulative</u>

| Months(s) | Operating Hours |
|---|---|
| 1-1 | 233 |
| 1-2 | 466 |
| 1-3 | 700 |
| 1-4 | 933 |
| 1-5 | 1,054 |
| 1-6 | 1,175 |
| 1-7 | 1,296 |
| 1-8 | 1,417 |
| 1-9 | 1,538 |
| 1-10 | 1,659 |
| 1-11 | 1,780 |
| 1-12 | 1,900 |

After the first 12 calendar months of operation following the startup of emissions unit P701, compliance with the annual operating hour limitation shall be based upon a rolling, 12-month summation of the operating hours.

(3) See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

d) Monitoring and/or Recordkeeping Requirements

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

(2) The permittee shall maintain monthly records of the following information:

a. the operating hours for each month;

b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the hours of operation; and

c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

(3) The permittee shall maintain monthly records of the operating hours for this emissions unit.

(4) See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

(3) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month limitation on the hours of operation for this emissions unit; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation;

b. any exceedance of the annual limitation on the hours of operation.

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

(4) See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

f) Testing Requirements

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

a. Emissions Limitations:
$NO_x$ emissions shall not exceed 0.031 lb/HP-hr.
$NO_x$ emissions shall not exceed 14.87 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance shall be based upon an emission factor of 0.031 lb/HP-hr. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96).

If required, compliance with the $NO_x$ lb/HP-hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

Compliance with the rolling, 12-month emissions limitations is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the uncontrolled emission factor for $NO_x$ from AP-42, Table 3.3-1 (10/96) of 0.031 lb/HP-hr by the maximum rated capacity of P701 (505 HP), then dividing by 2,000 lbs/ton.

b. Emissions Limitations:
CO emissions shall not exceed 3.37 lbs/hr.
CO emissions shall not exceed 3.20 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor for CO from AP-42, Table 3.3-1 (10/96) of 0.00668 lb/HP-hr by the maximum rated capacity of P701 (505 HP).

If required, compliance with the CO lbs/hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the uncontrolled emission factor for CO from AP-42, Table 3.3-1 (10/96) of 0.00668 lb/HP-hr by the maximum rated capacity of P701 (505 HP), then dividing by 2,000 lbs/ton.

c. Emissions Limitations:
$SO_2$ emissions shall not exceed 1.04 lbs/hr.
$SO_2$ emissions shall not exceed 0.95 ton per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor for $SO_2$ of 0.00205 lb/HP-hr from AP-42, Table 3.3-1 (10/96) by the maximum rated capacity of P701 (505 HP).

If required, compliance with the $SO_2$ lbs/hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the emission factor for $SO_2$ from AP-42, Table 3.3-1 (10/96) of 0.00205 lb/HP-hr by the maximum rated capacity of P701 (505 HP), then dividing by 2,000 lbs/ton.

d. Emissions Limitations:
OC emissions shall not exceed 1.28 lbs/hr.
OC emissions shall not exceed 1.20 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor for OC of 0.00251 lb/hp-hr from AP-42, Table 3.3-1 (10/96) by the maximum rated capacity of P701 (505 HP).

If required, compliance with the lb/hr emission limitation shall be determined based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 - 4, and 18, 25, or 25A.

Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the emission factor for OC from AP-42, Table 3.3-1 (10/96) of 0.00251 lb/HP-hr by the maximum rated capacity of P701 (505 HP), then dividing by 2,000 lbs/ton.

e. Emissions Limitation:
$PM/PM_{10}$ emissions shall not exceed 1.06 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the rolling, 12-month emissions limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the emission factor for PE from AP-42, Table 3.3-1 (10/96) of 0.0022 lb/HP-hr by the maximum rated capacity of P701 (505 HP), then dividing by 2,000 lbs/ton.

f. Emissions Limitations:
$PM_{2.5}$ emissions shall not exceed 1.06 tons per year.

Applicable Compliance Method:
Compliance with the annual emissions limitations is demonstrated by multiplying the actual annual hours of operation and the emission factor for PE from AP-42, Table 3.3-1 (10/96) of 0.0022 lb/HP-hr by the maximum rated capacity of P701 (505 HP), then dividing by 2,000 lbs/ton.

g. Emissions Limitation:
Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, compliance with the visible PE limitation shall be determined according to USEPA Method 9.

h. Emissions Limitation:
PE shall not exceed 0.310 pound/million Btu of actual heat input.

Applicable Compliance Method:
Compliance shall be based upon an emission factor of 0.31 lb/million Btu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96).

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

i. Emissions Limitation:
CO emissions shall be reduced by 70% or more, or the concentration of formaldehyde in the stationary RICE exhaust shall be limited to 580 mmbvd or less (at 15% $O_2$).

Applicable Compliance Method:
See f)(2).

(2) Performance testing shall be conducted as required in 40 CFR Part 63 Subpart ZZZZ. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

a. The initial performance testing shall be conducted not later than 180 days after initial startup of this emissions unit pursuant to 40 CFR 63.6610(a). Testing shall be completed in accordance with the requirements in 40 CFR 63.6620 and Table 4. Pursuant to 40 CFR 63.6615, subsequent performance tests must be conducted semi-annually as specified in Table 3 of 40 CFR Subpart ZZZZ, except as otherwise specified in Footnote 1 in Table 3 and 40 CFR 63.6620.

b. The emission testing shall be conducted to demonstrate compliance with the requirement to reduce CO emissions by 70 percent or more, or the mass emission rate of formaldehyde to 580 ppbvd or less at 15 percent $O_2$ in Table 2a of 40 CFR Part 63 Subpart ZZZZ.

c. The test method(s) in Table 4 of 40 CFR Subpart ZZZZ shall be employed to demonstrate compliance with the allowable emission rate(s).

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

e. No later than thirty (30) days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Southeast District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Southeast District Office's refusal to accept the results of the emissions test(s).

f. Personnel from the Ohio EPA, Southeast District 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.

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

(3) See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

g) Miscellaneous Requirements

(1) This emissions unit was manufactured in 2004. Therefore, 40 CFR Part 60 Subpart IIII (40 CFR 60. 4200 - 60.4219) does not apply pursuant to 40 CFR 60.4200.

(2) Modeling to demonstrate compliance with the “Toxic Air Contaminant Statute” in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be

less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.

(3) This emissions unit will be operated at a location in the state of Maryland as well as at the permittee's facility. The permittee shall notify the Ohio EPA, Southeast District Office, within thirty (30) days of moving this emissions unit out of Ohio and within thirty (30) days of moving the crusher back to the permittee's Sugarcreek facility. The permittee must comply with the recordkeeping and reporting requirements of this permit at all times, including when the emissions unit is operated outside Ohio.

**4. P702, 237 HP diesel-fired generator**

**Operations, Property and/or Equipment Description:**

237 HP (176.73 kW) John Deere diesel-fired generator (model no. 6068HF285) manufactured in 2009/2010; certified to 40 CFR 89.112 Tier 3 exhaust emission standards in Table 1

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

(1) g)(1)

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | Nitrogen oxides ($NO_x$) emissions shall not exceed 1.17 lbs/hr and 5.12 tons/yr.<br><br>Carbon monoxide (CO) emissions shall not exceed 1.36 lbs/hr and 5.96 tons/yr.<br><br>Sulfur dioxide ($SO_2$) emissions shall not exceed 0.49 lb/hr and 2.13 tons/yr.<br><br>Organic compound (OC) emissions shall not exceed 0.40 lb/hr and 1.73 tons/yr.<br><br>Particulate emissions (PE), emissions of particulate matter less than 10 microns ($PM_{10}$) and emissions of particulate matter less than 2.5 microns ($PM_{2.5}$) shall not exceed 0.08 lb/hr and 0.35 ton/yr.<br><br>The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and 3745-17-11(B)(5)(a) and 40 CFR 63.4200 - 60.4219.<br><br>See b)(2)a. below. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. and c. below. |
| c. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack serving this emissions unit shall not |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | | exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| d. | OAC rule 3745-17-11(B)(5)(a) | The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to 40 CFR 60.4204(a), 40 CFR 60.4201(a), and Table 1 to 40 CFR 89.112, Tier 3. |
| e. | OAC rule 3745-18-06(G) | This emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) pursuant to OAC rule 3745-18-06(B). |
| f. | OAC rule 3745-110-03(F) | This emissions unit is exempt from the requirements of OAC rule 3745-110-03(F) pursuant to OAC rule 3745-110-03(J)(3). |
| g. | 40 CFR Part 60, Subpart IIII<br>(40 CFR 60.4200 - 60.4219)<br><br>[In accordance with 40 CFR 60.4200(a)(2)(i), this emissions unit is a stationary compression ignition internal combustion engine subject to the emissions limitations specified in this section.] | Emissions shall not exceed:<br>4.0 grams NOx + NMHC/kW-hr<br>0.20 gram particulate matter (PM)/kW-hr<br>3.5 grams CO/kW-hr<br><br>[40 CFR 60.4204(a), 40 CFR 60.4201(a), and Table 1 to 40 CFR 89.112, Tier 3]<br><br>Exhaust opacity must not exceed:<br>20% opacity during the acceleration mode, 15% opacity during the lugging mode, and 50% opacity during the peaks in either the acceleration or lugging modes.<br><br>[40 CFR 60.4204(a), 40 CFR 60.4201(a), and 40 CFR 89.113]<br><br>See b)(2)d. below. |
| h. | 40 CFR 60.1-19<br>(40 CFR 60.4218) | Table 8 of Subpart IIII of 40 CFR Part 60 – Applicability of General Provisions to Subpart IIII, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart or that apply with certain exceptions. |
| i. | 40 CFR Part 63, Subpart ZZZZ<br>(40 CFR 63.6580 - 63.6675)<br><br>[In accordance with 40 CFR 63.6590(a)(2)(ii), this emissions unit is a stationary compression ignition internal combustion engine with a site rating of less than or equal to 500 HP located for which | Pursuant to 40 CFR 63.6590(c), stationary compression ignition reciprocating internal combustion engines (RICE) at a major source of HAP emissions with a site rating of less than or equal to 500 HP must meet the requirements of this part by meeting the requirements of 40 CFR Part 60 Subpart IIII for compression ignition engines. |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | construction commenced on or after July 12, 2006 at a major source of HAP emissions.] | |
| j. | 40 CFR 63.1-15<br>(40 CFR 63.6665) | Pursuant to 40 CFR 63.6665, the General Provisions in 40 CFR 63.1 through 63.15 do not apply to a stationary RICE located at a major source of HAP emissions with a site rating of less than or equal to 500 HP. |

(2) Additional Terms and Conditions

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

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the $NO_x$ emissions from this air contaminant source since the calculated annual emission rate for $NO_x$ is less than 10 tons/yr taking into account the federally enforceable rule limit of 4.0 grams NOx + NMHC/kW-hr in Table 1 of 40 CFR Part 89.112 as required by 40 CFR 60.4204(a) and 40 CFR 60.4201(a).

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, $SO_2$, OC, and particulate emissions from this air contaminant source since the uncontrolled potential to emit for CO, $SO_2$, OC, and particulate is less than 10 tons/yr.

d. See 40 CFR Part 60, Subpart IIII [40 CFR 60.4200 - 60.4219].

c) Operational Restrictions

(1) The permittee shall burn only diesel fuel in this emissions unit.

(2) See 40 CFR Part 60, Subpart IIII [40 CFR 60.4200 - 60.4219].

d) Monitoring and/or Recordkeeping Requirements

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

(2) See 40 CFR Part 60, Subpart IIII [40 CFR 60.4200 - 60.4219].

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

(3) See 40 CFR Part 60, Subpart IIII [40 CFR 60.4200 - 60.4219].

f) Testing Requirements

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

a. Emissions Limitations:
$NO_x$ emissions shall not exceed 1.17 lbs/hr and 5.12 tons/yr.

Applicable Compliance Method:
Compliance with the lb/hr emissions limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The lb/hr limit is equivalent to the g $NO_x$ + NMHC/kW-hr emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 175 and 750 horsepower (130 and 560 kilowatts).

The $NO_x$ limits shall be calculated using a ratio of 74.6% NOx to 25.4% VOC. This ratio is based upon the linear relationship of NOx to NMHC from Table 1 of Subpart IIII, Table 1 from 40 CFR 89.112, to Tables 4, 5, and 6 from 40 CFR 1039.102:

4.0 g $NO_x$ + NMHC/kW-hr x 74.6% $NO_x$ = 3.0 grams NOx/kW-hr

If required, compliance with the $NO_x$ lb/hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

Compliance with the ton per year NOx emissions limitation is demonstrated by multiplying 8,760 hours of operation and the lb/hr emission limitation for $NO_x$ of 1.17 lb/hr, then dividing by 2,000 lbs/ton.

b. Emissions Limitations:

CO emissions shall not exceed 1.36 lbs/hr and 5.96 tons/yr.

Applicable Compliance Method:
Compliance with the lb/hr emissions limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The lb/hr limit is equivalent to the g CO/kW-hr emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 175 and 750 horsepower (130 and 560 kilowatts).

If required, compliance with the CO lbs/hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

Compliance with the ton per year CO emissions limitation is demonstrated by multiplying 8,760 hours of operation and the lb/hr emission limitation for CO of 1.36 lb/hr, then dividing by 2,000 lbs/ton.

c. Emissions Limitation:
$SO_2$ emissions shall not exceed 0.49 lb/hr and 2.13 tons/yr.

Applicable Compliance Method:
Compliance with the lb/hr emissions limitation shall be demonstrated by multiplying the emission factor for $SO_2$ of 0.00205 lb/HP-hr from AP-42, Table 3.3-1 (10/96) by the maximum rated capacity of P702 (237 HP). Compliance with the annual emission limitation is demonstrated by multiplying the actual annual hours of operation and the emission factor for $SO_2$ from AP-42, Table 3.3-1 (10/96) of 0.00205 lb/hp-hr by the maximum rated capacity of P702 (237 HP), then dividing by 2,000 lbs/ton.

If required, compliance with the $SO_2$ lbs/hr emissions limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

Compliance with the ton per year $SO_2$ emissions limitation is demonstrated by multiplying 8,760 hours of operation and the lb/hr emission limitation for $SO_2$ of 0.49 lb/hr, then dividing by 2,000 lbs/ton.

d. Emissions Limitation:
OC emissions shall not exceed 0.40 lb/hr and 1.73 tons/yr.

Applicable Compliance Method:
Compliance with the lb/hr emissions limitation shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications.

The lb/hr limit is equivalent to the g $NO_x$ + NMHC/kW-hr emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 175 and 750 horsepower (130 and 560 kilowatts). The OC

limits shall be calculated using a ratio of 74.6% NOx to 25.4% VOC. This ratio is based upon the linear relationship of NOx to NMHC from Table 1 of Subpart IIII, Table 1 from 40 CFR 89.112, to Tables 4, 5, and 6 from 40 CFR 1039.102:

4.0 g $NO_x$ + NMHC/kW-hr x 25.4% VOC = 1.0 grams OC/kW-hr

If required, compliance with the lb/hr emissions limitation shall be determined based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 - 4, and 18, 25, or 25A.

Compliance with the ton per year OC emissions limitation is demonstrated by multiplying 8,760 hours of operation and the lb/hr emission limitation for OC of 0.40 lb/hr, then dividing by 2,000 lbs/ton.

e. Emissions Limitations:
PE, $PM_{10}$ and $PM_{2.5}$ emissions shall not exceed 0.08 lb/hr and 0.35 ton/yr.

Applicable Compliance Method:
Compliance with the lb/hr emissions limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The lb/hr limit is equivalent to the g PM/kW-hr emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 175 and 750 horsepower (130 and 560 kilowatts).

If required, compliance with the lb/hr PE, $PM_{10}$ and $PM_{2.5}$ emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

Compliance with the ton per year PE, $PM_{10}$ and $PM_{2.5}$ emissions limitations is demonstrated by multiplying 8,760 hours of operation and the lb/hr emission limitation for PE of 0.08 lb/hr, then dividing by 2,000 lbs/ton.

f. Emissions Limitations:
Visible PE from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule.
Exhaust opacity must not exceed: 20% opacity during the acceleration mode, 15% opacity during the lugging mode, and 50% opacity during the peaks in either the acceleration or lugging modes.

Applicable Compliance Method:
If required, compliance with the visible PE limitation shall be determined according to USEPA Method 9.

g. Emissions Limitations:
Emissions shall not exceed:
4.0 grams NOx + NMHC/kW-hr
0.20 gram particulate matter (PM)/kW-hr
3.5 grams CO/kW-hr

Applicable Compliance Method:
Compliance with the emission limitations shall be based on the manufacturer's certification and by maintaining the engine according to the manufacturer's specifications. The g/kW-hr limits are the emission limitation from Table 1 of 40 CFR 89.112, the Tier 3 exhaust emission standards for diesel engines between 175 and 750 horsepower (130 and 560 kilowatts).

g) Miscellaneous Requirements

(1) Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute" in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.

**5. P703, 90 HP diesel-fired generator**

**Operations, Property and/or Equipment Description:**

90 HP Ford diesel-fired generator (model no. 2722E) manufactured in 1978; maximum of 3,500 hours of operation per rolling, 12-month period

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

(1) g)(2)

b) Applicable Emissions Limitations and/or Control Requirements

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

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| a. | OAC rule 3745-31-05(A)(3), as effective 11/30/01 | Nitrogen oxide ($NO_x$) emissions shall not exceed 2.79 lbs/hr.<br><br>Carbon monoxide (CO) emissions shall not exceed 0.60 lb/hr.<br><br>Sulfur dioxide ($SO_2$) emissions shall not exceed 0.18 lb/hr.<br><br>Organic compound (OC) emissions shall not exceed 0.23 lb/hr.<br><br>Emissions of particulate matter less than 2.5 microns ($PM_{2.5}$) shall not exceed 0.35 ton per year.<br><br>The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A), 3745-17-11(B)(5)(a) and 3745-31-05(D) and 40 CFR 63.6580 - 63.6675.<br><br>See b)(2)a. below. |
| b. | OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06 | See b)(2)b. below. |
| c. | OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD requirements for $NO_x$ and $PM/PM_{10}$, and voluntary restriction to avoid | $NO_x$ emissions shall not exceed 4.88 tons per rolling, 12-month period.<br><br>CO emissions shall not exceed 1.05 tons |

| | Applicable Rules/Requirements | Applicable Emissions Limitations/Control Measures |
|---|---|---|
| | BAT and state modeling for $NO_x$) | per rolling, 12-month period.<br><br>$SO_2$ emissions shall not exceed 0.32 ton per rolling, 12-month period.<br><br>OC emissions shall not exceed 0.40 ton per rolling, 12-month period.<br><br>Emissions of particulate matter (PM) and emissions of particulate matter less than 10 microns ($PM_{10}$) shall not exceed 0.35 ton per rolling, 12-month period.<br><br>See b)(2)c. and c)(2) below. |
| d. | OAC rule 3745-17-07(A)(1) | Visible particulate emissions from any stack serving this emissions unit shall not exceed 20 percent opacity as a six-minute average, except as provided by rule. |
| e. | OAC rule 3745-17-11(B)(5)(a) | PE shall not exceed 0.310 pound/million Btu of actual heat input. |
| f. | OAC rule 3745-18-06(G) | This emissions unit is exempt from the requirements of OAC rule 3745-18-06(G) pursuant to OAC rule 3745-18-06(B). |
| g. | OAC rule 3745-110-03(F) | This emissions unit is exempt from the requirements of OAC rule 3745-110-03(F) pursuant to OAC rule 3745-110-03(J)(3). |
| h. | 40 CFR Part 63, Subpart ZZZZ<br>(40 CFR 63.6580 - 63.6675)<br><br>[In accordance with 40 CFR 63.6590(a)(1)(ii), this emissions unit is an existing stationary compression ignition internal combustion engine with a site rating of less than or equal to 100 HP located at a major source of HAP emissions subject to the emissions limitations/control measures specified in this section.] | See b)(2)d. below. |
| i. | 40 CFR 63.1-15<br>(40 CFR 63.6665) | Table 8 to Subpart ZZZZ of 40 CFR Part 63 – Applicability of General Provisions to Subpart ZZZZ, specifies the provisions of Subpart A that apply to owners and operators of affected facilities subject to this subpart. |

(2) Additional Terms and Conditions

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

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

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the CO, $SO_2$, OC, and particulate emissions from this air contaminant source since the uncontrolled potential to emit for the CO, $SO_2$, OC, and particulate is less than 10 tons/yr.

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

Permit to Install P0105813 for this air contaminant source takes into account the following voluntary restriction (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. The maximum annual operating hours for this emissions unit shall not exceed 3,500.

ii. $NO_x$ shall not exceed 4.88 tons per year.

d. See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

c) Operational Restrictions

(1) The permittee shall burn only diesel fuel in this emissions unit.

(2) The permittee has requested a federally enforceable limitation on operating hours for the purposes of limiting potential to emit to avoid PSD requirements for $NO_x$ and $PM_{10}$. Therefore, the maximum number of operating hours for emissions unit P703 shall not exceed 3,500 hours as a rolling, 12-month summation. To ensure compliance during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours specified in the following table:

| Months(s) | Maximum Cumulative Operating Hours |
|---|---|
| 1-1 | 233 |
| 1-2 | 466 |
| 1-3 | 700 |
| 1-4 | 933 |
| 1-5 | 1,254 |
| 1-6 | 1,575 |
| 1-7 | 1,896 |
| 1-8 | 2,217 |
| 1-9 | 2,538 |
| 1-10 | 2,859 |
| 1-11 | 3,180 |
| 1-12 | 3,500 |

After the first 12 calendar months of operation following the startup of emissions unit P703, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

(3) See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

d) Monitoring and/or Recordkeeping Requirements

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

(2) The permittee shall maintain monthly records of the following information:

a. the operating hours for each month;

b. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the hours of operation; and

c. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

(3) See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

e) Reporting Requirements

(1) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

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

(3) The permittee shall submit quarterly deviation (excursion) reports that identify the following:

a. all exceedances of the rolling, 12-month limitation on the hours of operation for this emissions unit; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation;

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

(4) See 40 CFR Part 63, Subpart ZZZZ [40 CFR 63.6580 - 63.6675].

f) Testing Requirements

a. Emission Limitation:
$NO_x$ emissions shall not exceed 2.79 lbs/hr.
$NO_x$ emissions shall not exceed 4.88 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the lb/hr emissions limitation shall be demonstrated by multiplying the emission factor for $NO_x$ from AP-42, Table 3.3-1 (10/96) of 0.031 lb/HP-hr by the maximum rated capacity of P703 (90 HP). Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the uncontrolled emission factor for $NO_x$ from AP-42, Table 3.3-1 (10/96) of 0.031 lb/HP-hr by the maximum rated capacity of P703 (90 HP), then dividing by 2,000 lbs/ton.

If required, compliance with the $NO_x$ lb/HP-hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7.

b. Emission Limitation:
CO emissions shall not exceed 0.60 lbs/hr.
CO emissions shall not exceed 1.05 tons per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the lb/hr emission limitation shall be demonstrated by multiplying the emission factor for CO from AP-42, Table 3.3-1 (10/96) of 0.00668 lb/HP-hr by the maximum rated capacity of P703 (90 HP). Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the uncontrolled emission factor for CO from AP-42, Table 3.3-1 (10/96) of 0.00668 lb/HP-hr by the maximum rated capacity of P703 (90 HP), then dividing by 2,000 lbs/ton.

If required, compliance with the CO lbs/hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10.

c. Emission Limitation:
$SO_2$ emissions shall not exceed 0.18 lb/hr.

$SO_2$ emissions shall not exceed 0.32 ton per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor for $SO_2$ of 0.00205 lb/HP-hr from AP-42, Table 3.3-1 (10/96) by the maximum rated capacity of P703 (90 HP). Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the emission factor for $SO_2$ from AP-42, Table 3.3-1 (10/96) of 0.00205 lb/HP-hr by the maximum rated capacity of P703 (90 HP), then dividing by 2,000 lbs/ton.

If required, compliance with the $SO_2$ lbs/hr emission limitation shall be demonstrated based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6.

d. Emission Limitation:
OC emissions shall not exceed 0.23 lb/hr.
OC emissions shall not exceed 0.40 ton per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the lbs/hr emission limitation shall be demonstrated by multiplying the emission factor for OC of 0.00251 lb/HP-hr from AP-42, Table 3.3-1 (10/96) by the maximum rated capacity of P703 (90 HP). Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the emission factor for OC from AP-42, Table 3.3-1 (10/96) of 0.00251 lb/HP-hr by the maximum rated capacity of P703 (90 HP), then dividing by 2,000 lbs/ton.

If required, compliance with the lb/hr emission limitation shall be determined based upon the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 - 4, and 18, 25, or 25A.

e. Emissions Limitation:
$PM_{2.5}$ emissions shall not exceed 0.35 ton per year.

Applicable Compliance Method:
Compliance with the annual emissions limitation is demonstrated by multiplying the actual annual hours of operation and the emission factor for PE from AP-42, Table 3.3-1 (10/96) of 0.0022 lb/HP-hr by the maximum rated capacity of P703 (90 HP), then dividing by 2,000 lbs/ton.

f. Emissions Limitations:
$PM/PM_{10}$ emissions shall not exceed 0.35 ton per rolling, 12-month period.

Applicable Compliance Method:
Compliance with the rolling, 12-month emission limitation is demonstrated by multiplying the actual rolling, 12-month summation of hours of operation and the emission factor for PE from AP-42, Table 3.3-1 (10/96) of 0.0022 lb/HP-hr by the maximum rated capacity of P703 (90 HP), then dividing by 2,000 lbs/ton.

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

Applicable Compliance Method:
If required, compliance with the visible PE limitation shall be determined according to USEPA Method 9.

h. Emission Limitation:
PE shall not exceed 0.310 pound/million Btu of actual heat input.

Applicable Compliance Method:
Compliance shall be based upon an emission factor of 0.31 lb/million Btu. This emission factor is specified in the U.S. EPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 3.3, Table 3.3-1 (10/96).

g) Miscellaneous Requirements

(1) This emissions unit was manufactured in 1978. Therefore, 40 CFR Part 60 Subpart IIII (40 CFR 60. 4200 - 60.4219) does not apply pursuant to 40 CFR 60.4200.

(2) Modeling to demonstrate compliance with the “Toxic Air Contaminant Statute” in ORC 3704.03(F)(4)(b) was not necessary because the emissions unit’s maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTI or PTIO.