



State of Ohio Environmental Protection Agency

STREET ADDRESS:

Lazarus Government Center  
50 W. Town St., Suite 700  
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184  
www.epa.state.oh.us

MAILING ADDRESS:

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

9/18/2009

Pamela Blakley *Via E-Mail Notification*  
United States Environmental Protection Agency  
Mail Code: AR-18J  
77 West Jackson Blvd.  
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT  
Facility Name: Pilkington North America Inc  
Facility ID: 0487010012  
Permit Type: Renewal  
Permit Number: P0088670

Dear Ms. Blakley:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page <http://www.epa.state.oh.us/dapc> in Microsoft Word and Adobe Acrobat format. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

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

Cc: Toledo Department of Environmental Services

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director





State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

## **PROPOSED**

### **Air Pollution Title V Permit for Pilkington North America Inc**

Facility ID: 0487010012  
Permit Number: P0088670  
Permit Type: Renewal  
Issued: 9/18/2009  
Effective: To be entered upon final issuance  
Expiration: To be entered upon final issuance





State of Ohio Environmental Protection Agency  
 Division of Air Pollution Control

**Air Pollution Title V Permit**  
 for  
 Pilkington North America Inc

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State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

## Authorization

Facility ID: 0487010012

Facility Description: The facility manufactures float glass for industrial purposes and the automobile industry.

Application Number(s): A0019849, A0019850

Permit Number: P0088670

Permit Description: Title V renewal for float glass manufacturing facility

Permit Type: Renewal

Issue Date: 9/18/2009

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

Superseded Permit Number:

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

Pilkington North America Inc  
140 Dixie Highway  
Rossford, OH 43460-1215

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

Toledo Department of Environmental Services  
348 South Erie Street  
Toledo, OH 43604  
(419)936-3015

The above named entity is hereby granted a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Toledo Department of Environmental Services. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski  
Director



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

## **A. Standard Terms and Conditions**



**1. Federally Enforceable Standard Terms and Conditions**

- a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:
  - (1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions
  - (2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions
  - (3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting
  - (4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations  
*(Authority for term: ORC 3704.036(A))*

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

- a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - (1) The date, place (as defined in the permit), and time of sampling or measurements.
  - (2) The date(s) analyses were performed.
  - (3) The company or entity that performed the analyses.
  - (4) The analytical techniques or methods used.
  - (5) The results of such analyses.
  - (6) The operating conditions existing at the time of sampling or measurement.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))*
- b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.  
*(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))*
- c) The permittee shall submit required reports in the following manner:
  - (1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:



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

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

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

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

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

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

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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



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

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

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

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

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

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

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

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



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

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

- (4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

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

- (5) Reports of any required monitoring and/or record keeping information shall be submitted to Toledo Department of Environmental Services.

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

### **3. Scheduled Maintenance**

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

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

### **4. Risk Management Plans**

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

- a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or
- b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

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

### **5. Title IV Provisions**

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

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



**6. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.  
*(Authority for term: OAC rule 3745-77-07(A)(6))*

**7. General Requirements**

- a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d) This permit does not convey any property rights of any sort, or any exclusive privilege.
- e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.
- f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:
  - (1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or
  - (2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or
  - (3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee



shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

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

**8. Fees**

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

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

**9. Marketable Permit Programs**

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

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

**10. Reasonably Anticipated Operating Scenarios**

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

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

**11. Reopening for Cause**

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

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



- d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.  
*(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))*

**12. Federal and State Enforceability**

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

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

**13. Compliance Requirements**

- a) Any document (including reports) required to be submitted and required by a federally applicable requirement in this Title V permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - (1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.
  - (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.
- c) The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - (1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
  - (2) An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the



Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

- (1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.
- (2) Compliance certifications shall include the following:
  - (a) An identification of each term or condition of this permit that is the basis of the certification.
  - (b) The permittee's current compliance status.
  - (c) Whether compliance was continuous or intermittent.
  - (d) The method(s) used for determining the compliance status of the source currently and over the required reporting period.
  - (e) Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

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

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

#### **14. Permit Shield**

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

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

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

#### **15. Operational Flexibility**

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



soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

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

## **16. Emergencies**

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

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

## **17. Off-Permit Changes**

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

- a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.
- b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.
- c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).
- d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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



**18. Compliance Method Requirements**

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

**19. Insignificant Activities or Emissions Levels**

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

**20. Permit to Install Requirement**

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

**21. Air Pollution Nuisance**

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

**22. Permanent Shutdown of an Emissions Unit**

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

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

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.  
*(Authority for term: OAC rule 3745-77-01)*



**23. Title VI Provisions**

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

- a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.
- b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.
- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.  
*(Authority for term: OAC rule 3745-77-01(H)(11))*

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

The permittee shall submit required reports in the following manner:

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

**25. Records Retention Requirements Under State Law Only**

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

**26. Inspections and Information Requests**

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports



pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

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

**27. Scheduled Maintenance/Malfunction Reporting**

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

**28. Permit Transfers**

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

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

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

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

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

- a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or
- b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or
- c) where the company's responsible official has certified that an emissions unit has been permanently shut down.



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

## **B. Facility-Wide Terms and Conditions**



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

a) None.

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

- B021 - RAFFO Cleaver-Brooks package boiler (OAC rule 3745-31-03);
- B022 - RAFFO Cleaver-Brooks package boiler (OAC rule 3745-31-03);
- B023 - RAFFO Cleaver-Brooks package boiler (OAC rule 3745-31-03);
- F001 - roadways and parking areas (ORC 3704.036);
- F002 - cullet storage piles (ORC 3704.036);
- F008 – Batch cullet and feed system at doghouse (ORC 3704.036);
- T007 - 150,000-gallon fuel oil storage tank (ORC 3704.036);
- Z001 - Hotwell diesel storage tank (ORC 3704.036);
- Z002 - bath bottom diesel storage tank (ORC 3704.036);
- Z040 - RAFFO Cleaver-Brooks package boiler (OAC rule 3745-31-03);
- Z044 - 6F1 wareroom glass cutting system (ORC 3704.036);
- Z050 - 8 mmBtu/hr Cleaver-Brooks package boiler (OAC rule 3745-31-03); and
- Z051 - 6F3 wareroom glass cutting system (ORC 3704.036).

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

3. The following insignificant emissions units are located at this facility are exempt from permit requirements because they are not subject to any applicable requirements (as defined in OAC rule 3745-77-01(H)) or because they meet the “de minimis” criteria established in OAC rule 3745-15-05:

- B005 – ARU-1 gas fired heater (OAC rule 3745-15-05);
- B006 – ARU-2 gas fired heater (OAC rule 3745-15-05);
- B007 – ARU-3 gas fired heater (OAC rule 3745-15-05);
- B008 – ARU-4 gas fired heater (OAC rule 3745-15-05);
- B009 – ARU-5 gas fired heater (OAC rule 3745-15-05);
- B010 – ARU-6 gas fired heater (OAC rule 3745-15-05);
- B011 – ARU-7 gas fired heater (OAC rule 3745-15-05);
- B012 – ARU-8 gas fired heater (OAC rule 3745-15-05);
- B013 – ARU-9 gas fired heater (OAC rule 3745-15-05);
- B014 – ARU-10 gas fired heater (OAC rule 3745-15-05);
- B015 – ARU-11 gas fired heater (OAC rule 3745-15-05);
- B016 – ARU-12 gas fired heater (OAC rule 3745-15-05);
- B017 – ARU-13 gas fired heater (OAC rule 3745-15-05);
- B018 – ARU-14 gas fired heater (OAC rule 3745-15-05);
- B019 – ARU-16 gas fired heater (OAC rule 3745-15-05);
- B020 – ARU-4 gas fired heater (OAC rule 3745-15-05);
- F009 - 6F3 Main Line Lucor Dust Collector, +formerly Z074 (OAC rule 3745-15-05);
- F010 - Annealing Lehr for P001 (OAC rule 3745-15-05);
- F011 - Annealing Lehr for P003 (OAC rule 3745-15-05);
- G001 - gasoline/diesel fuel dispensing facility (OAC rule 3745-15-05);



- Z011 - bath bottom diesel cooling fan #1 (OAC rule 3745-15-05);
- Z012 - bath bottom diesel cooling fan #2 (OAC rule 3745-15-05);
- Z021 - RAFFO silk screen cleaning booth (OAC rule 3745-15-05);
- Z045 - instrument air backup air compressor (OAC rule 3745-15-05);
- Z046 - 6F1 #2 crusher with dust collector (OAC rule 3745-15-05);
- Z047 - off-line cutting system with dust collector (OAC rule 3745-15-05);
- Z048 - RAFFO CBG lines (low odor base solvent) (OAC rule 3745-15-05);
- Z049 - RAFFO trim/hardware application booth (OAC rule 3745-15-05);
- Z060 - F1A mixer B (OAC rule 3745-15-05);
- Z061 - F1B mixer A (OAC rule 3745-15-05);
- Z062 - F3A mixer D (OAC rule 3745-15-05);
- Z063 - F3B mixer C (OAC rule 3745-15-05);
- Z064 - BP-MM-1 (OAC rule 3745-15-05);
- Z065 - BP-MM-2 (OAC rule 3745-15-05);
- Z066 - BP-MM-4 (OAC rule 3745-15-05);
- Z067 - 6f1 unit A bin vents (OAC rule 3745-15-05);
- Z068 - 6f1 unit B bin vents (OAC rule 3745-15-05);
- Z069 - 6F3 unit C bin vents (OAC rule 3745-15-05);
- Z070 - 6F3 unit D bin vents (OAC rule 3745-15-05);
- Z071 - BP-RS-1 rail unloading (OAC rule 3745-15-05);
- Z072 - BP-RT-1 storage silo (OAC rule 3745-15-05); and
- Z073 - 6F3 Lucor dust collector (OAC rule 3745-15-05).

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



State of Ohio Environmental Protection Agency  
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**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

## **C. Emissions Unit Terms and Conditions**



**1. F003, 6F1 Hot End Cullet Handling System**

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

F003 - 6F1 Hot End Cullet Handling System controlled with baghouse #7

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	See b)(2)a.
b.	OAC rule 3745-17-07(B)(1)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	9.09 lbs/hr of particulate emissions
e.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d) and e)

(2) Additional Terms and Conditions

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

b. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08. Therefore, the visible particulate emission limitation and reasonably available control measures required in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively, do not apply to the fugitive emissions of this equipment

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

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



equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.

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

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Authority for term: OAC rule 3745-77-07(A)(3) and 40 CFR Part 64]

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop immediately after the corrective action, and the names of the personnel who performed the work.



Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1 to 7 inches of water.

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

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

- (4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the baghouse controlling this emissions unit are the static pressure drop across the baghouse, which was established in accordance with the manufacturer's recommendations and visible emission readings. When the static pressure drop show operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

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

- (5) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

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

- (6) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

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

- (7) Baghouse operating parameters shall be re-verified as a result of any changes to the operating conditions of the baghouse or emissions unit. In addition to periodic monitoring



of the baghouse operating parameters, the permittee also has an annual inspection and maintenance program for the baghouse, including but not limited to:

- a. checking the bags / filters for deterioration or degradation;
- b. checking the cleaning system for proper operation;
- c. checking the ductwork and conveyance systems for proper operation; and
- d. verifying the magnahelic pressure gauge with a digital manometer.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed. If the current CAM indicators and/or the baghouse inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

[OAC rule 3745-77-07(C)(1) and 40 CFR, Part 64]

- (8) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to filter bags, set of belts and spare bearings for blower motor, and replacement magnahelix pressure gauge.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;
  - b. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - c. an identification of each incident of deviation described above where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in (1)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. an identification of each incident of deviation described in (1)a. where proper records were not maintained for the investigation and/or the corrective action.

The deviation reports shall be submitted in accordance with the requirements specified in Section A - Standard Terms and Conditions A.2.c) of this permit.

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



f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

9.09 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor determined during the most recent stack test that demonstrated compliance (0.03 pound of particulate emissions per ton of glass draw based on the stack test conducted 6/15/01 for BH#6 and 29.1 tons of glass draw per hour), in pounds of particulates per ton of glass draw, by the production rate of glass (tons of glass draw per hour for the 6F1 furnace (P001)). If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Methods 1 through 5 and the methods and procedures of OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible emission observations performed in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1)

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

g) Miscellaneous Requirements

(1) None.



**2. F004, 6F1 Cold End Cullet Handling System**

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

F004 - 6F1 Cold End Cullet Handling System controlled with baghouses #4 and #5

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	See b)(2)a.
b.	OAC rule 3745-17-07(B)(1)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	23.43 lbs/hr of particulate emissions See b)(2)c.
e.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d) and e)

(2) Additional Terms and Conditions

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

b. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08. Therefore, the visible particulate emission limitation and reasonably available control measures required in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively, do not apply to the fugitive emissions of this equipment.

c. This emission limitation represents the total allowable particulate emissions for baghouse #4 and baghouse #5, combined.

c) Operational Restrictions

(1) None



d) Monitoring and/or Recordkeeping Requirements

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

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

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Authority for term: OAC rule 3745-77-07(A)(3) and 40 CFR Part 64]

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

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



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

The acceptable range for the pressure drop across the baghouse is 1 to 7 inches of water.

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

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

- (4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the baghouse controlling this emissions unit are the static pressure drop across the baghouse, which was established in accordance with the manufacturer's recommendations and visible emission readings. When the static pressure drop show operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

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

- (5) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

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

- (6) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

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



- (7) Baghouse operating parameters shall be re-verified as a result of any changes to the operating conditions of the baghouse or emissions unit. In addition to periodic monitoring of the baghouse operating parameters, the permittee also has an annual inspection and maintenance program for the baghouse, including but not limited to:
- a. checking the bags / filters for deterioration or degradation;
  - b. checking the cleaning system for proper operation;
  - c. checking the ductwork and conveyance systems for proper operation; and
  - d. verifying the magnahelic pressure gauge with a digital manometer.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed. If the current CAM indicators and/or the baghouse inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

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

- (8) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to filter bags, set of belts and spare bearings for blower motor, and replacement magnahelix pressure gauge.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
- a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;
  - b. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - c. an identification of each incident of deviation described above where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in (1)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. an identification of each incident of deviation described in (1)a. where proper records were not maintained for the investigation and/or the corrective action.

The deviation reports shall be submitted in accordance with the requirements specified in Section A - Standard Terms and Conditions A.2.c) of this permit.

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



f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

23.43 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor determined during the most recent stack test that demonstrated compliance (0.13 pound PE per ton of glass draw based on the stack test conducted on 4/22/01 for BH#3 and 29.1 tons of glass draw per hour), in pounds of particulates per ton of glass draw, by the production rate of glass (tons of glass draw per hour) for the 6F1 furnace (P001).. If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Methods 1 through 5 and the methods and procedures of OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible emission observations performed in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1)

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

g) Miscellaneous Requirements

(1) None.



**3. F005, 6F3 Hot End Cullet Handling System**

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

F005 - 6F3 Hot End Cullet Handling System with baghouse #6 for control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	See b)(2)a.
b.	OAC rule 3745-17-08(B)	See b)(2)a.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	10.50 lbs/hr of particulate emissions
e.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d) and e)

(2) Additional Terms and Conditions

a. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08. Therefore, the visible particulate emission limitation and reasonably available control measures required in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively, do not apply to the fugitive emissions of this equipment.

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

c) Operational Restrictions

(1) None

d) Monitoring and/or Recordkeeping Requirements

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



equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a weekly basis.

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

- (2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
- a. the color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emission incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Authority for term: OAC rule 3745-77-07(A)(3) and 40 CFR Part 64]

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

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop immediately after the corrective action, and the names of the personnel who performed the work.



Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable range for the pressure drop across the baghouse is 1 to 7 inches of water.

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

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

- (4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the baghouse controlling this emissions unit are the static pressure drop across the baghouse, which was established in accordance with the manufacturer's recommendations and visible emission readings. When the static pressure drop show operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

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

- (5) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

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

- (6) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

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

- (7) Baghouse operating parameters shall be re-verified as a result of any changes to the operating conditions of the baghouse or emissions unit. In addition to periodic monitoring



of the baghouse operating parameters, the permittee also has an annual inspection and maintenance program for the baghouse, including but not limited to:

- a. checking the bags / filters for deterioration or degradation;
- b. checking the cleaning system for proper operation;
- c. checking the ductwork and conveyance systems for proper operation; and
- d. verifying the magnahelic pressure gauge with a digital manometer.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed. If the current CAM indicators and/or the baghouse inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

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

- (8) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to filter bags, set of belts and spare bearings for blower motor, and replacement magnahelix pressure gauge.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
  - a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;
  - b. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - c. an identification of each incident of deviation described above where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in (1)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. an identification of each incident of deviation described in (1)a. where proper records were not maintained for the investigation and/or the corrective action.

The deviation reports shall be submitted in accordance with the requirements specified in Section A - Standard Terms and Conditions A.2.c) of this permit.

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



f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

10.50 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor determined during the most recent stack test that demonstrated compliance (0.03 pound PE per ton of glass draw based on the stack test conducted on 6/15/01 for BH#6 and 29.1 tons of glass draw per hour), in pounds of particulates per ton of glass draw, by the production rate of glass (tons of glass draw per hour) for the 6F3 furnace (P003). If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Methods 1 through 5 and the methods and procedures of OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

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

g) Miscellaneous Requirements

(1) None.



**4. F006, 6F3 Cold End Cullet Handling System**

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

F006 - 6F3 Cold End Cullet Handling System with baghouses #1 and #3 for control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(B)	See b)(2)a.
b.	OAC rule 3745-17-08(B)	See b)(2)a.
c.	OAC rule 3745-17-07(A)(1)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	27.1 lbs/hr of particulate emissions See b)(2)c.
e.	40 CFR, Part 64 - Compliance Assurance Monitoring (CAM)	See d) and e)

(2) Additional Terms and Conditions

a. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08. Therefore, the visible particulate emission limitation and reasonably available control measures required in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively, do not apply to the fugitive emissions of this equipment.

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

c. This emission rate is the total particulate emissions allowed for both baghouses combined.

c) Operational Restrictions

(1) None



d) Monitoring and/or Recordkeeping Requirements

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

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

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item (d) above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

[Authority for term: OAC rule 3745-77-07(A)(3) and 40 CFR Part 64]

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

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



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

The acceptable range for the pressure drop across the baghouse is 1 to 7 inches of water.

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

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

- (4) The CAM plan for this emissions unit has been developed for particulate emissions. The CAM performance indicators for the baghouse controlling this emissions unit are the static pressure drop across the baghouse, which was established in accordance with the manufacturer's recommendations and visible emission readings. When the static pressure drop show operation outside the indicator range(s), the permittee shall take corrective actions to restore operation of the emissions unit and/or its control equipment to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions, and shall comply with the reporting requirements specified in Section e) below. The emissions unit and control equipment shall be operated in accordance with the approved CAM Plan, or any approved revision of the Plan. The baghouse shall not be configured to have bypass capability.

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

- (5) At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

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

- (6) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance, the permittee shall promptly notify the appropriate Ohio EPA District Office or local air agency, and if necessary, submit a proposed modification to the Title V permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, re-establishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

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



- (7) Baghouse operating parameters shall be re-verified as a result of any changes to the operating conditions of the baghouse or emissions unit. In addition to periodic monitoring of the baghouse operating parameters, the permittee also has an annual inspection and maintenance program for the baghouse, including but not limited to:
- a. checking the bags / filters for deterioration or degradation;
  - b. checking the cleaning system for proper operation;
  - c. checking the ductwork and conveyance systems for proper operation; and
  - d. verifying the magnahelic pressure gauge with a digital manometer.

Based on the results of the monitoring and inspection program, repairs to the baghouse shall be made as needed. If the current CAM indicators and/or the baghouse inspection program is considered inadequate, the permittee shall develop a Quality Improvement Plan.

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

- (8) The permittee shall maintain a supply of replacement parts necessary to ensure ongoing proper operation of the baghouse system, including, but not limited to filter bags, set of belts and spare bearings for blower motor, and replacement magnahelic pressure gauge.

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:
- a. each period of time when the pressure drop across the baghouse field was outside of the acceptable range;
  - b. all days during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - c. an identification of each incident of deviation described above where a prompt investigation was not conducted;
  - d. an identification of each incident of deviation described in (1)a. where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. an identification of each incident of deviation described in (1)a. where proper records were not maintained for the investigation and/or the corrective action.

The deviation reports shall be submitted in accordance with the requirements specified in Section A - Standard Terms and Conditions A.2.c) of this permit.

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



f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

27.1 lbs/hr of particulate emissions (combined limit)

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor determined during the most recent stack test that demonstrated compliance (0.13 pound PE per ton of glass draw based on the stack test conducted on 4/22/01 for BH#3 and 26 tons of glass draw per hour), in pounds of particulates per ton of glass draw, by the production rate of glass (tons of glass draw per hour) for the 6F3 furnace (P003). If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Methods 1 through 5 and the methods and procedures of OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

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

g) Miscellaneous Requirements

(1) None.



**5. F007, 6F3 Batch and Cullet Feed System**

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

F007 - Batch and Cullet Feed System controlled by two cyclones (#1 and #2). Previously grouped under P008.

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-17-07(A)(1)	See b)(2)a.
b.	OAC rule 3745-17-07(B)(1)	See b)(2)b.
c.	OAC rule 3745-17-08(B)	See b)(2)b.
d.	OAC rule 3745-17-11(B)(1)	39.8 lbs/hr of particulate emissions See b)(2)c.

(2) Additional Terms and Conditions

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

b. This facility is not located in an Appendix A area as described in OAC rule 3745-17-08. Therefore, the visible particulate emission limitation and reasonably available control measures required in OAC rule 3745-17-07(B) and OAC rule 3745-17-08(B), respectively, do not apply to the fugitive emissions of this equipment.

c. This emission limitation represents the total allowable particulate emissions for cyclone #1 and cyclone #2, combined.

c) Operational Restrictions

(1) The permittee shall operate the cyclones whenever the 6F3 batch and cullet feed system is in operation.



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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain daily records that document any time periods when either cyclone was not in service when the associated emissions unit was in operation.

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

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

e) Reporting Requirements

- (1) The permittee shall notify the Toledo Division of Environmental Services in writing of any daily record showing that either cyclone was not in service when the associated emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Toledo Division of Environmental Services within 30 days after the event occurs.

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

- (2) The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the



appropriate Ohio EPA District Office or local air agency) by January 31 and July 31 of each year and shall cover the previous 6-month period.

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

f) Testing Requirements

(1) Compliance with the emission limitations in b)(1) and b)(2) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

39.8 lbs/hr of particulate emissions (combined limit)

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor determined during the most recent stack test that demonstrated compliance (0.01 pound PE per ton of glass draw based on the stack test conducted on 4/20/01 for Cyclone #1), in pounds of particulates per ton of glass draw, by the production rate of glass (tons of glass draw per hour), established through the record keeping requirements of d) for each cyclone. If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Methods 1 through 5 and the methods and procedures of OAC rule 3745-17-03(B)(10).

b. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

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

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

g) Miscellaneous Requirements

(1) None.



**6. P001, 6F1 Float Glass Melting Furnace**

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

P001 - 6F1 float glass melting furnace (23.8 tons glass draw per hour) fueled by natural gas and/or #2 fuel oil with no control equipment, tin bath and annealing Lehr

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) Compliance with the Air Toxics Policy, see d)(3), (4), (5), (6) and e)(6).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)  (PTI 04-01076 issued March 25, 1998, modified June 4, 2002 and April 2, 2008)	83.27 lbs/hour of NO <sub>x</sub> ;  364.7 tons per year of NO <sub>x</sub> , based upon a rolling, 12-month summation of the monthly emissions;  149.6 tons per year of particulate emissions (PE), based upon a rolling, 12-month summation of the monthly emissions;  243.84 tons per year of SO <sub>2</sub> , based upon a rolling, 12-month summation of the monthly emissions;  3.88 lbs/hour of carbon monoxide (CO)  16.99 tons per year of CO, based upon a rolling, 12-month summation of the monthly emissions;  2.45 lbs/hour of volatile organic compounds (VOC)  10.75 tons per year of VOC, based upon a rolling, 12-month summation of the monthly emissions;  25.64 lbs/hour of sulfuric acid mist  Salt cake usage limit not to exceed the



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		equivalent of 13 pounds salt cake per thousand pounds sand; and  See b)(2)a.
b.	OAC rule 3745-31-10 through 20	112.34 tons per year of sulfuric acid mist, based upon a rolling, 12-month summation of the monthly emissions.
c.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
d.	OAC rule 3745-17-11(B)(1)	38.91 lbs/hr of particulate emissions
e.	OAC rule 3745-18-06(E)(2)	55.67 lbs/hr of SO <sub>2</sub>
f.	OAC rule 3745-21-07(B)	See b)(2)b.
g.	OAC rule 3745-21-08(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-17-11(B)(1), and 3745-18-06(E)(2).
- b. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to



Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The production rate of glass draw shall not exceed 197,441 tons per year, based upon a rolling, 12-month summation of the monthly production rate. This production level was based upon the stack test conducted on April 17, 2008 and the emission factor of 2.47 lb of sulfur dioxide per ton of glass draw. If future testing results in lower emission factors being developed and approved by Ohio EPA (approval is assumed on the date the stack test report is submitted to Ohio EPA/TDES unless Ohio EPA/TDES notifies Pilkington of disapproval after review of the report), the production restriction will be adjusted based upon the following formula:

$$PR = EL \times (1/EF) \times 2000 \text{ lbs/ton}$$

where:

PR = the production rate (tons of glass draw per rolling, 12-month period);

EL = the emission limit, 364.73 tpy of Nox, 243.84 tpy of SO<sub>2</sub>, or 149.6 tpy of particulates (tons per rolling, 12-month period); and

EF = the emission factor determined from the most recent stack test for NO<sub>x</sub>, SO<sub>2</sub>, or particulates (lb of pollutant per ton of glass draw).

The new allowable production limit shall be the lowest production rate resulting from the above formula (whichever pollutant with the factor and emission limit that results in the lowest allowable production shall be used).

Compliance with the annual glass draw production rate limitation shall be based upon a rolling, 12-month summation of the monthly glass draw production rate.

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

- (2) The maximum annual salt cake and gypsum usage for this emissions unit shall not exceed the equivalent of 13 pounds of salt cake per thousand pounds of sand employed, based upon a rolling, 12-month summation of the salt cake and gypsum usage figures.

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

- (3) The permittee shall burn only natural gas and/or #2 fuel oil in this emissions unit.

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

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information:
  - a. The tons of glass draw produced, the pounds of salt cake, pounds of gypsum, and pounds of sand employed;



- b. the rolling, 12-month summation of glass draw produced;
- c. the rolling, 12-month summation of particulate emissions, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, and sulfuric acid mist, in tons (calculated as described in f(1)); and
- d. the hours of operation.

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

- (2) For each day during which the permittee burns a fuel other than natural gas and/or number two fuel oil, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

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

- (3) The PTI application for this emissions unit, P001, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
  - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
- c. This standard is then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting



calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or “worst case” toxic contaminant(s):

Toxic Contaminant: Selenium

TLV (mg/m<sup>3</sup>): 0.2

Maximum Hourly Emission Rate (lbs/hr): 3.05

Predicted 1-Hour Maximum Ground Level Concentration (ug/m<sup>3</sup>): 0.7789

MAGLC (ug/m<sup>3</sup>): 4.76

Toxic Contaminant: Hydrogen Chloride

TLV (mg/m<sup>3</sup>): 2.98

Maximum Hourly Emission Rate (lbs/hr): 7.78

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2.08

MAGLC (ug/m<sup>3</sup>): 71.0

Toxic Contaminant: Hydrogen Fluoride

TLV (mg/m<sup>3</sup>): 8.18

Maximum Hourly Emission Rate (lbs/hr): 1.04

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 0.28

MAGLC (ug/m<sup>3</sup>): 196

The permittee, has demonstrated that emissions of selenium, hydrogen chloride, and hydrogen fluoride, from emissions unit(s) P001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F).

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (4) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can



affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745 31 01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
  - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination



that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (6) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the ton per year emission limitations for particulate emissions, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, and sulfuric acid mist as a rolling, 12-month summation.

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the equivalent of 13 pounds of salt cake per thousand pounds of sand employed.

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

- (3) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas and/or #2 fuel oil was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

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

- (4) The permittee shall also submit annual reports that specify the total particulate emissions (or equivalent particulate matter less than 10 microns), CO, SO<sub>2</sub>, VOC, NO<sub>x</sub>, and sulfuric acid mist emissions from this emissions unit for the previous calendar year. These reports shall be submitted by April 15 of each year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

- (6) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the quarterly deviation (excursion) reports. If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.



Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with the requirements specified in 40 CFR Part 60, Appendix A, Method 9 and the methods and procedures specified in OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

The maximum annual salt cake and gypsum usage for this emissions unit shall not exceed the equivalent of 13 pounds of salt cake per thousand pounds of sand employed, based upon a rolling, 12-month summation of the salt cake and gypsum usage figures.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the requirements specified in d)(1) and the following equation:

$$EF = [A + (0.72B)] / C$$

where:

EF = the pounds of salt cake per thousand pounds of sand employed;

A = the amount of salt cake (Na<sub>2</sub>SO<sub>4</sub>) employed, in pounds;

B = the amount of gypsum (CaSO<sub>4</sub>\*2H<sub>2</sub>O) employed, in pounds; and

C = the amount of sand employed, in thousand pounds.

c. Emission Limitation:

25.64 lbs/hr of sulfuric acid mist

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the sulfuric acid mist emission factor determined during the most recent stack test (0.135 lb of H<sub>2</sub>SO<sub>4</sub> per ton of glass draw based on the stack test performed on April 17, 2008), in pound(s) of sulfuric acid mist emissions per ton of glass draw, by the average glass draw, in



tons per hour. Compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 4 and Method 8 of 40 CFR Part 60, Appendix A as specified in f)(2).

d. Emission Limitation:

112.34 tons per year of sulfuric acid mist

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the sulfuric acid mist emission factor, determined during the most recent stack test that demonstrated compliance, in pounds of sulfuric acid mist per ton of glass draw, by the rolling, 12-month summation of the production of glass draw, in tons, found in d)(1), and then dividing by 2000 lbs/ton.

e. Emission Limitation:

38.91 lbs/hr of particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the particulate emission factor determined during the most recent stack test that demonstrated compliance (1.39 lb of particulates per ton of glass draw based on the stack test performed on April 17, 2008), in pounds of particulate emissions per ton of glass draw, by the production rate of glass (tons of glass draw per hour), established through the record keeping requirements in d)(1). Compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60, Appendix A as specified in f)(2) and the methods and procedures specified in OAC rule 3745-17-03(B)(10).

f. Emission Limitation:

149.6 tons per year of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the particulate emission factor, determined during the most recent stack test that demonstrated compliance, in pounds of particulate emissions per ton of glass draw, by the rolling, 12-month summation of the production of glass draw, in tons, found in d)(1), and then dividing by 2000 lbs/ton.

g. Emission Limitation:

55.67 lbs/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the SO<sub>2</sub> emission factor determined during the most recent stack test that demonstrated compliance (2.47 lbs of SO<sub>2</sub> per ton of glass draw based on the stack test performed on April 17,



2008), in pounds of SO<sub>2</sub> per ton of glass draw, by the production rate of glass (tons of glass draw per hour) established through the record keeping requirements of d)(1). Compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A as specified in f)(2) and the methods and procedures of OAC rule 3745-18-04.

h. Emission Limitation:

243.84 tons per year of SO<sub>2</sub>

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the SO<sub>2</sub> emission factor determined during the most recent stack test that demonstrated compliance, in pounds of SO<sub>2</sub> per ton of glass draw, by the rolling, 12-month summation of the production of glass draw, in tons, established through the record keeping requirements in d)(1), and then dividing by 2000 lbs/ton.

i. Emission Limitation:

3.88 lbs/hr of CO

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the CO emission factor determined during the most recent stack test that demonstrated compliance (0.005 lb of CO per ton of glass draw based on the stack test performed on February 4, 2003), in pounds of CO per ton of glass draw, by the production rate of glass (tons of glass draw per hour), established through the record keeping requirements of d)(1). If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

j. Emission Limitation:

16.99 tons per year of CO

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the CO emission factor determined during the most recent stack test that demonstrated compliance, in pounds of CO per ton of glass draw, by the rolling, 12-month summation of the glass draw, in tons, and then dividing by 2000 lbs/ton. The rolling, 12-month summation of the glass draw, in tons, shall be determined based on the monitoring and record keeping requirements specified in d)(1).

k. Emission Limitation:

2.45 lbs/hr of VOC



Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the VOC emission factor of 0.1 pound of VOC per ton of glass draw (obtained from AP-42, 10/86 Edition, Table 11.15-2), by the glass draw, in tons per hour. The glass draw, in tons per hour, shall be determined based on the monitoring and record keeping requirements specified in d)(1). If required, the permittee shall also demonstrate compliance using Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and OAC rule 3745-21-10(C).

I. Emission Limitation:

10.75 tons per year of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the VOC emission factor of 0.1 pound of VOC per ton of glass draw (obtained from AP42, 10/86 Edition, Table 11.15-2), by the rolling, 12-month summation of the glass draw, in tons, and then dividing by 2000 lbs/ton. The rolling, 12-month summation of the glass draw, in tons, shall be determined based on the monitoring and record keeping requirements specified in d)(1).

m. Emission Limitation:

83.27 lbs/hr of NO<sub>x</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the NO<sub>x</sub> emission factor in pounds of NO<sub>x</sub> per ton of glass draw as determined during the most recent stack test (3.31 lbs of NO<sub>x</sub> per ton of glass draw based on stack test performed on April 17, 2008), by the glass draw, in tons per hour. The glass draw, in tons per hour, shall be determined through the record keeping requirements specified in d)(1). Compliance shall be demonstrated based upon emission testing performed in accordance with Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A as specified in f)(2).

n. Emission Limitation:

364.73 tons per year of NO<sub>x</sub>

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the NO<sub>x</sub> emission factor in pounds of NO<sub>x</sub> emissions per ton of glass draw as determined during the most recent stack test, by the rolling, 12-month summation of the glass draw, in tons, and then dividing by 2000 lbs/ton. The rolling, 12-month summation of the glass draw, in tons, shall be determined based on the monitoring and record keeping requirements specified in d)(1).

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



- (2) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
  - a. The emission testing shall be conducted within 2.5 years after the permit issuance, and within 6 months prior to the permit expiration.
  - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for particulates, SO<sub>2</sub>, NO<sub>x</sub>, and sulfuric acid mist.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
    - particulates - Methods 1 through 5 of 40 CFR Part 60, Appendix A;
    - SO<sub>2</sub> - Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A;
    - NO<sub>x</sub> - Methods 1 through 4 and Method 7 of 40 CFR Part 60, Appendix A; and
    - sulfuric acid mist - Methods 1 through 4 and Method 8 of 40 CFR Part 60, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.
  - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services.

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

g) Miscellaneous Requirements

- (1) None.



**7. P003, 6F3 Float Glass Melting Furnace**

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

29.8 tons of glass draw per hour, natural gas-fired float glass melting furnace (6F3) with 3R technology for NOx control

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) Compliance with the Air Toxics Policy, see d)(7), d)(8), d)(9), d)(10) and e)(11).

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) PTI 04-01200 issued on 9/26/2000 modified on 3/15/05 and 10/27/08	220 lbs/hr of nitrogen oxides (NOx); see b)(2)f. and g., 100 lbs/hr of sulfur dioxide (SO <sub>2</sub> ), 4.5 lbs/hr and 20 TPY of volatile organic compounds (VOC), and see b)(2)c. and b)(2)e.
b.	OAC rule 3745-17-07(C)	see b)(2)a.
c.	OAC rule 3745-17-11(B)(1)	41 lbs/hr of particulate emissions (PE)
d.	OAC rule 3745-18-06(E)(2)	see b)(2)b.
e.	OAC rule 3745-21-07(B)	see b)(2)h.
f.	OAC rule 3745-21-08(B)	see b)(2)d.
g.	OAC rule 3745-31-05(D) Synthetic Minor to avoid PSD PTI 04-01200 issued on 9/26/2000 modified on 3/15/05 and 10/27/08	144 TPY of PE, based upon a rolling, 365-day summation of the daily emissions, 945 TPY of NOx, based upon a rolling, 12-month summation of the monthly emissions, 272 TPY of SO <sub>2</sub> , based upon a rolling, 365-day summation of the daily emissions, and see c)(1).
h.	OAC rule 3745-31-10 thru 20 PTI 04-01200 issued on 9/26/2000 modified on 3/15/05 and 10/27/08	200 lbs/hr CO and 438 TPY of CO based upon a rolling, 12-month summation of the monthly emissions; see b)(2)f. and g; and 3.36 lb CO per ton glass draw.



(2) Additional Terms and Conditions

- a. Pursuant to the provisions of OAC rule 3745-17-07(C), this facility is hereby granted the following equivalent visible particulate emissions limitations for this emissions unit in lieu of the 20 and 60 percent opacity limitations specified in OAC rule 3745-17-07(A)(1)(a) and (A)(1)(b).
  - i. Except as otherwise specified in OAC rule 3745-17-07(A)(2) and (A)(3) and paragraph ii. below, this facility shall not cause or allow the discharge into the ambient air from any stack associated with this emissions unit any air contaminant of a shade or density greater than the equivalent visible emissions limitation (EVEL) established during the most recent stack test (an EVEL of 36.7 percent opacity, as a six-minute average was established on the December 4, 2001 stack test).
  - ii. This facility may cause or allow the discharge into the ambient air from any stack associated with this emissions unit for not more than six consecutive minutes in any 60 minutes any air contaminant of a shade or density not greater than 60 percent opacity, as a six-minute average.

For the purpose of determining compliance with the equivalent visible particulate emissions limitations specified above, visible particulate emissions shall be determined according to the test methods and procedures prescribed in OAC rule 3745-17-03(B)(1).

- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) or 3745-17-07(C), OAC rule 3745-17-11(B)(1), OAC rule 3745-31-05(D) and OAC rule 3745-31-10 through 20.
- d. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio

- e. The permittee shall maintain a written quality assurance/quality control plan for the continuous NO<sub>x</sub> and CO monitoring system, designed to ensure continuous valid and representative readings of NO<sub>x</sub> and CO emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO<sub>x</sub> and CO monitoring system must be kept on site and available for inspection during regular office hours.



The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendix F]

- f. The continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

Authority for term: [40 CFR 60.2] and/or [40 CFR 63.2] and [Appendix F to 40 CFR Part 60]

- g. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The production rate of glass draw shall not exceed 229,535 tons per year, based upon a rolling, 365-day summation of the daily production rate. This production level was initially based upon the established emission factors of 2.37 lbs of SO<sub>2</sub> per ton of glass draw or 1.2 lbs of PE per ton of glass draw. If future stack testing results in different emission factors being developed and approved by Ohio EPA, for particulates based on the color/type (i.e., dark, light or clear) of glass produced or sulfur dioxide, the calculated allowable production restriction will adjust based upon the formula stated below. Approval is assumed on the date the stack test report is submitted to Ohio EPA/TDES unless Ohio EPA/TDES notifies Pilkington of disapproval after review of the report. The allowable 365-day production rate shall be calculated each day using the most current emission factor for particulates for the color/type of glass produced and the most current emission factor for sulfur dioxide.

$$PR = EL * (1/EF) * 2000 \text{ lbs/ton}$$

where:

PR = the calculated, allowable production rate (tons of glass draw per rolling 365-day period)

EL = the emission limit, 272 TPY of SO<sub>2</sub> or 144 TPY of PE (tons per rolling 365-day period)



EF = the weighted average emission factor determined using the following formula:

$$EF = ((EF_1 * \text{Days of Production of Type 1 Glass}) + (EF_2 * \text{Days of Production of Type 2 Glass}) + (EF_n * \text{Days of Production of Type n Glass}))/365$$

Each  $EF_x$  will come from the most current stack test for PE (lb of PE per ton of glass draw for the color/type of glass produced) or the most current emission factor for  $SO_2$  (lb of  $SO_2$  per ton of glass draw).

The new calculated, allowable production limit shall be the lowest production rate resulting from the above formula (whichever pollutant with the emission factor and emissions limit that results in the lowest allowable production shall be used).

The emissions of particulates from this emissions unit shall not exceed 144 tons per year and emissions of sulfur dioxide from this emissions unit shall not exceed 272 tons per year, based upon a rolling, 365-day summation of the daily emissions.

Compliance with the annual glass draw production rate limitation shall be based upon a rolling, 365-day summation of the daily glass-draw production rate.

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

- (2) The salt cake usage rate, in pounds per ton of glass draw, shall not exceed the rate determined during the most recent stack test which demonstrated compliance with the emission limitation.

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

- (3) The permittee shall test the decrepitation of dolomite used for glass production on a biweekly basis. If the dolomite decrepitation value (percentage) obtained from biweekly testing exceeds the highest acceptable dolomite decrepitation value for the particular color/type of glass produced plus 0.7%, then the permittee shall perform a new particulate stack test as soon as practical after receipt of the dolomite decrepitation test result, and while using the type of dolomite that caused the exceedance. Ohio EPA reserves the right to propose a change in the 0.7% dolomite decrepitation buffer if stack test results indicate that particulate emissions are approaching the short-term emission limit. The "highest acceptable dolomite decrepitation value" shall mean the highest dolomite decrepitation test result, expressed as a percentage, that was measured in association with a Method 5 stack test that yielded an average emission rate less than or equal to 41 lbs/hr of particulate emissions for a particular color/type of glass.

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

- (4) The 365-day, rolling summation of the daily emissions of particulates is calculated by multiplying the current emission factor(s) (tons of particulates per ton of glass draw) determined from the most recent stack test that demonstrated compliance for the type of glass produced, times the daily production rate (tons of glass draw per day); and adding this quantity to the summation of the previous 364 days. The calculation of the 365-day, rolling summation of the daily emissions of sulfur dioxide shall use the emission factor(s) (tons of sulfur dioxide per ton of glass draw) determined from the most recent stack test which demonstrated compliance.



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

d) Monitoring and/or Recordkeeping Requirements

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emission incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

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

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

- a. the tons of glass draw;
- b. the total number of hours this emissions unit was in operation;
- c. the monthly average production rate of glass, in tons of glass draw per hour, (a. ÷ b.);
- d. the rolling, 12-month summation of CO, in tons;
- e. the rolling, 12-month summation of NOx, in tons;
- f. the salt cake usage, in pounds; and
- g. the salt cake usage rate, in pounds per ton of glass draw (f. ÷ a.).

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



- (3) The permittee shall maintain biweekly records of the test results for the dolomite decrepitation value (percentage) matched to the color/type of glass produced.

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

- (4) The permittee shall maintain daily records of the following:
  - a. actual production rate, in tons of glass draw per day;
  - b. the glass color/type produced;
  - c. the current emission factor for the glass color/type made that day (ton of emissions per ton of glass draw) for particulates and sulfur dioxide. If there is a change of glass color/type during the day, the higher emission factor must be used for that day's calculation;
  - d. the calculation of the rolling, 365-day summation of the daily particulate emissions and sulfur dioxide emissions (tons per year).;
  - e. the calculation of the allowable 365-day annual production rate using the equation in c)(1) based upon the weighted average particulate emission factor for the color/type of glass produced or the sulfur dioxide emission factor; and
  - f. the calculation of the actual rolling, 365-day summation of the daily production rate (in tons of glass draw per year).

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

- (5) NOx CEM Monitoring and Recordkeeping
  - a. The permittee shall maintain on site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NOx monitoring systems has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. The letter(s)/document(s) of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- b. The permittee shall operate and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.

The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:



- i. emissions of NOx in parts per million on an instantaneous (one-minute) basis;
- ii. emissions of NOx in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;
- iii. results of quarterly cylinder gas audits;
- iv. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- v. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- vi. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;
- vii. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;
- viii. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,
- ix. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

(6) CO CEM Monitoring and Recordkeeping

- a. The permittee shall maintain on site, the document(s) of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous carbon monoxide (CO) monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6. The letter(s)/document(s) of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendix B]

- b. The permittee shall operate and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:



- i. emissions of CO in parts per million on an instantaneous (one-minute) basis;
- ii. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;
- iii. results of quarterly cylinder gas audits;
- iv. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;
- v. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);
- vi. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;
- vii. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;
- viii. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; as well as,
- ix. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

(7) Compliance with the Air Toxics Policy

The permit-to-install (PTI) application for this emissions unit, P003, was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this emissions unit for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):



- i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or
  - ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.
- b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).
  - c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "X" hours per day and "Y" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/X \times 5/Y = 4 TLV/XY = MAGLC$$

- d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Selenium

TLV (mg/m<sup>3</sup>): 0.2

Maximum Hourly Emission Rate (lbs/hr): 3.81

Predicted 1-Hour Maximum Ground Level Concentration (ug/m<sup>3</sup>): 1.21

MAGLC (ug/m<sup>3</sup>): 4.76

Toxic Contaminant: Sulfuric Acid Mist

TLV (mg/m<sup>3</sup>): 1000

Maximum Hourly Emission Rate (lbs/hr): 2.67

Predicted 1-Hour Maximum Ground Level Concentration (ug/m<sup>3</sup>): 0.86

MAGLC (ug/m<sup>3</sup>): 23.8

Toxic Contaminant: Hydrogen Chloride

TLV (mg/m<sup>3</sup>): 2.98

Maximum Hourly Emission Rate (lbs/hr): 7.31



Predicted 1-Hour Maximum Ground Level Concentration (ug/m<sup>3</sup>): 1.68

MAGLC (ug/m<sup>3</sup>): 71.0

Toxic Contaminant: Hydrogen Fluoride

TLV (mg/m<sup>3</sup>): 08.18

Maximum Hourly Emission Rate (lbs/hr): 1.25

Predicted 1-Hour Maximum Ground Level Concentration (ug/m<sup>3</sup>): 0.29

MAGLC (ug/m<sup>3</sup>): 196

The permittee, has demonstrated that emissions of selenium, sulfuric acid mist, hydrogen chloride, or hydrogen fluoride, from emissions unit P003, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (8) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
  - a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
  - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
  - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745 31 01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to



determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
  - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
  - b. the Maximum Acceptable Ground Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
  - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
  - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

- (10) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports which (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions.

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



- (2) The permittee shall submit deviation (excursion) reports which identify all exceedences of the rolling 12-month emission limitations for CO, and NOx.

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

- (3) The permittee shall submit quarterly summations of the daily records for glass draw color/type, the calculated, allowable production rate, hours of operation, the rolling, 365-day summation of particulate emissions and the rolling, 365-day summation of sulfur dioxide emissions. These reports shall be submitted along with the deviation reports and cover the same time period.

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

- (4) The permittee shall submit quarterly, a summary of the biweekly dolomite decrepitation value for each particular color/glass type.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Terms and Conditions in this permit. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

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

- (6) The permittee shall submit a deviation (excursion) report within 30 days of any exceedance(s) of the rolling, 365-day particulates or sulfur dioxide emission limitation, along with the cause and corrective action. This report shall be submitted in writing to The Toledo Division of Environmental Services.

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

- (7) The permittee shall submit a deviation (excursion) report within 30 days of any exceedance(s) of the rolling, 365-day actual production rate when compared to the calculated allowable 365 day production rate, along with the cause and corrective action. This report shall be submitted in writing to The Toledo Division of Environmental Services.

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

- (8) The permittee shall submit quarterly summations of the monthly records for the salt cake usage rate, in pounds per ton of glass draw. These reports shall be submitted along with the deviation reports required in e) of these terms and conditions and cover the same time period.

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

- (9) NOx CEM Reporting

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:



- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NO<sub>x</sub> emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
  - i. the facility name and address;
  - ii. the manufacturer and model number of the continuous NO<sub>x</sub> and other associated monitors;
  - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
  - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total NO<sub>x</sub> emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;
  - vii. the total operating time of the continuous NO<sub>x</sub> monitoring system while the emissions unit was in operation;
  - viii. results and dates of quarterly cylinder gas audits;
  - ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
  - x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NO<sub>x</sub> monitor out-of-control and the compliant results following any corrective actions;
  - xi. the date, time, and duration of any/each malfunction\*\* of the continuous NO<sub>x</sub> monitoring system, emissions unit, and/or control equipment;
  - xii. the date, time, and duration of any downtime\*\* of the continuous NO<sub>x</sub> monitoring system and/or control equipment while the emissions unit was in operation; and



- xiii. the reason (if known) and the corrective actions taken (if any) for each event in b.xi. and xii.

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

\*\* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[Authority for term: 40 CFR 60.7]

(10) CO CEM Reporting

The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

- a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-21, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as, the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).
- b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:
  - i. the facility name and address;
  - ii. the manufacturer and model number of the continuous CO and other associated monitors;
  - iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;
  - iv. the excess emissions report (EER)\*, i.e., a summary of any exceedances during the calendar quarter, as specified above;
  - v. the total CO emissions for the calendar quarter (tons);
  - vi. the total operating time (hours) of the emissions unit;



- vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;
- viii. results and dates of quarterly cylinder gas audits;
- ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));
- x. unless previously submitted, the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;
- xi. the date, time, and duration of any/each malfunction\*\* of the continuous CO monitoring system, emissions unit, and/or control equipment;
- xii. the date, time, and duration of any downtime\*\* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and
- xiii. the reason (if known) and the corrective actions taken (if any) for each event in b.xi. and xii.

Each report shall address the operations conducted and data obtained during the previous calendar quarter.

\* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

\*\* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[Authority for term: 40 CFR 60.7]

(11) AIR TOXICS POLICY REPORTING

The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), through the predicted 1-hour maximum ground level concentration. If no changes to the emissions unit or the exhaust stack have been made, then the report shall include a statement to this effect. This report shall be postmarked or delivered no later than January 31 following the end of each calendar year.

Authority for term: [ORC 3704.03(F)(3)(c) and F(4)], [OAC rule 3745-114-01], Option A, Engineering Guide #70



f) Testing Requirements

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

a. Emission Limitation:

36.7% opacity as a 6-minute average (based on the EVEL established on the December 2001 stack test)

Applicable Compliance Method:

If required, compliance shall be demonstrated through visible emissions readings performed in accordance with the requirements of 40 CFR 60, Appendix A, Method 9 and the methods and procedures of OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

3.36 lb CO per ton glass draw

Applicable Compliance Method:

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

c. Emission Limitation:

200 lbs/hr CO

Applicable Compliance Method:

Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

d. Emission Limitation:

438 TPY CO



Applicable Compliance Method:

The applicable compliance method shall be the rolling, 12-month summation of CO emissions as determined in d)(2) and (6).

e. Emission Limitation:

220 lbs/hr of NOx

Applicable Compliance Method:

Ongoing compliance with the NOx emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

Authority for term: [40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

f. Emission Limitation:

945 TPY of NOx

Applicable Compliance Method:

The applicable compliance method shall be the rolling, 12-month summation of NOx emissions as determined in d)(2) and d)(5).

g. Emission Limitation:

41 lbs/hr of PE

Applicable Compliance Method:

Multiply the particulate emission factor for the particular color/type of glass determined during the most recent stack test that demonstrated compliance, in pounds of particulates per ton of glass draw, by the production rate of glass (tons of glass draw per hour), established through the record keeping requirements of d)(4). If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Method 5 and the methods and procedures of OAC rule 3745-17-03(B)(10).

h. Emission Limitation:

144 TPY of PE based on a rolling, 365-day summation

Applicable Compliance Method:

Multiply the current emission factor for particulates, determined from the most recent stack test that demonstrated compliance, for the type of glass produced, times the daily production rate (tons of glass draw per day) and add this quantity to the summation of the previous 364-days and divide by 2000 lbs/ton. The



rolling, 365-day summation of the glass draw, in tons, shall also be determined through the monitoring and record keeping requirements of d)(4).

i. Emission Limitation:

100 lbs/hr of SO<sub>2</sub>

Applicable Compliance Method:

Multiply the sulfur dioxide emission factor determined during the most recent stack test that demonstrated compliance, in pounds of SO<sub>2</sub> per ton of glass draw, by the production rate of glass (tons of glass draw per hour), established through the record keeping requirements of d)(4). If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Method 6 and the methods and procedures of OAC rule 3745-18-04.

j. Emission Limitation:

272 TPY of SO<sub>2</sub> based on a rolling, 365-day summation

Applicable Compliance Method:

Multiply the SO<sub>2</sub> emission factor determined during the most recent stack test that demonstrated compliance, in pounds of SO<sub>2</sub> emissions per ton of glass draw, times the daily tons of glass draw and add it to the previous rolling, 364-day summation, and divide by 2000 lbs/ton. The rolling, 365-day summation of the glass draw, in tons, shall also be determined through the monitoring and record keeping requirements of d)(4).

k. Emission Limitation:

4.5 lbs/hr VOC

Applicable Compliance Method:

Multiply the VOC emission factor determined during the most recent stack test that demonstrated compliance, in pound(s) of VOC emissions per ton of glass draw, times the average glass draw, in tons per hour. The average glass draw, in tons per hour, shall be determined through the monitoring and recordkeeping requirements of d)(2). If required, the permittee shall also demonstrate compliance using Method 25 of 40 CFR Part 60, Appendix A.

l. Emission Limitation:

20 TPY of VOC

Applicable Compliance Method:

Multiply the VOC emission factor determined during the most recent stack test that demonstrated compliance, in pound(s) of VOC emissions per ton of glass draw, times the rolling, 12-month summation of the glass draw, in tons, and divide by 2000 lbs/ton. The rolling, 12-month summation of the glass draw, in



tons, shall be determined by the monitoring and recordkeeping requirements of d)(2).

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

(2) The permittee shall conduct, or have conducted, emission testing for emissions unit P003 in accordance with the following requirements:

- a. The emission testing shall be conducted within 6 months after issuance of this permit, within 2.5 years after permit issuance, and within 6 months prior to the permit expiration.
- b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for PE, SO<sub>2</sub>, NO<sub>x</sub>, CO, VOC, and opacity.
- c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

Particulates	Method 5 of 40 CFR 60, Appendix A
SO <sub>2</sub>	Method 6 or 6c of 40 CFR 60, Appendix A
NO <sub>x</sub>	Method 7 or 7e of 40 CFR 60, Appendix A
Opacity	Method 9 of 40 CFR 60, Appendix A
CO	Method 10 of 40 CFR 60, Appendix A
VOC	Method 25 of 40 CFR 60, Appendix A

The permittee may request to use an alternative method or procedure. The Ohio EPA will consider the request, including any evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement. A relative accuracy test audit (RATA) conducted within 6 months of the testing time frame can be used in lieu of a separate stack test provided the following conditions are met: three (3) RATA test runs are added together to equal one (1) stack test run; the emissions unit is operating at or near its maximum capacity; and the drift test passes at the end of each RATA test run.

The stack test(s) shall be conducted while the emission unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Toledo Division of Environmental Services. Operation at less than 90% of the maximum capacity (i.e., less than 90% of an average 30 tons per hour of glass draw during the recorded period of any test) of the emission unit, may result in additional emission limitations and/or additional stack testing if the production rate subsequently exceeds 110% of the production rate during the test.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. 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 Toledo Division of Environmental Services refusal to accept the results of the emission test(s).

Personnel from the Toledo Division of Environmental Services 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 performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s).

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

(3) DOLOMITE TESTING

- a. Prior to December 28, 2008, the permittee shall perform a U.S. EPA Reference Method 5 stack test for particulates during each production run of a different glass color/type (i.e. after normal furnace operations are resumed following a transition from clear, light, or dark glass production to a different color/type of glass production). The permittee shall also obtain a corresponding sample of the dolomite being used as a raw material near the time of any Method 5 stack test to determine the percent decrepitation of such dolomite. This value shall be reported in the stack test report.
- b. After December 28, 2008, the permittee shall perform at least one Method 5 stack test for particulates during each calendar year.
- c. The permittee shall perform a U.S. EPA Reference Method 5 stack test for particulates within 30 days of a transition to any different glass color/type that has not been tested within the past 2.5 years.

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

(4) NOx and CO CEM QA/QC

The permittee shall conduct the audits stated in f)(4)a. and b. or (f)(4)a. and c. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:

- a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable Performance Specifications (PS) in Appendix B (e.g., PS 4 and 6 for CO and PS 6 for NOX). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Method 7).
  - i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. 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 Toledo Division of Environmental Services refusal to accept the results of the emission test(s).

ii. Personnel from the Toledo Division of Environmental Services 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.

b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.

c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.

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

g) Miscellaneous Requirements

(1) None.



**8. P011, Backup Air Compressor**

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

P011 - Diesel-fired Emergency Air Compressor (890 hp), with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	9.1 lbs/hr of nitrogen oxides (NOx) 8.7 tons per year of NOx  2.8 lbs/hr of carbon monoxide (CO) 2.7 tons per year of CO  0.9 lb/hr of particulate emissions (PE) 0.9 ton per year of particulate emissions  0.9 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 0.8 ton per year of SO <sub>2</sub>  1.0 lb/hr of volatile organic compounds (VOC) 1.0 ton per year of VOC  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	OAC rule 3745-21-07(B)	See b)(2)b.
f.	OAC rule 3745-21-08(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the requirements established pursuant to OAC rule 3745-31-05(C) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The permittee shall burn only commercially available diesel fuel in this emissions unit.  
[Authority for term: OAC rule 3745-77-07(A)(1)]
- (2) The annual fuel usage of emissions unit P011 shall not exceed 40,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.  
[Authority for term: OAC rule 3745-77-07(A)(1)]



d) Monitoring and/or Recordkeeping Requirements

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

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

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

- a. the fuel usage for each month, in gallons per month, for this emissions unit; and
- b. the rolling, 12-month summation of the fuel usage for this emissions unit.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2).

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions. This report shall be submitted to the Toledo Division of Environmental Services by April 15<sup>th</sup> of each year.

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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30<sup>th</sup> of each year and shall cover the previous calendar year.



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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

- a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

- b. Emission Limitation:

9.1 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (20.9 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

- c. Emission Limitation:

8.7 tons per year of NOx

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

- d. Emission Limitation:

2.8 lbs/hr of CO



Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (20.9 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

2.7 tons per year of CO

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

0.9 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (20.9 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.9 tons per year of particulate emissions

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.9 lb/hr of SO<sub>2</sub>



Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (20.9 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.8 tons per year of SO<sub>2</sub>

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

1.0 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (20.9 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

1.0 tons per year of VOC

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

g) Miscellaneous Requirements

(1) None.



**9. P012, 6-F1 Diesel-fired Generator**

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

P012 - 6-F1 CAT Diesel-fired Generator (420 hp) for Fin Fan cooler with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	10.0 lbs/hr of nitrogen oxides (NOx) 3.1 lbs/hr of carbon monoxide (CO) 1.0 lb/hr of particulate emissions 0.9 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 1.1 lbs/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P012, P013, and P014, combined (Group 1) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

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

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

- (2) The annual fuel usage of emissions units P012, P013, and P014, combined (Group 1), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.

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



d) Monitoring and/or Recordkeeping Requirements

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

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

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

- a. the fuel usage for each month, in gallons per month, for each Group 1 emissions unit; and
- b. the rolling, 12-month summation of the fuel usage for emissions units P012, P013, and P014, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for the Group 1 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P012, P013, and P014, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.

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



- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

- a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

- b. Emission Limitation:

10.0 lbs/hr of NO<sub>x</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the NO<sub>x</sub> emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NO<sub>x</sub> emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

- c. Emission Limitation:

3.9 tons per year of NO<sub>x</sub> for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NO<sub>x</sub> emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

3.1 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

1.0 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.9 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 ton per year of SO<sub>2</sub> for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

1.1 lbs/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 ton per year of VOC for emissions units P012, P013, and P014, combined



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**10. P013, 6-F3 Diesel-fired Generator**

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

P013 - 6-F3 CAT Diesel-fired Generator (890 hp, model 3406) for Fin Fan with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	10.0 lbs/hr of nitrogen oxides (NOx)  3.1 lbs/hr of carbon monoxide (CO)  1.0 lb/hr of particulate emissions  0.9 lb/hr of sulfur dioxide (SO <sub>2</sub> )  1.1 lbs/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P012, P013, and P014, combined (Group 1) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the rule.
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.
g.	OAC rule 3745-17-11(B)(5)	See b)(2)a.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

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

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



- (2) The annual fuel usage of emissions units P012, P013, and P014, combined (Group 1), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.

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

d) Monitoring and/or Recordkeeping Requirements

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

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

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

- a. the fuel usage for each month, in gallons per month, for each Group 1 emissions unit; and
- b. the rolling, 12-month summation of the fuel usage for emissions units P012, P013, and P014, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for the Group 1 emissions units.

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



- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NOx, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P012, P013, and P014, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.

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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

- a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

- b. Emission Limitation:

10.0 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

- c. Emission Limitation:

3.9 tons per year of NOx for emissions units P012, P013, and P014, combined



Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

d. Emission Limitation:

3.1 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

1.0 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).



g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.9 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 ton per year of SO<sub>2</sub> for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

1.1 lbs/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (22.9 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1



through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 ton per year of VOC for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**11. P014, 6-F3 Diesel-fired Generator for Hotwell Pumps**

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

P014 - 6-F3 CAT Diesel-fired Generator (460 hp 6-F3 CAT model 3412) for Hotwell Pumps with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	19.3 lbs/hr of nitrogen oxides (NOx)  5.9 lbs/hr of carbon monoxide (CO)  1.9 lbs/hr of particulate emissions  1.8 lbs/hr of sulfur dioxide (SO <sub>2</sub> )  2.2 lbs/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P012, P013, and P014, combined (Group 1) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the rule.
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

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

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

- (2) The annual fuel usage of emissions units P012, P013, and P014, combined (Group 1), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.



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

d) Monitoring and/or Recordkeeping Requirements

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

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

- (2) The permittee shall maintain monthly records of the following information:
  - a. the fuel usage for each month, in gallons per month, for each Group 1 emissions unit; and
  - b. the rolling, 12-month summation of the fuel usage for emissions units P012, P013, and P014, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for the Group 1 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P012, P013, and P014, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.



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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

19.3 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (44.2 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

c. Emission Limitation:

3.9 tons per year of NOx for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

5.9 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (44.2 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

1.9 lbs/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (44.2 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

1.8 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (44.2 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 ton per year of SO<sub>2</sub> for emissions units P012, P013, and P014, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

2.2 lbs/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (44.2 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 ton per year of VOC for emissions units P012, P013, and P014, combined



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Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**12. P015, 6-F1-A Diesel-fired Pump**

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

P015 - 6F1-A CAT Diesel-fired Cooling Pump (234 hp model 3306) no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	5.1 lbs/hr of nitrogen oxides (NOx) 1.6 lbs/hr of carbon monoxide (CO) 0.5 lb/hr of particulate emissions 0.5 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 0.6 lb/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P015, P016, and P017, combined (Group 2) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B)
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

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

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

- (2) The annual fuel usage of emissions units P015, P016, and P017, combined (Group 2), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.

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



d) Monitoring and/or Recordkeeping Requirements

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

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

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

- a. the fuel usage for each month, in gallons per month, for each Group 2 emissions unit; and
- b. the rolling, 12-month summation of the fuel usage for emissions units P015, P016, and P017, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for Group 2 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P015, P016, and P017, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.

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



- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

5.1 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

c. Emission Limitation:

3.9 tons per year of NOx for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

1.6 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

0.5 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.5 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 ton per year of SO<sub>2</sub> for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

0.6 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 ton per year of VOC for emissions units P015, P016, and P017, combined



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Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**13. P016, 6-F1-B Diesel-fired Pump**

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

P016 - 6F1-B CAT Diesel-fired Cooling Pump (234 hp, model 3306) with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	5.1 lbs/hr of nitrogen oxides (NOx) 1.6 lbs/hr of carbon monoxide (CO) 0.5 lb/hr of particulate emissions 0.5 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 0.6 lb/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P015, P016, and P017, combined (Group 2) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The permittee shall burn only commercially available diesel fuel in this emissions unit.  
 [Authority for term: OAC rule 3745-77-07(A)(1)]
- (2) The annual fuel usage of emissions units P015, P016, and P017, combined (Group 2), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.



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

d) Monitoring and/or Recordkeeping Requirements

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

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

- (2) The permittee shall maintain monthly records of the following information:
  - a. the fuel usage for each month, in gallons per month, for each Group 2 emissions unit; and
  - b. the rolling, 12-month summation of the fuel usage for emissions units P015, P016, and P017, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for Group 2 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P015, P016, and P017, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.



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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

5.1 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

c. Emission Limitation:

3.9 tons per year of NOx for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

1.6 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

0.5 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.5 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 ton per year of SO<sub>2</sub> for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

0.6 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 ton per year of VOC for emissions units P015, P016, and P017, combined



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Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**14. P017, 6-F1-C Diesel-fired Pump**

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

P017 - 6-F1-C CAT Diesel-fired Cooling Pump (234 hp, model 3306) with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	5.1 lbs/hr of nitrogen oxides (NO <sub>x</sub> ) 1.6 lbs/hr of carbon monoxide (CO) 0.5 lb/hr of particulate emissions 0.5 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 0.6 lb/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P015, P016, and P017, combined (Group 2) shall not exceed the following limitations:  3.9 tons per year of NO <sub>x</sub> ; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B)
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The permittee shall burn only commercially available diesel fuel in this emissions unit.  
[Authority for term: OAC rule 3745-77-07(A)(1)]
- (2) The annual fuel usage of emissions units P015, P016, and P017, combined (Group 2), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.



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

d) Monitoring and/or Recordkeeping Requirements

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

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

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

- a. the fuel usage for each month, in gallons per month, for each Group 2 emissions unit; and
- b. the rolling, 12-month summation of the fuel usage for emissions units P015, P016, and P017, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for Group 2 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P015, P016, and P017, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.



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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

5.1 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

c. Emission Limitation:

3.9 tons per year of NOx for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

1.6 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

0.5 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.5 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 ton per year of SO<sub>2</sub> for emissions units P015, P016, and P017, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

0.6 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (11.6 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 ton per year of VOC for emissions units P015, P016, and P017, combined



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**15. P018, 6-F3-A Diesel-fired Pump**

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

P018 - 6F3A CAT Diesel-fired Cooling Pump (285 hp, model 3306) with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	6.2 lbs/hr of nitrogen oxides (NOx) 1.9 lbs/hr of carbon monoxide (CO) 0.6 lb/hr of particulate emissions 0.6 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 0.7 lb/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P018, P019, and P020, combined (Group 3) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The permittee shall burn only commercially available diesel fuel in this emissions unit.  
[Authority for term: OAC rule 3745-77-07(A)(1)]
- (2) The annual fuel usage of emissions units P018, P019, and P020, combined (Group 3), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.



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

d) Monitoring and/or Recordkeeping Requirements

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

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

- (2) The permittee shall maintain monthly records of the following information:
  - a. the fuel usage for each month, in gallons per month, for each Group 3 emissions unit; and
  - b. the rolling, 12-month summation of the fuel usage for emissions units P018, P019, and P020, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for Group 3 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P018, P019, and P020, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.



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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

6.2 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

c. Emission Limitation:

3.9 tons per year of NOx for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

1.9 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

0.6 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.6 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 tpy of SO<sub>2</sub> for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

0.7 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 tpy of VOC for emissions units P018, P019, and P020, combined



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**16. P019, 6-F3-B Diesel-fired Pump**

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

P019 - 6F3B CAT Diesel-fired Cooling Pump (285 hp, model 3306) with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	6.2 lbs/hr of nitrogen oxides (NOx) 1.9 lbs/hr of carbon monoxide (CO) 0.6 lb/hr of particulate emissions 0.6 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 0.7 lb/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P018, P019, and P020, combined (Group 3) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The permittee shall burn only commercially available diesel fuel in this emissions unit.  
[Authority for term: OAC rule 3745-77-07(A)(1)]
- (2) The annual fuel usage of emissions units P018, P019, and P020, combined (Group 3), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.



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

d) Monitoring and/or Recordkeeping Requirements

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

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

- (2) The permittee shall maintain monthly records of the following information:
  - a. the fuel usage for each month, in gallons per month, for each Group 3 emissions unit; and
  - b. the rolling, 12-month summation of the fuel usage for emissions units P018, P019, and P020, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for Group 3 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P018, P019, and P020, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.



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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

6.2 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

c. Emission Limitation:

3.9 tons per year of NOx for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

1.9 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

0.6 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.6 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 tpy of SO<sub>2</sub> for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

0.7 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 tpy of VOC for emissions units P018, P019, and P020, combined



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**17. P020, 6-F3-C Diesel-fired Pump**

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

P020 - 6F3C CAT Diesel-fired Cooling Pump (285 hp, model 3306) with no control

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-01136 modified January 31, 2002)	6.2 lbs/hr of nitrogen oxides (NOx) 1.9 lbs/hr of carbon monoxide (CO) 0.6 lb/hr of particulate emissions 0.6 lb/hr of sulfur dioxide (SO <sub>2</sub> ) 0.7 lb/hr of volatile organic compounds (VOC)  The annual emissions from emissions units P018, P019, and P020, combined (Group 3) shall not exceed the following limitations:  3.9 tons per year of NOx; 1.2 tons per year of CO; 0.4 ton per year of particulate emissions; 0.4 ton per year of SO <sub>2</sub> ; and 0.4 ton per year of VOC.  The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-21-07(B) and OAC rule 3745-21-08(B).
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6 minute average, except as provided by the rule.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-11(B)(5)	See b)(2)a.
d.	OAC rule 3745-18-06(G)	See b)(2)a.
e.	OAC rule 3745-21-07(B)	See b)(2)c.
f.	OAC rule 3745-21-08(B)	See b)(2)b.

(2) Additional Terms and Conditions

- a. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- b. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- c. The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-21-07(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 04-01136.

On February 18, 2008, OAC rule 3745-21-07 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-07, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

c) Operational Restrictions

- (1) The permittee shall burn only commercially available diesel fuel in this emissions unit.  
[Authority for term: OAC rule 3745-77-07(A)(1)]
- (2) The annual fuel usage of emissions units P018, P019, and P020, combined (Group 3), shall not exceed 18,000 gallons per year based on the rolling, 12-month summation of the diesel fuel usage.



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

d) Monitoring and/or Recordkeeping Requirements

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

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

- (2) The permittee shall maintain monthly records of the following information:
  - a. the fuel usage for each month, in gallons per month, for each Group 3 emissions unit; and
  - b. the rolling, 12-month summation of the fuel usage for emissions units P018, P019, and P020, combined.

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

- (3) Once each year, the permittee shall check to ensure that the injection timing is retarded 4 degrees from peak power settings and shall make adjustments if necessary.

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

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

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

e) Reporting Requirements

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

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

- (2) The permittee shall submit quarterly deviation (excursion) reports that identify all exceedences of the rolling, 12-month fuel limitation specified in c)(2) for Group 3 emissions units.

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

- (3) The permittee shall also submit an annual report that includes the calendar year total emissions for NO<sub>x</sub>, CO, SO<sub>2</sub>, VOC, and particulate emissions for emissions units P018, P019, and P020, combined. This report shall be submitted to the Toledo Division of Environmental Services by April 15 of each year.



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

- (4) The permittee shall submit an annual report indicating the results of the injection timing monitoring specified in d)(3). This report shall be submitted by January 30th of each year and shall cover the previous calendar year.

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

- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Term and Condition A.2.c) of this permit.

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

f) Testing Requirements

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

a. Emission Limitation:

20% opacity as a 6-minute average

Applicable Compliance Method:

If required, compliance shall be demonstrated based upon visible particulate emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and OAC rule 3745-17-03(B)(1).

b. Emission Limitation:

6.2 lbs/hr of NOx

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon. This NOx emission factor was determined through a RACT/BACT/LAER study of similar sources.

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

c. Emission Limitation:

3.9 tons per year of NOx for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage (gallons/yr) in d)(2) by the NOx emission factor of 3.1 pounds per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.



d. Emission Limitation:

1.9 lbs/hr of CO

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This CO emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

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

e. Emission Limitation:

1.2 tons per year of CO for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the CO emission factor of 0.95 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

f. Emission Limitation:

0.6 lb/hr particulate emissions

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the particulate emission factor of 0.31 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This particulate emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 5 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-17-03(B)(10).

g. Emission Limitation:

0.4 ton per year of particulate emissions for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the particulate emission factor of 0.31 pound per



million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

h. Emission Limitation:

0.6 lb/hr of SO<sub>2</sub>

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 6 of 40 CFR Part 60, Appendix A.

i. Emission Limitation:

0.4 tpy of SO<sub>2</sub> for emissions units P018, P019, and P020, combined

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the SO<sub>2</sub> emission factor of 0.29 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

j. Emission Limitation:

0.7 lb/hr of VOC

Applicable Compliance Method:

Compliance may be demonstrated by multiplying the maximum fuel usage rate (14.2 gallons per hour) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon. This emission factor is specified in USEPA reference document AP-42, Stationary Internal Combustion Sources, Section 3.3, Table 3.3-1, dated 10/96.

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with the methods and procedures specified in Methods 1 through 4 and Method 25 of 40 CFR Part 60, Appendix A and/or in OAC rule 3745-21-10(C).

k. Emission Limitation:

0.4 tpy of VOC for emissions units P018, P019, and P020, combined



State of Ohio Environmental Protection Agency  
Division of Air Pollution Control

**Proposed Title V Permit**

**Permit Number:** P0088670

**Facility ID:** 0487010012

**Effective Date:** To be entered upon final issuance

Applicable Compliance Method:

Compliance shall be demonstrated by multiplying the rolling, 12-month fuel usage in d)(2) (gallons/yr) by the VOC emission factor of 0.35 pound per million Btu, and by the heating value of 0.141 million Btu per gallon, and then dividing by 2000 lbs/ton.

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

g) Miscellaneous Requirements

(1) None.



**18. R002, RAFFO Glass Bending Furnace #24 Printing Room B**

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

R002 - RAFFO Bending Furnace #24 Printing Room B (no dryer), coating operation for nonmetal parts

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-1015 issued May 22, 1996)	8 lbs/hr of organic compounds (OC) 40 lbs/day of OC  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).  See b)(2)a.
b.	OAC rule 3745-21-07(G)(2)	See b)(2)b.

(2) Additional Terms and Conditions

a. This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any photochemically reactive material is employed (coating or cleanup).

b. The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(1); e)(1) and (2); and f)(1) and (2) shall be void.

c) Operational Restrictions

(1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed;
  - c. the OC content of each coating and photochemically reactive cleanup material, in pounds of OC per gallon;
  - d. for each day during which a photochemically reactive material (coating or cleanup material) is employed, the total emission rate for all coatings and photochemically reactive cleanup materials, in pounds of OC per day;
  - e. for each day during which a photochemically reactive material (coating or cleanup material) is employed, the total number of hours the emissions unit was in operation; and
  - f. for each day during which a photochemically reactive material (coating or cleanup material) is employed, the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in lbs/hr (average).

[NOTE: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definition of photochemically reactive material is based upon OAC rule 3745-21-01(C)(5).]

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. for the days during which a photochemically reactive material (coating or cleanup material) was employed, an identification of each day during which the average hourly OC emissions from all the coatings and photochemically reactive cleanup materials exceeded 8 lbs/hr, and the actual average hourly OC emissions for each such day; and
  - b. for the days during which a photochemically reactive material (coating or cleanup material) was employed, an identification of each day during which the OC emissions from all the coatings and photochemically reactive cleanup materials exceeded 40 lbs/day, and the actual OC emissions for each such day.

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

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



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

f) Testing Requirements

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

a. Emission Limitation:

8 lbs/hr of OC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

b. Emission Limitation:

40 lbs/day of OC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

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

(2) Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials employed in this emissions unit.

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

g) Miscellaneous Requirements

(1) None.



**19. R003, RAFFO Bending Furnace #24 Printing Room A**

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

R003 - RAFFO Bending Furnace #24 Printing Room A with UV Dryer, coating operation for nonmetal parts

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI 04-1015 issued May 22, 1996)	8 lbs/hr of organic compounds (OC) 40 lbs/day of OC  The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-07(G)(2).  See b)(2)a.
b.	OAC rule 3745-21-07(G)(2)	See b)(2)b.

(2) Additional Terms and Conditions

a. This emissions unit becomes subject to OAC rule 3745-21-07(G)(2) on any day when any photochemically reactive material is employed (coating or cleanup).

b. The OC emission limitations of 8 pounds per hour and 40 pounds per day when photochemically reactive coatings or clean up materials are employed shall cease to be effective and federally enforceable on the date the U.S. EPA approves the revisions to OAC rule 3745-21-07(G) as a revision to the Ohio SIP for organic compounds. After the rule is added to the Ohio SIP, the emission limitations, monitoring, record keeping, reporting and testing requirements related to these hourly and daily limitations included in d)(1); e)(1) and (2); and f)(1) and (2) shall be void.

c) Operational Restrictions

(1) None.



d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall collect and record the following information for each day for the coating operation:
  - a. the company identification for each coating and photochemically reactive cleanup material employed;
  - b. the number of gallons of each coating and photochemically reactive cleanup material employed;
  - c. the OC content of each coating and photochemically reactive cleanup material, in pounds of OC per gallon;
  - d. for each day during which a photochemically reactive material (coating or cleanup material) is employed, the total emission rate for all coatings and photochemically reactive cleanup materials, in pounds of OC per day;
  - e. for each day during which a photochemically reactive material (coating or cleanup material) is employed, the total number of hours the emissions unit was in operation; and
  - f. for each day during which a photochemically reactive material (coating or cleanup material) is employed, the average hourly OC emission rate for all coatings and photochemically reactive cleanup materials, i.e., (d)/(e), in lbs/hr (average).

[NOTE: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit. Also, the definition of photochemically reactive material is based upon OAC rule 3745-21-01(C)(5).]

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

e) Reporting Requirements

- (1) The permittee shall submit quarterly deviation (excursion) reports that include the following information:
  - a. for the days during which a photochemically reactive material (coating or cleanup material) was employed, an identification of each day during which the average hourly OC emissions from all the coatings and photochemically reactive cleanup materials exceeded 8 lbs/hr, and the actual average hourly OC emissions for each such day; and
  - b. for the days during which a photochemically reactive material (coating or cleanup material) was employed, an identification of each day during which the OC emissions from all the coatings and photochemically reactive cleanup materials exceeded 40 lbs/day, and the actual OC emissions for each such day.

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

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



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

f) Testing Requirements

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

a. Emission Limitation:

8 lbs/hr of OC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

b. Emission Limitation:

40 lbs/day of OC

Applicable Compliance Method:

Compliance shall be demonstrated based upon the record keeping requirements specified in d)(1).

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

(2) Formulation data or USEPA Method 24 shall be used to determine the OC contents of the coatings and cleanup materials employed in this emissions unit.

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

g) Miscellaneous Requirements

(1) None.