



State of Ohio Environmental Protection Agency

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02/13/02

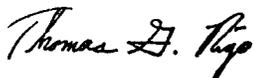
**RE: Proposed Title V Chapter 3745-77 Permit
03-20-01-0003
Johns Manville International, Inc. - Defiance Plant
2**

Attn: Genevieve Damico AR-18J
United States Environmental Protection Agency
Region V
77 West Jackson Blvd.
Chicago, IL 60604-3590

Dear Ms. Damico:

The proposed issuance of the Title V permit for Johns Manville International, Inc. - Defiance Plant 2, has been created in Ohio EPA's State Air Resources System (STARS) on 02/13/02, for review by USEPA. This proposed action is identified in STARS as  3-Title V Proposed Permit T+C covering the facility specific terms and conditions, and  Title V Proposed Permit covering the general terms and conditions. This proposed permit will be processed for issuance as a final action after forty-five (45) days from USEPA's receipt of this certified letter if USEPA does not object to the proposed permit. Please contact Mike Ahern, DAPC Permit Management Unit supervisor at (614) 644-3631 by the end of the forty-five (45) day review period if you wish to object to the proposed permit.

Very truly yours,



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

cc: Northwest District Office
File, DAPC PMU



State of Ohio Environmental Protection Agency

PROPOSED TITLE V PERMIT

Issue Date: 02/13/02

Effective Date: To be entered upon final issuance

Expiration Date: To be entered upon final issuance

This document constitutes issuance of a Title V permit for Facility ID: 03-20-01-0003 to:
Johns Manville International, Inc. - Defiance Plant 2
400 PERRY STREET
P.O. BOX 158
DEFIANCE, OH 43512-0158

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

Table with 3 columns: Emissions Unit ID (Company ID), Emissions Unit Activity Description, and Emissions Unit Activity Description. Rows include units P001 through P018 and P019 through P027.

You will be contacted approximately eighteen (18) months prior to the expiration date regarding the renewal of this permit. If you are not contacted, please contact the appropriate Ohio EPA District Office or local air agency listed below. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above.

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

Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419) 352-8461

OHIO ENVIRONMENTAL PROTECTION AGENCY

Christopher Jones
Director

PART I - GENERAL TERMS AND CONDITIONS

A. *State and Federally Enforceable Section*

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

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
(Authority for term: OAC rule 3745-77-07(A)(3)(c))
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. These quarterly written reports shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(i) and (ii) pertaining to the submission of monitoring reports every six months and the requirements of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations except malfunctions, which shall be reported in accordance with OAC rule 3745-15-06. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.) See B.6 below if no deviations occurred during the quarter.
(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii))

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

2. **Scheduled Maintenance/Malfunction Reporting**

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

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

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

3. **Risk Management Plans**

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

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

4. **Title IV Provisions**

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

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

5. Severability Clause

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

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

6. General Requirements

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

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

7. Fees

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

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

8. Marketable Permit Programs

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

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

9. Reasonably Anticipated Operating Scenarios

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

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

10. Reopening for Cause

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

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

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

11. Federal and State Enforceability

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

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

12. Compliance Requirements

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

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

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

13. Permit Shield

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

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

14. Operational Flexibility

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

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

15. Emergencies

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

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

16. Off-Permit Changes

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

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

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

- c. The change shall not qualify for the permit shield under OAC rule 3745-77-07(F);
- d. The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes; and
- e. The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

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

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

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

17. Compliance Method Requirements

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

(This term is provided for informational purposes only.)

18. Insignificant Activities

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

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

19. Permit to Install Requirement

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

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

20. Air Pollution Nuisance

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

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

B. *State Only Enforceable Section*

1. Reporting Requirements Related to Monitoring and Record Keeping Requirements

The permittee shall submit required reports in the following manner:

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

2. Records Retention Requirements

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

3. Inspections and Information Requests

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

4. Scheduled Maintenance/Malfunction Reporting

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

control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

5. Permit Transfers

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

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

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

Part II - Specific Facility Terms and Conditions

A. State and Federally Enforcable Section

None

B. State Only Enforceable Section

1. The following insignificant emissions units are located at this facility:
 - P013- Glass cullett bin;
 - P020- Glass material storage silos;
 - P023- Fiberglass test press w/ HEAF;
 - T001- Dedusting oil storage tank;
 - Z001- Lehr System - glass melting furnace #201;
 - Z002- Lehr System - glass melting furnace #202;
 - Z003- Lehr System - glass melting furnace #203;
 - Z004- Resin storage tank;
 - Z005- Binder mix tank;
 - Z006- Ammonia storage tanks;
 - Z010- Caustic tank;
 - Z011- Urea hopper;
 - Z012- Ammonia sulfate hopper;
 - Z013- Glass marble conveying;
 - Z014- Pot and burner rebuild area;
 - Z015- Process water treatment;
 - Z016- Water-based paint spray booth;
 - Z021- LOI test oven;
 - Z022- 6 NG fired space heaters;
 - Z026- 3 Safety Kleen stations;
 - Z030- Glass storage silo;
 - Z031- Glass storage silo;
 - Z032- Glass storage silo;
 - Z033- Glass storage silo;
 - Z034- Glass storage silo;
 - Z035- Glass storage silo;
 - Z038- Glass storage silo;
 - Z039- Glass storage silo;
 - Z040- Glass storage silo;
 - Z041- Railcar unloading;
 - Z042- Material mixing; and
 - Z043- Glass storage silo.

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

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FIBERGLASS FORMING AND COLLECTION UNIT #21 (P001)

Activity Description: This process operates by melting glass and attenuating it in to glass fibers.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass forming and collection unit #21	OAC rule 3745-17-11(B)(1)	See A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.a.)

2. Additional Terms and Conditions

- 2.a This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.
- 2.b PE from this emissions unit shall be less than 10 lbs/hr.*

*The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds/hour (the permittee has demonstrated this based on stack testing). Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 lbs PE/hr. However, to ensure that Figure II will not be applicable, the permittee has agreed to accept the PE limitation stated above (less than 10 lbs/hr).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
less than 10 lbs PE/hr

Applicable Compliance Method:
Compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with the methods in OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 - 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only).
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: GLASS MELTING FURNACE UNIT #201 (P003)

Activity Description: Glass melting furnace. Marble production.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass melt furnace, unit melter w/ electrostatic precipitator & baghouse in series; glass melting furnace unit #201	OAC rule 3745-17-11(B)(1)	8.7 lbs particulate emissions (PE)/hr (See A.1.2.a.)
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-18-06(E)(2)	65.40 lbs sulfur dioxide (SO ₂)/hr

2. Additional Terms and Conditions

- Emissions units P003 and P007 are subject to the "grouping" provisions of OAC rule 3745-17-11(A)(3). Therefore, the PE shall not exceed 8.7 lbs/hr from emissions units P003 and P007, combined.

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range established during the most recent emission test that demonstrated the emissions unit was in compliance, while this emissions unit is in operation.
- The gauges/devices used to regulate the operating parameters of the ESP shall be calibrated to ensure that the ESP will operate within, or at, the following settings:
 - primary voltage (V)- minimum of 50 and a maximum of 505.
 - secondary voltage (KV)- minimum of 5 and a maximum of 50.
 - primary current (amps)- less than 46.
 - secondary current (milliamps)- less than 500.
 - spark rate (sparks/minute)- minimum of 5 and maximum of 60.
 - inlet temperature range (degrees Fahrenheit)- 200-700.
 - outlet temperature range (degrees Fahrenheit)- 150-675.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.
2. The permittee shall properly operate and maintain equipment to monitor the primary and secondary voltage, primary and secondary current, inlet and outlet temperatures, and spark rate for the ESP while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the appropriate parameters for the ESP on a once per shift basis.
3. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

4. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit quarterly voltage, current, inlet/outlet temperatures, and spark rate deviation (excursion) reports that identify all periods of time during which these operating parameters for the ESP did not comply with the allowable values or ranges specified above.
3. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
8.7 lbs PE/hr

Applicable Compliance Method:
Compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with the methods in OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:
65.40 lbs SO₂/hr

Applicable Compliance Method:
Compliance with the SO₂ emission limitation above shall be based on the results of stack testing conducted in accordance with Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.
 - 1.c Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO₂.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

for PE: Methods 1- 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only); and

for SO₂: Methods 1 through 4 and d 6 of 40 CFR, Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The emissions testing shall also be conducted to demonstrate compliance with the allowable emission rate across the requested pressure drop range of 0.5-15 inches of water.

V. Testing Requirements (continued)

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: GLASS MELTING FURNACE UNIT#203 (P007)

Activity Description: Glass melting furnace. Marble production.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass melt furnace, unit melter w/ electrostatic precipitator & baghouse in series; glass melting furnace unit #203	OAC rule 3745-17-11(B)(1)	8.7 lbs particulate emissions (PE)/hr (See A.I.2.a.)
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-18-06(E)(2)	65.40 lbs sulfur dioxide (SO ₂)/hr

2. Additional Terms and Conditions

- 2.a Emissions units P003 and P007 are subject to the "grouping" provisions of OAC rule 3745-17-11(A)(3). Therefore, the PE shall not exceed 8.7 lbs/hr from emissions units P003 and P007, combined.

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range established during the most recent emission test that demonstrated the emissions unit was in compliance, while this emissions unit is in operation.
2. The gauges/devices used to regulate the operating parameters of the ESP shall be calibrated to ensure that the ESP will operate within, or at, the following settings:
 - primary voltage (V)- minimum of 50 and a maximum of 505.
 - secondary voltage (KV)- minimum of 5 and a maximum of 50.
 - primary current (amps)- less than 46.
 - secondary current (milliamps)- less than 500.
 - spark rate (sparks/minute)- minimum of 5 and maximum of 60.
 - inlet temperature range (degrees Fahrenheit)- 200-700.
 - outlet temperature range (degrees Fahrenheit)- 150-675.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across the baghouse while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop across the baghouse on a once per shift basis.
2. The permittee shall properly operate and maintain equipment to monitor the primary and secondary voltage, primary and secondary current, inlet and outlet temperatures, and spark rate for the ESP while the emissions unit is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the appropriate parameters for the ESP on a once per shift basis.
3. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

4. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above.
2. The permittee shall submit quarterly voltage, current, inlet/outlet temperatures, and spark rate deviation (excursion) reports that identify all periods of time during which these operating parameters for the ESP did not comply with the allowable values or ranges specified above.
3. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
8.7 lbs PE/hr

Applicable Compliance Method:
Compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with the methods in OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:
65.40 lbs SO₂/hr

Applicable Compliance Method:
Compliance with the SO₂ emission limitation above shall be based on the results of stack testing conducted in accordance with Methods 1 through 4 and 6 of 40 CFR, Part 60, Appendix A.
 - 1.c Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).
2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for PE and SO₂.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

for PE: Methods 1- 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only); and

for SO₂: Methods 1 through 4 and d 6 of 40 CFR, Part 60, Appendix A.
 - d. The tests shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
 - e. The emissions testing shall also be conducted to demonstrate compliance with the allowable emission rate across the requested pressure drop range of 0.5-15 inches of water.

V. Testing Requirements (continued)

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FIBERGLASS FORMING AND COLLECTION UNIT #23 (P008)

Activity Description: This process operates by melting glass and attenuating it in to glass fibers.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass forming and collection unit #23	OAC rule 3745-17-11(B)(1)	See A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.a.)

2. Additional Terms and Conditions

- 2.a This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.
- 2.b PE from this emissions unit shall be less than 10 lbs/hr.*

*The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds/hour (the permittee has demonstrated this based on stack testing). Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 lbs PE/hr. However, to ensure that Figure II will not be applicable, the permittee has agreed to accept the PE limitation stated above (less than 10 lbs/hr).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
less than 10 lbs PE/hr

Applicable Compliance Method:
Compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with the methods in OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 - 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only).
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FIBERGLASS FORMING AND COLLECTION UNIT #24 (P009)

Activity Description: This process operates by melting glass and attenuating it in to glass fibers.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass forming and collection unit #24	OAC rule 3745-31-05(A)(3) (PTI# 03-13579)	See A.I.2.a. 9.96 lbs particulate emissions (PE)/hr, 43.62 tons PE/yr (See A.I.2.d.) 2.65 lbs organic compounds (OC)/hr, 11.61 tons OC/yr 31.38 lbs carbon monoxide (CO)/hr, 137.44 tons CO/yr 3.16 lbs nitrogen oxides (NOx)/hr, 13.84 tons NOx/yr 0.25 lb fluorides/hr, 1.10 tons fluorides/yr
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-17-11(B)	See A.I.2.b.
	OAC rule 3745-21-07(G)	exempt (See A.II.1.)
	40 CFR, Part 63, Subpart NNN	See A.I.2.d.

2. Additional Terms and Conditions

- 2.a The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A) and 3745-21-07(G).
- 2.b The emission limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
- 2.c Pursuant to the provisions of OAC rule 3745-21-07(A) this is an existing source in a non-priority 1 county, therefore the provisions of OAC rule 3745-21-07(G) do not apply.

2. Additional Terms and Conditions (continued)

- 2.d** The permittee shall demonstrate compliance with the requirements of this subpart by no later than June 14, 2002, for an existing wool fiberglass manufacturing line producing a bonded heavy-density product.
- 2.e** All PE from this emissions unit is assumed to be in the form of PM10.

II. Operational Restrictions

- 1.** The use of any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), in this emissions unit, is prohibited.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

- 2.** Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.
- 3.** The permittee shall collect and record the following information each month:
 - a. the company identification for each liquid organic material employed in this emissions unit; and
 - b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

IV. Reporting Requirements

- 1.** The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.
- 2.** The permittee shall submit quarterly deviation (excursion) reports that identify each month during which a photochemically reactive material was employed in this emissions unit. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

V. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - 1.a The emission testing shall be conducted within 6 months prior to permit expiration.
 - 1.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates of 9.96 lbs PE/hr and 0.25 lb fluorides/hr.
 - 1.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:
 - i. for PE, Methods 1- 5 of 40 CFR, Part 60, Appendix A; and
 - ii. for fluorides, Method 13 or Method 26 of 40 CFR, Part 60, Appendix A.
 - 1.d Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

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

2. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 2.a Emission Limitations: 9.96 lbs PE/hr, 43.62 tons PE/yr

Applicable Compliance Method: Compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with Methods 1- 5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly limitation by the maximum operating schedule of 8760 hours/yr, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

V. Testing Requirements (continued)

2.b Emission Limitations: 2.65 lbs OC/hr, 11.61 tons OC/yr

Applicable Compliance Method:

The hourly emission limitation represents the emissions unit's potential to emit. It was determined by multiplying the maximum process rate (as indicated in the permit application) by an emission factor derived from the results of stack testing conducted on a similar emissions unit.

If required, the permittee shall demonstrate compliance by testing in accordance with Method 18, Method 25 or Method 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly limitation by the maximum operating schedule of 8760 hours/yr, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2.c Emission Limitations: 31.38 lbs CO/hr, 137.44 tons CO/yr

Applicable Compliance Method:

The hourly emission limitation represents the emissions unit's potential to emit. It was determined by multiplying the maximum process rate (as indicated in the permit application) by an emission factor derived from the results of stack testing conducted on a similar emissions unit.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

The tons/yr emission limitation was developed by multiplying the lb/hr limitation by the maximum operating schedule of 8760 hours/yr and dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

2.d Emission Limitations: 3.16 lbs NOx/hr, 13.85 tons NOx/yr

Applicable Compliance Method:

The hourly emission limitation represents the emissions unit's potential to emit. It was determined by multiplying the maximum process rate (as indicated in the permit application) by an emission factor derived from the results of stack testing conducted on a similar emissions unit.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly limitation by the maximum operating schedule of 8760 hours/yr, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2.e Emission Limitations: 0.25 lb flourides/hr, 1.10 tons fluoride/yr

Applicable Compliance Method: Compliance with the flourides limitation above shall be based on the results of stack testing conducted in accordance with Method 13 or Method 26 of 40 CFR, Part 60, Appendix A..

The annual emission limitation was developed by multiplying the hourly limitation by the maximum operating schedule of 8760 hours/yr, and then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance shall also be shown with the annual limitation.

2.f Emission Limitation: Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

Facility Name: **Johns Manville International, Inc. (Plant 02)**

Facility ID: **03-20-01-0003**

Emissions Unit: **FIBERGLASS FORMING AND COLLECTION UNIT #24 (F**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FIBERGLASS FORMING AND COLLECTION UNIT #25 (P010)

Activity Description: This process operates by melting glass and attenuating it in to glass fibers.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass forming and collection unit #25	OAC rule 3745-17-11(B)(1)	See A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.a.)

2. Additional Terms and Conditions

- 2.a This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.
- 2.b PE from this emissions unit shall be less than 10 lbs/hr.*

*The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds/hour (the permittee has demonstrated this based on stack testing). Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 lbs PE/hr. However, to ensure that Figure II will not be applicable, the permittee has agreed to accept the PE limitation stated above (less than 10 lbs/hr).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

- 1.a Emission Limitation:
less than 10 lbs PE/hr

Applicable Compliance Method:

Compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with the methods in OAC rule 3745-17-03(B)(10).

- 1.b Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 - 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only).
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FIBERGLASS FORMING AND COLLECTION UNIT #26 (P011)

Activity Description: This process operates by melting glass and attenuating it in to glass fibers.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass forming and collection unit #26	OAC rule 3745-17-11(B)(1)	See A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.a.)

2. Additional Terms and Conditions

- 2.a This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.
- 2.b PE from this emissions unit shall be less than 10 lbs/hr.*

*The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds/hour (the permittee has demonstrated this based on stack testing). Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 lbs PE/hr. However, to ensure that Figure II will not be applicable, the permittee has agreed to accept the PE limitation stated above (less than 10 lbs/hr).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
less than 10 lbs PE/hr

Applicable Compliance Method:
Compliance with the PE limitation above shall be based on the results of stack testing conducted in accordance with the methods in OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 - 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only).
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: FIBERGLASS FORMING AND COLLECTION UNIT #27 (P012)
Activity Description: This process operates by melting glass and attenuating it in to glass fibers.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass forming and collection unit #27	OAC rule 3745-17-11(B)(1)	See A.I.2.b.
	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.a.)

2. Additional Terms and Conditions

- 2.a This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.
- 2.b PE from this emissions unit shall be less than 10 lbs/hr.*

*The uncontrolled mass rate of PE from this emissions unit is less than 10 pounds/hour (the permittee has demonstrated this based on stack testing). Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, based on Table I of OAC rule 3745-17-11, the allowable PE limitation is greater than 10 lbs PE/hr. However, to ensure that Figure II will not be applicable, the permittee has agreed to accept the PE limitation stated above (less than 10 lbs/hr).

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no abnormal visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any abnormal visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation:
less than 10 lbs PE/hr

Applicable Compliance Method:
Compliance with the PE limitation above shall be based on the results of emission testing conducted in accordance with the methods specified in OAC rule 3745-17-03(B)(10).
 - 1.b Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

V. Testing Requirements (continued)

2. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. The emission testing shall be conducted within 6 months prior to permit expiration.
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
 - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1 - 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only).
 - d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
3. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CURING OVEN UNIT #23 (P016)

Activity Description: This oven cures fiberglass products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass curing operation with high energy air filtration (HEAF) units; curing unit #23	OAC rule 3745-17-11(B)(1)	1.66 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.b.)

2. Additional Terms and Conditions

- 2.a PE from this emissions unit shall be vented to either one of the two HEAF units (North or South HEAF units).
- 2.b This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.

II. Operational Restrictions

1. The permittee shall perform the following:
 - a. The filter media of the HEAF units shall be inspected and replaced, if needed, on a twice per shift basis.
 - b. Once each month the HEAF units shall be shut down, inspected, cleaned, and repaired as needed.
2. The permittee shall operate either one of the HEAF units when this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day:
 - a. The date and time of each HEAF unit inspection.
 - b. The date and time that each HEAF unit was shut down and a description of any repairs made.
2. The permittee shall document whether or not a HEAF unit was used to control this emissions unit whenever the emissions unit was in operation.

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

3. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

4. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that a HEAF unit was not used to control this emissions unit when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly HEAF inspection deviation (excursion) reports that identify all days when the filter media was not inspected on a twice per shift basis and replaced if needed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

V. Testing Requirements

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

- 1.a Emission Limitation: 1.66 lbs PE/hr

Applicable Compliance Method: Compliance may be determined by multiplying the maximum process rate (as indicated in the permit application) by an emission factor derived from the results of stack testing conducted on a similar emissions unit.

If required, compliance with the PE limitation above shall be conducted in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

Facility Name: **Johns Manville International, Inc. (Plant 02)**

Facility ID: **03-20-01-0003**

Emissions Unit: **CURING OVEN UNIT #23 (P016)**

V. Testing Requirements (continued)

- 1.b** Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CURING OVEN UNIT #24 (P017)

Activity Description: This oven cures fiberglass products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass curing operation with high energy air filtration (HEAF) units; curing unit #24	OAC rule 3745-17-11(B)(1)	1.30 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.b.)

2. Additional Terms and Conditions

- 2.a PE from this emissions unit shall be vented to either one of the two HEAF units (North or South HEAF units).
- 2.b This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.

II. Operational Restrictions

1. The permittee shall perform the following:
 - a. The filter media of the HEAF units shall be inspected and replaced, if needed, on a twice per shift basis.
 - b. Once each month the HEAF units shall be shut down, inspected, cleaned, and repaired as needed.
2. The permittee shall operate either one of the HEAF units when this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day:
 - a. The date and time of each HEAF unit inspection.
 - b. The date and time that each HEAF unit was shut down and a description of any repairs made.
2. The permittee shall document whether or not a HEAF unit was used to control this emissions unit whenever the emissions unit was in operation.

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

3. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

4. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that a HEAF unit was not used to control this emissions unit when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly HEAF inspection deviation (excursion) reports that identify all days when the filter media was not inspected on a twice per shift basis and replaced if needed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 1.30 lbs PE/hr

Applicable Compliance Method: Compliance may be determined by multiplying the maximum process rate (as indicated in the permit application) by an emission factor derived from the results of stack testing conducted on a similar emissions unit.

If required, compliance with the PE limitation above shall be conducted in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

Facility Name: **Johns Manville International, Inc. (Plant 02)**

Facility ID: **03-20-01-0003**

Emissions Unit: **CURING OVEN UNIT #24 (P017)**

V. Testing Requirements (continued)

1.b Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CURING OVEN UNIT #25 (P018)

Activity Description: This oven cures fiberglass products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass curing operation with high energy air filtration (HEAF) units; curing unit #25	OAC rule 3745-17-11(B)(1)	1.66 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.b.)

2. Additional Terms and Conditions

- 2.a PE from this emissions unit shall be vented to either one of the two HEAF units (North or South HEAF units).
- 2.b This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.

II. Operational Restrictions

1. The permittee shall perform the following:
 - a. The filter media of the HEAF units shall be inspected and replaced, if needed, on a twice per shift basis.
 - b. Once each month the HEAF units shall be shut down, inspected, cleaned, and repaired as needed.
2. The permittee shall operate either one of the HEAF units when this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day:
 - a. The date and time of each HEAF unit inspection.
 - b. The date and time that each HEAF unit was shut down and a description of any repairs made.
2. The permittee shall document whether or not a HEAF unit was used to control this emissions unit whenever the emissions unit was in operation.

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

3. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

4. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that a HEAF unit was not used to control this emissions unit when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly HEAF inspection deviation (excursion) reports that identify all days when the filter media was not inspected on a twice per shift basis and replaced if needed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 1.66 lbs PE/hr

Applicable Compliance Method: Compliance may be determined by multiplying the maximum process rate (as indicated in the permit application) by an emission factor derived from the results of stack testing conducted on a similar emissions unit.

If required, compliance with the PE limitation above shall be conducted in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

- 1.b** Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: CURING OVEN UNIT #26 (P019)

Activity Description: This oven cures fiberglass products.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass curing operation with high energy air filtration (HEAF) units; curing unit #26	OAC rule 3745-17-11(B)(1)	1.66 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	exempt (See A.I.2.b.)

2. Additional Terms and Conditions

- 2.a PE from this emissions unit shall be vented to either one of the two HEAF units (North or South HEAF units).
- 2.b This emissions unit was installed prior to February 15, 1972. Therefore, there are no applicable regulations/emission limitations for organic compounds for this emissions unit.

II. Operational Restrictions

1. The permittee shall perform the following:
 - a. The filter media of the HEAF units shall be inspected and replaced, if needed, on a twice per shift basis.
 - b. Once each month the HEAF units shall be shut down, inspected, cleaned, and repaired as needed.
2. The permittee shall operate either one of the HEAF units when this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall collect and record the following information each day:
 - a. The date and time of each HEAF unit inspection.
 - b. The date and time that each HEAF unit was shut down and a description of any repairs made.
2. The permittee shall document whether or not a HEAF unit was used to control this emissions unit whenever the emissions unit was in operation.

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

3. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

4. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office or local air agency) in writing of any record showing that a HEAF unit was not used to control this emissions unit when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office or local air agency) within 30 days after the event occurs.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.
3. The permittee shall submit quarterly HEAF inspection deviation (excursion) reports that identify all days when the filter media was not inspected on a twice per shift basis and replaced if needed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 1.66 lbs PE/hr

Applicable Compliance Method: Compliance may be determined by multiplying the maximum process rate (as indicated in the permit application) by an emission factor derived from the results of stack testing conducted on a similar emissions unit.

If required, compliance with the PE limitation above shall be conducted in accordance with the methods specified in OAC rule 3745-17-03(B)(10).

Facility Name: **Johns Manville International, Inc. (Plant 02)**

Facility ID: **03-20-01-0003**

Emissions Unit: **CURING OVEN UNIT #26 (P019)**

V. Testing Requirements (continued)

- 1.b** Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance in accordance with the methods specified in OAC rule 3745-17-03 (B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass mix batch bin #8 (P024)

Activity Description: Mix batch bin for fiberglass raw materials - insignificant source

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass mix batch bin #8, with baghouse	OAC rule 3745-31-05(A)(3) (PTI # 03-8729)	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
	OAC rule 3745-17-07(A)	0.34 lb particulate emissions (PE)/hr Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-17-11(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).

2. Additional Terms and Conditions

None

II. Operational Restrictions

- The pressure drop across the baghouse shall be maintained within the range of 2 to 6 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 0.34 lb PE/hr

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.
 - 1.b Emission Limitation: Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method:
If required, the permittee shall demonstrate compliance in accordance with the methods in OAC rule 3745-17-03(B)(1).

Facility Name: **Johns Manville International, Inc. (Plant 02)**
Facility ID: **03-20-01-0003**
Emissions Unit: **Fiberglass mix batch bin #8 (P024)**

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass pipe Curing Oven - Line #21 (P025)
Activity Description: The oven process cures fiberglass pipe insulation

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass wool curing oven; line 21	OAC rule 3745-17-11(B)(1)	1.42 lbs of particulate emissions (PE)/hr
	OAC rule 3745-18-06(E)	exempt (See A.I.2.a.)
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See A.II.1.)
	OAC rule 3745-31-05(A)(3) (PTI 03-3282)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(1), 3745-17-07(A), 3745-18-06(E) and 3745-21-07(G).
		6.2 tons PE/yr (See A.I.2.b.)
		1.52 lbs sulfur dioxide (SO ₂)/hr and 6.7 tons SO ₂ /yr
	1.87 lbs carbon monoxide (CO)/hr and 8.2 ton CO/yr	
	1.16 lbs nitrogen oxides (NO _x)/hr and 5.1 tons NO _x	
	0.31 lb organic compounds (OC) and 1.4 tons OC/yr (See A.I.2.c.)	

2. Additional Terms and Conditions

- 2.a The maximum process weight rate is less than 1,000 pounds/hr. Therefore, this emissions unit is exempt from the SO₂ emission limitation based on OAC rule 3745-18-06(E), pursuant to OAC rule 3745-18-06(C).
- 2.b PE from this emissions unit shall be vented to either one of the two HEAF units (North or South HEAF unit).

2. Additional Terms and Conditions (continued)

2.c For purposes of federal enforceability, all OC is considered to be VOC.

II. Operational Restrictions

- 1.** The permittee shall only employ binder resins that comply with OAC rule 3745-21-07(G)(9)(c) [use of water-based, nonphotochemically reactive materials].
- 2.** The permittee shall perform the following:
 - 2.a** The filter media of the HEAF units shall be inspected and replaced, if needed, on a twice per shift basis.
 - 2.b** Once each month the HEAF units shall be shut down, inspected, cleaned, and repaired as needed.
- 3.** The permittee shall operate either one of the HEAF units when this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information each day:
 - 1.a** The date and time of each HEAF unit inspection.
 - 1.b** The date and time that each HEAF unit was shut down and a description of any repairs made.
- 2.** The permittee shall document whether or not a HEAF unit was used to control this emissions unit whenever the emissions unit was in operation.
- 3.** The permittee shall collect and record the following information each month for this emissions unit:
 - 3.a** the volatile content (including water) of each material as employed;
 - 3.b** the liquid organic portion of said volatile content, in percent by volume as applied; and
 - 3.c** whether or not the volatile content of each material employed is a photochemically reactive material, as applied.
- 4.** The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a.** the 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.

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

5. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office) in writing of any record showing that a HEAF unit was not used to control this emissions unit when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office) within 30 days after the event occurs.
2. In accordance with paragraph A.1.c of the General Terms and Conditions, the permittee shall submit deviation reports that identify the following information:
 - 2.a any month during which the volatile content did not consist of only water and liquid organic material, as applied.
 - 2.b any month during which the liquid organic portion of the said volatile content exceeded 20% by volume, and the actual liquid organic portion of the said volatile content, as applied.
 - 2.c any month during which the volatile content of any material employed is a photochemically reactive material, as applied.

Each report shall identify the cause for the deviation and the actual total quantity of OC emitted during each such month, in pounds, as well as the number of hours and days of operation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit HEAF inspection deviation (excursion) reports that identify all days when the filter media was not inspected on a twice per shift basis and replaced if needed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with the methods in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitations: 1.42 lbs PE/hr and 6.2 tons PE/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

V. Testing Requirements (continued)

1.c Emission Limitation: 1.16 lbs NO_x/hr and 5.1 tons NO_x/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

1.d Emission Limitation: 1.87 lbs CO/hr and 8.2 tons CO/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

1.e Emission Limitations: 0.31 lb OC/hr and 1.4 tons OC/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

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

2.a The emission testing shall be conducted within 6 months prior to permit expiration.

2.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for: PE, OC, CO, SO₂ and NO_x.

2.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only);

ii. VOC/OC: Methods 18, Method 25, or Method 25A, as appropriate, of 40 CFR, Part 60, Appendix A;

iii. CO: Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A;

iv. NO_x: Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A; and

v. SO₂: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

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

V. Testing Requirements (continued)

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass wool curing oven; line 21	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
 - 1.a Pollutant: formaldehyde
 TLV (mg/m3): 273
 Maximum Hourly Emission Rate (lbs/hr): 0.57 (P025 and P027 combined)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.26
 MAGLC (ug/m3): 6.49
 - 1.b Pollutant: phenol
 TLV (mg/m3): 19,000
 Maximum Hourly Emission Rate (lbs/hr): 0.35 (P025 and P027 combined)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.16
 MAGLC (ug/m3): 452
 - 1.c Pollutant: methanol
 TLV (mg/m3): 262,000
 Maximum Hourly Emission Rate (lbs/hr): 1.18 (P025 and P027 combined)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.56
 MAGLC (ug/m3): 6,238
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

- 2.a** changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 2.b** changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- 2.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.).
- 3.** If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
- 4.** The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - 4.a** a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - 4.b** documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - 4.c** where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass pipe grinding, trimming, and slitting (P026)

Activity Description: This process grinds, trims, and slits the cured pipe insulation to proper final product specifications.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass slitting, cutting, and grinding operation with cyclone and baghouse; line 21	OAC rule 3745-31-05(A)(3) (PTI 03-3282)	See A.I.2.a. 1.0 lb particulate emissions (PE)/hr and 4.4 tons PE/yr
	OAC rule 3745-17-11(B)(1)	See A.I.2.b.
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

2. Additional Terms and Conditions

- 2.a The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A).
- 2.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).

II. Operational Restrictions

1. The pressure drop across the baghouse shall be maintained within the range of 0.5 to 12 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

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

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

2. The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a. the 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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall submit quarterly pressure drop deviation (excursion) reports that identify all periods of time during which the pressure drop across the baghouse did not comply with the allowable range specified above while the emissions unit was in operation. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.
2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

1. Compliance with the emission limitations in Section A.I of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: 1.0 lb PE/hr, 4.4 tons PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

V. Testing Requirements (continued)

- 1.b** Emission Limitation:
Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
- Applicable Compliance Method:
If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with the methods in OAC rule 3745-17-03(B)(1).
- 2.** The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- 2.a** The emission testing shall be conducted within 6 months prior to permit expiration.
- 2.b** The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.
- 2.c** The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate(s): Methods 1- 5 of 40 CFR, Part 60, Appendix A.
- 2.d** The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.
- 2.e** The emissions testing shall also be conducted to demonstrate compliance with the allowable emission rate across the entire pressure drop range of 0.5-12 inches of water.
- 3.** Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
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2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass pipe Sear Roll (P027)

Activity Description: The Sear Roll thermally set the exterior of the uncured pipe insulation before entering the curing oven.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass sear roll operation; line 21	OAC rule 3745-17-11(B)(1)	0.75 lb of particulate emissions (PE)/hr
	OAC rule 3745-18-06(E)	exempt (See A.I.2.a.)
	OAC rule 3745-17-07(A)	Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See A.II.1.)
	OAC rule 3745-31-05(A)(3) (PTI 03-3282)	The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-11(B)(1), 3745-17-07(A), 3745-18-06(E) and 3745-21-07(G).
		3.3 tons PE/yr (See A.I.2.b.)
		0.15 lb sulfur dioxide (SO ₂)/hr and 0.7 ton SO ₂ /yr
	0.19 lbs carbon monoxide (CO)/hr and 0.8 ton CO/yr	
	0.12 lbs nitrogen oxides (NO _x)/hr and 0.5 ton NO _x	
	0.31 lb organic compounds (OC) and 1.4 tons OC/yr (See A.I.2.c.)	

2. Additional Terms and Conditions

- 2.a The maximum process weight rate is less than 1,000 pounds/hr. Therefore, this emissions unit is exempt from the SO₂ emission limitation based on OAC rule 3745-18-06(E), pursuant to OAC rule 3745-18-06(C).
- 2.b PE from this emissions unit shall be vented to either one of the two HEAF units (North or South HEAF unit).

2. Additional Terms and Conditions (continued)

2.c For purposes of federal enforceability, all OC is considered to be VOC.

II. Operational Restrictions

- 1.** The permittee shall only employ binder resins that comply with OAC rule 3745-21-07(G)(9)(c) [use of water-based, nonphotochemically reactive materials].
- 2.** The permittee shall perform the following:
 - 2.a** The filter media of the HEAF units shall be inspected and replaced, if needed, on a twice per shift basis.
 - 2.b** Once each month the HEAF units shall be shut down, inspected, cleaned, and repaired as needed.
- 3.** The permittee shall operate either one of the HEAF units when this emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

- 1.** The permittee shall collect and record the following information each day:
 - 1.a** The date and time of each HEAF unit inspection.
 - 1.b** The date and time that each HEAF unit was shut down and a description of any repairs made.
- 2.** The permittee shall document whether or not a HEAF unit was used to control this emissions unit whenever the emissions unit was in operation.
- 3.** The permittee shall collect and record the following information each month:
 - 3.a** the volatile content (including water) of each material, as employed;
 - 3.b** the liquid organic portion of said volatile content, in percent by volume, as applied; and
 - 3.c** whether or not the volatile content of each material employed is a photochemically reactive material, as applied.
- 4.** The permittee shall perform checks at least 5 days per week, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
 - a.** the 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.

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

5. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions from at least 5 days per week to weekly readings if the following conditions are met:
 - a. for 1 full quarter the facility's visual observations indicate no visible emissions; and
 - b. the permittee continues to comply with all the record keeping and monitoring requirements specified in section A.III.1.

The permittee shall revert to 5 days per week readings if any visible emissions are observed.

IV. Reporting Requirements

1. The permittee shall notify the Director (the appropriate District Office) in writing of any record showing that a HEAF unit was not used to control this emissions unit when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the appropriate District Office) within 30 days after the event occurs.
2. In accordance with paragraph A.1.c of the General Terms and Conditions, the permittee shall submit deviation reports which identify the following information:
 - 2.a any month during which the volatile content did not consist of only water and liquied organic material, as applied.
 - 2.b any month during which the liquid organic portion of the said volatile content exceeded 20% by volume, and the actual liquid organic portion of the said volatile content, as applied.
 - 2.c any month during which the volatile content of any material employed is a photochemically reactive material, as applied.

Each report shall identify the cause for the deviation and the actual total quantity of OC emitted during each such month, in pounds, as well as the number of hours and days of operation.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from 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) by January 31 and July 31 of each year and shall cover the previous 6-month period.
4. The permittee shall submit HEAF inspection deviation (excursion) reports that identify all days when the filter media was not inspected on a twice per shift basis and replaced if needed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

V. Testing Requirements

1. Compliance with the emissions limitations in Section A.I. of these terms and conditions shall be determined in accordance with the following methods:
 - 1.a Emission Limitation: Visible PE from the stack servicing this emissions unit shall not exceed 20% opacity, as a six-minute average, except as provided by rule.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with the methods in OAC rule 3745-17-03(B)(1).

- 1.b Emission Limitations: 0.75 lbs PE/hr and 3.3 tons PE/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 1 through 5 of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

V. Testing Requirements (continued)

1.c Emission Limitation: 0.12 lb NO_x/hr and 0.5 ton NO_x/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

1.d Emission Limitation: 0.19 lb CO/hr and 0.8 ton CO/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

1.e Emission Limitations: 0.31 lb OC/hr and 1.4 tons OC/yr

Applicable Compliance Method: The permittee shall demonstrate compliance with the hourly emission limitation based upon the results of stack testing conducted in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

Compliance with the annual emission limitation shall be assumed as long as compliance with the hourly emission limitation is maintained [the annual emission limitation was developed by multiplying the hourly emission limitation by 8760, and then dividing by 2000].

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

2.a The emission testing shall be conducted within 6 months prior to permit expiration.

2.b The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for: PE, OC, CO, SO₂ and NO_x.

2.c The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

i. PE: Methods 1 - 5 of 40 CFR, Part 60, Appendix A (as measured by the front-half catch only);

ii. VOC/OC: Methods 18, Method 25, or Method 25A, as appropriate, of 40 CFR, Part 60, Appendix A;

iii. CO: Methods 1 - 4 and 10 of 40 CFR, Part 60, Appendix A;

iv. NO_x: Methods 1 - 4 and 7 of 40 CFR, Part 60, Appendix A; and

v. SO₂: Methods 1 - 4 and 6 of 40 CFR, Part 60, Appendix A.

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

V. Testing Requirements (continued)

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

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

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

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/ Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
fiberglass wool curing oven; line 21	none	none

2. Additional Terms and Conditions

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

1. The permit to install for this permit action was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):
 - 1.a Pollutant: formaldehyde
 TLV (mg/m3): 273
 Maximum Hourly Emission Rate (lbs/hr): 0.57 (P025 and P027 combined)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.26
 MAGLC (ug/m3): 6.49
 - 1.b Pollutant: phenol
 TLV (mg/m3): 19,000
 Maximum Hourly Emission Rate (lbs/hr): 0.35 (P025 and P027 combined)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.16
 MAGLC (ug/m3): 452
 - 1.c Pollutant: methanol
 TLV (mg/m3): 262,000
 Maximum Hourly Emission Rate (lbs/hr): 1.18 (P025 and P027 combined)
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.56
 MAGLC (ug/m3): 6,238
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

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

- 2.a** changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- 2.b** changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- 2.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.).
- 3.** If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.
- 4.** The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - 4.a** a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - 4.b** documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - 4.c** where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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