OhioEPA

State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

12/31/02

CERTIFIED MAIL

RE: Final Title V Administrative Permit Amendment Chapter 3745-77 permit

03-20-01-0004
Johns Manville International, Inc. - Plant 3
Roger Snow
1410 Columbus Avenue
P.O. Box 7188
Defiance, OH 43512-7188

Dear Roger Snow:

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

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

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed with the Environmental Review Appeals Commission within thirty (30) days after notice of the Director's action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. It is also requested by the Director that a copy of the appeal be served upon the Environmental Enforcement Section of the Office of the Attorney General. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street
Room 300
Columbus, Ohio 43215

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

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northwest District Office
File, DAPC PMU

OhioEPA

State of Ohio Environmental Protection Agency

FINAL TITLE V ADMINISTRATIVE PERMIT AMENDMENT

Effective Date: **01/08/03** Expiration Date: **01/08/08** Modification Issue Date: **12/31/02**

This document constitutes issuance of a Title V permit for Facility ID: 03-20-01-0004 to:
Johns Manville International, Inc. - Plant 3
1410 Columbus Avenue
P.O. Box 7188
Defiance, OH 43512-7188

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

B002 (Dock B - Roof Air Make-up Unit)
Natural gas fired air make-up unit with a BTU rating of 10 MMBTU/hr.

K001 (Maintenance Paint Spray Booth (Enclosed Room))
Used to paint items as part of the plant's on going maintenance activities.

P003 (Handwrap Line/Curing Oven 36")
Natural gas fired oven, used to cure fiberglass pipe insulation sections.

P011 (Fiberglass Forming and Collection - Unit 31)
This process operates by melting glass using natural gas to make glass fibers.

P012 (Fiberglass Forming and Collection - Unit 32)
This process operates by melting glass using natural gas to make glass fibers.

P013 (Fiberglass Forming and Collection - Unit 33)
This process operates by melting glass using natural gas to make glass fibers.

P014 (Fiberglass Forming and Collection - Unit 34)
This process operates by melting glass using natural gas to make glass fibers.

P015 (Fiberglass Forming and Collection - Unit 35)
This process operates by melting glass using natural gas to make glass fibers.

P016 (Fiberglass Forming and Collection - Unit 36)
This process operates by melting glass using natural gas to make glass fibers.

P017 (Sear Roll: Unit 31)
The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

P018 (Sear Roll: Unit 32)
The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

P019 (Sear Roll: Unit 33)
The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

P020 (Sear Roll: Unit 34)
The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

P021 (Sear Roll: Unit 35)
The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

P022 (Sear Roll: Unit 36)
The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

P023 (Curing Oven: Unit 31)
Used to complete cure of fiberglass sections.

P024 (Curing Oven: Unit 32)
Used to complete cure of fiberglass sections.

P025 (Curing Oven: Unit 33)
Used to complete cure of fiberglass sections.

P026 (Curing Oven: Unit 34)
Used to complete cure of fiberglass sections.

P027 (Curing Oven: Unit 35)
Used to complete cure of fiberglass sections.

P028 (Curing Oven: Unit 36)
Used to complete cure of fiberglass sections.

P031 (Slitting, Cutting & Grinding: Unit 31)
Process used to finish the final products.

P032 (Slitting, Cutting & Grinding: Unit 32)
Process used to finish the final products.

P033 (Slitting, Cutting & Grinding: Unit 33)
Process used to finish the final products.

P034 (Slitting, Cutting & Grinding: Unit 34)
Process used to finish the final products.

P035 (Slitting, Cutting & Grinding: Unit 35)
Process used to finish the final products.

P036 (Slitting, Cutting & Grinding: Unit 36)
Process used to finish the final products.

P040 (Handwrap Line/Curing Oven #38)
Natural gas fired oven, used to cure fiberglass pipe insulation sections.

P042 (Fiberglass Forming and Collection: Unit 37)
This process operates by melting glass using natural gas to make glass fibers.

P043 (Curing Oven & Sear Roll: Unit 37)
Used to cure the fiberglass pipe sections.

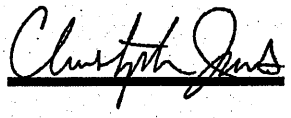
P044 (Slitting, Cutting & Grinding: Unit 37)
Process used to finish the final products.

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

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

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))

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

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

cc: Northwest District Office
File, DAPC PMU

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. 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. **All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) with respect to emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:**

(a) Written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations ; (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. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, i.e., in Part III of this Title V permit, 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. These 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 (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations. See B.6 below if no deviations occurred during the quarter.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) ,(ii) and (iii))

(b) Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the deviation reporting requirements for this Title V permit, written reports that identify each malfunction that occurred during each calendar quarter shall be submitted, at a minimum, quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year, and shall cover the previous calendar quarters.

In identifying each deviation caused by a malfunction, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Also, if a deviation caused by a malfunction is identified in a written report submitted pursuant to paragraph (a) above, a separate report is not required for that malfunction pursuant to this paragraph. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing, at a minimum, on a quarterly basis.

Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation, operational restriction, and control device operating parameter limitation shall be reported in the same manner as described above for malfunctions. These written reports for malfunctions (and scheduled maintenance projects, if appropriate) shall satisfy the requirements (in part) of OAC rule 3745-77-07(A)(3)(c)(iii) pertaining to the prompt reporting of all deviations.

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

iii. **For monitoring, record keeping, and reporting requirements:**

Written reports that 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. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. 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 (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."
(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

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 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. 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.

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 (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee

shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted 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:

B002 - Dock B - Roof air make-up unit (10 mmBtu/hr, natural gas-fired)
B003 - Warehouse air make-up unit #1
B004 - Compactor air make-up unit
L001- Spindle degreaser
P004- Manual pipe jacketing line
P029- Pre-react mix tanks (3)
P030- Binder mix tanks (14)
P037- Scrap re-feed system
P038- Automatic jacketing machine #34
P041- Automatic jacketing machine #32
Z001- Resin storage room tanks (2)
Z002- Melamine resin storage tanks (2)
Z003- Baler for edge trim and scrap
Z004- Compactor
Z005- Process water system
Z006- 1 MMBtu/hr water heater
Z007- Reverse osmosis room
Z008- QC oven
Z013- Caustic tank
Z022- Urea hopper loading
Z023- Marble unloading and coveying system
Z024- Off line re-work area
Z025- Packaging adhesive applicator
Z028- Madrel release
Z902- Warehouse air make-up unit #2
Z903- Dock B - north wall air make-up unit
Z906- Cold resin room roof air make-up unit
Z907- Hot end air make-up unit
Z908 - Marble room air make-up unit
Z909 - Warehouse co-ray vac
Z910 - Room #4 co-ray vac #1
Z911 - Room #4 co-ray vac #2
Z912 - Room #4 co-ray vac #3
Z913 - Pre-react room co-ray vac
Z914 - Refeed room co-ray vac

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: Dock B - Roof Air Make-up Unit (B002)

Activity Description: Natural gas fired air make-up unit with a BTU rating of 10 MMBTU/hr.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
10 mmBtu/hr, natural gas-fired air make-up unit	OAC rule 3745-17-10 (B)(1)	0.020 lb particulate emissions (PE)/mmBtu of actual heat input
	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 3745-31-05(A)(3) (PTI # 03-9555)	1.68 lbs nitrogen oxides (NOx)/hr, 7.36 tons NOx/yr 0.42 lb carbon monoxide (CO)/hr, 1.84 tons CO/yr The requirements of this rule also include compliance with the requirements of OAC rules 3745-18-06(A), 3745-17-07(A), 3745-17-(10)(B), 3745-21-08(B) and 3745-23-06(B).
	OAC rule 3745-18-06(A)	See A.I.2.a.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.c.

2. **Additional Terms and Conditions**

2.a OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit because the emissions unit only employs natural gas/LPG as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas/LPG being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas/LPG being burned in this emissions unit is the standard, pipeline quality natural gas/LPG supplied to industrial, commercial, and residential users throughout the State, it is assumed that it meets the fuel quality restrictions; and no monitoring, record keeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).

2. Additional Terms and Conditions (continued)

2.b The 0.42 lb CO/hr and 1.68 lbs NOx/hr limits were established for PTI purposes to reflect the potentials to emit for the emissions unit. Therefore, it is not necessary to develop record keeping and reporting requirements to ensure compliance with these limits.

2.c The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install # 03-9555.

II. Operational Restrictions

1. The permittee shall only employ natural gas in this emissions unit.

III. Monitoring and/or Record Keeping Requirements

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

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. 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 limitation(s) in Section A.I. of these terms and conditions shall be determined in accordance with the following method(s):

1.a Emission Limitation: 0.020 lb PE/mmBtu of actual heat input

Applicable Compliance Method: The permittee may determine compliance with the PE limitation by multiplying the maximum hourly natural gas consumption rate (mmcu.ft/hr) by the emission factor from AP-42, Table 1.4-2 (revised 7/98) of 1.9 lbs PE (filterable)/mm cu. ft, and then dividing by the maximum heat input capacity of the emissions unit (mmBtu/hr).

If required, compliance with the lb/mmBtu PE limitation shall be determined in accordance with the methods specified in OAC rule 3745-17-03(B)(9).

1.b Emission Limitation: Visible PE shall not exceed 20%, as a 6-minute average, except as provided by rule.

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

V. Testing Requirements (continued)

1.c Emission Limitations: 1.68 lbs NOx/hr, 7.36 tons NOx/yr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable NOx emission limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 100 lbs NOx/mm cu. ft.

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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

If required, compliance with the hourly allowable NOx emission limitation above shall be determined in accordance with Methods 1 through 4 and 7 of 40 CFR, Part 60, Appendix A.

1.d Emission Limitations: 0.42 lb CO/hr , 1.84 tons CO/yr

Applicable Compliance Method:
The permittee may determine compliance with the hourly allowable CO emission limitation by multiplying the maximum hourly natural gas consumption rate (mm cu. ft/hr) by the emission factor from AP-42, Table 1.4-1 (revised 7/98) of 84 lbs CO/mm cu. ft.

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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

If required, compliance with the hourly allowable CO emission limitation above shall be determined in accordance with Methods 1 through 4 and 10 of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Maintenance Paint Spray Booth (Enclosed Room) (K001)

Activity Description: Used to paint items as part of the plant's on going maintenance activities.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
maintenance paint spray booth, with filters	OAC rule 3745-21-09(U)(1)	Exempt, pursuant to OAC rule 3745-21-09(U)(2)(e)(iii).
	OAC rule 3745-21-07(G)(2)	on the days when coating non-metal parts: 8 lbs/hour and 40 lbs/day of organic compounds (OC) (for the coatings used for only the non-metal parts)
	OAC rule 3745-17-11(B)(1)	0.551 lb particulate emissions (PE)/hr
	OAC rule 3745-17-07(A)	See A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI# 03-10821)	See A.I.2.b and A.II.3. 51.9 lbs OC/day (for the coatings used for the non-metal parts, metal parts, and the combined metal and non-metal parts) 9.47 TPY OC (from coatings usage) 154.41 lbs OC/month and 0.93 TPY OC (from cleanup material usage) Visible PE from the stack servicing this emissions unit shall not exceed 0% opacity, as a 6-minute average.

2. **Additional Terms and Conditions**

2.a The visible PE limitation specified by this rule is less stringent than the visible PE limitation established pursuant to OAC rule 3745-31-05(A)(3).

2.b The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(U)(1), OAC rule 3745-21-07(G)(2) and OAC rule 3745-17-11(B)(1).

II. Operational Restrictions

1. The permittee shall operate the dry filtration system whenever this emissions unit is in operation.
2. The use of any photochemically reactive cleanup material in this emissions unit, as defined in OAC rule 3745-21-01, is prohibited.
3. Coating usage in this emissions unit shall not exceed 10 gallons/day.

III. Monitoring and/or Record Keeping Requirements

1. On the days when coating parts that consist entirely of metal, the permittee shall collect and record the following information each day for this emissions unit for the coatings used for such metal parts:

   a. the name and identification number of each coating material employed;

   b. the volume, in gallons, of each coating employed;

   c. the total volume, in gallons, of all the coatings employed;

   d. the VOC content, in pounds/gallon, of each coating employed; and

   e. the total VOC emissions for all the coatings employed [summation of (1.b x 1.d) for all coatings], in pounds.

2. On the days when coating parts that include no metal, the permittee shall collect and record the following information each day for this emissions unit for the coatings used for such non-metal parts:

   a. the company identification for each coating employed;

   b. the volume, in gallons, of each coating employed;

   c. the total volume, in gallon, of all the coatings employed;

   d. the OC content of each coating, in pounds per gallon; and

   e. the total OC emission rate for all coatings [summation of (2.b x 2.d) for all coatings] in pounds.

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

3. On the days when coating combined parts that consist of both metal and non-metal, the permittee shall collect and record the following information each day for this emissions unit for the coatings used for the combined metal and non-metal parts:

   a. the name and identification number of each coating employed;

   b. the volume, in gallons, of each coating employed;

   c. the total volume, in gallons, of all the coatings employed;

   d. the total surface area of all the parts coated, in square feet;

   e. the total surface area of the metal portions of all the parts coated, in square feet;

   f. the ratio of the total surface area of the metal portions of all the parts coated to the total surface area of all the parts coated (3.e/3.d);

   g. the OC content of each coating employed, in pounds per gallon;

   h. the ratio of the total surface area of the non-metal portions of all the parts coated to the total surface area of all the parts coated ([d-e]/d);

   i. the total OC emission rate for all the coatings employed [summation of 3.b x 3.g) for all coatings], in pounds;

   j. the total OC emission rate for all the coatings applied to the non-metal portions of the combined metal and non-metal parts (3.h x 3.i), in pounds.

4. On the days when coating non-metal parts (including the non-metal portions of the combined metal and non-metal parts), the permittee shall collect and record the following information for the non-metal parts:

   a. the total OC emission rate for all the coatings employed for the non-metal parts (2.e + 3.j), in pounds;

   b. the total number of hours the emissions unit was in operation and coatings were applied to the non-metal parts and the non-metal portions of the combined non-metal and metal parts; and

   c. the average hourly OC emission rate for all the coatings employed for the non-metal parts, i.e., [(4.a)/(4.b), in pounds per hour (average).

5. On the days when coating metal parts, non-metal parts, and/or combined parts the permittee shall collect and record the following information:

   a. the total volume, in gallons, of all the coatings employed (1.c + 2.c + 3.c) ; and

   b. the total OC emission rate for all coatings employed (1.e + 2.e + 3.i), in pounds.

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

6. The permittee shall collect and record the following information each month for cleanup material usage:

   a. the name and identification of each cleanup material employed'

   b. documentation that each cleanup material is not a photochemically reactive material;

   c. the number of gallons of each cleanup material employed;

   d. the OC content of each cleanup material, in pounds per gallon;

   e. the total OC emissions for all the cleanup materials employed [summation of (6.c x 6.d) for all cleanup materials employed];

   NOTE: The permittee may also calculate the monthly OC emissions rate in accordance with the following formula if waste cleanup materials are sent off-site for reclamation/disposal:

   Monthly OC emissions from cleanup operations = summation of [(Ai-Bi) x di] for i = 1 to n

   where:

   i = 1, 2....n

   n = the total number of different cleanup materials employed

   Ai = the number of gallons of cleanup material i consumed (gallons/month)

   Bi - the number of gallons of cleanup material i sent off-site for disposal or reclamation

   di = density of cleanup material i, in pounds/gallon

7. The permittee shall maintain daily records that document any time periods when the dry filtration system was not in service when the emissions unit was in operation.

8. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following monitoring and record keeping requirements are as stringent as or more stringent than the monitoring and record keeping requirements contained in Permit to Install (PTI) #03-10821: A.III.1 to A.III.7 . The monitoring and record keeping requirements contained in the above-referenced PTI are subsumed into the monitoring and record keeping requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying monitoring and record keeping requirements in the PTI.

IV. Reporting Requirements

1. The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that this emissions unit employed more than the applicable maximum daily coating usage restriction (10 gallons/day). The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 45 days after the exceedance occurs.

IV. Reporting Requirements (continued)

2. For the coating of non-metal parts, the permittee shall submit deviation (excursion) reports which include the following information:

   a. An identification of each day during which the average hourly organic compound emissions from the coatings and cleanup materials used for the non-metal parts exceeded 8 pounds per hour, and the actual average hourly organic compound emissions for each such day.

   b. An identification of each day during which the organic compound emissions from the coatings and cleanup materials used for the non-metal parts exceeded 40 pounds per day, and the actual organic compound emissions for each such day.

3. The permittee shall notify the Director (the Ohio EPA, Northwest District Office) in writing of any daily record showing that the dry filtration system was not in service when the emissions unit was in operation. The notification shall include a copy of such record and shall be sent to the Director (the Ohio EPA, Northwest District Office) within 30 days after the event occurs.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the daily OC emission limitation of 51.9 pounds.

5. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the monthly cleanup OC emission limitation of 154.41 pounds.

6. The permittee shall submit annual reports that summarize the actual annual OC emissions (from coating usage) and the actual annual OC emissions (from cleanup material usage) for this emissions unit. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

7. The permittee shall submit deviation (excursion) reports that identify each month during which a photochemically reactive cleanup material was employed in this emissions unit.

8. The quarterly deviation (excursion) reports shall be submitted in accordance with section A.1.c of the General Terms and Conditions of this permit.

9. Pursuant to OAC Rule 3745-77-07(A)(3)(a)(ii), the following reporting requirements are as stringent as or more stringent than the reporting requirements contained in PTI #03-10821: A.IV.1 to A.IV.8. The reporting requirements contained in the above-referenced PTI are subsumed into the reporting requirements of this operating permit, so that compliance with these requirements constitutes compliance with the underlying reporting requirements in the PTI.

V. Testing Requirements

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

1.a Emission limitation: Coating usage shall be less than 10 gallons per day.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in section A.III.1 of this permit.

V. Testing Requirements (continued)

1.b Emission Limitations:
for the coating of non-metal parts, 8 lbs OC/hr and 40 lbs OC/day (for the coatings used for the non-metal parts)

Applicable Compliance Method-
Compliance shall be based upon the record keeping requirements specified in sections A.III.2, 3, and 4 of this permit.

If required, compliance with the hourly allowable OC emission limitation shall be demonstrated in accordance with Methods 18, 25, or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

1.c Emission Limitation:
0.551 lb PE/hr

Applicable Compliance method-

To determine the actual worst case PE rate, the following equation may be used:

E = maximum coating solids usage rate, in pounds per hour X (1-TE) X (1-CE)

E = particulate emissions rate (lbs/hr)

TE = transfer efficiency, which is the ratio of the amount of coating solids deposited on the coated part to the amount of coating solids used

CE = control efficiency of the control equipment

If required, the permittee shall demonstrate compliance with the hourly allowable PE limitation above pursuant to OAC rule 3745-17-03(B)(10).

1.d Emission limitations:
51.9 lbs OC/day and 9.47 TPY OC

Applicable Compliance Method:
Compliance with the daily and annual allowable OC emission limitations shall be based upon the record keeping requirements specified in sections A.III.1, A.III.2, A.III.3, and A.III.5 of this permit.

1.e Emission Limitation:
154.41 lbs OC/month and 0.75 TPY OC (from cleanup material usage)

Applicable Compliance Method:
Compliance with the monthly and annual allowable OC emission limitations above shall be based upon the record keeping requirements specified in section A.III.6 of this permit.

1.f Emission Limitation-
Visible PE shall not exceed 0 percent opacity, as a six-minute average.

Applicable Compliance Method-
If required, the permittee shall demonstrate compliance with the visible PE limitation above in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
maintenance paint spray booth, with filters	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):

   Pollutant: toulene
   TLV (mg/m3): 188
   Maximum Hourly Emission Rate (lbs/hr): 1.63
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1795
   MAGLC (ug/m3): 4476

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 still 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:

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.).

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

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

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

3.a a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

3.b documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

3.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: Handwrap Line/Curing Oven 36" (P003)

Activity Description: Natural gas fired oven, used to cure fiberglass pipe insulation sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired fiberglass curing oven	OAC rule 3745-17-11(B)(1)	0.88 lb particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	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 6-minute average except as provided by rule.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.b.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

II. Operational Restrictions (continued)

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

3. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

a. Procedures for the proper operation and maintenance of the process.

b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

d. A schedule for monitoring the process parameter(s).

e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitation: 0.88 lb PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass Forming and Collection - Unit 31 (P011)

Activity Description: This process operates by melting glass using natural gas to make 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
line #31 forming and collection unit	40 CFR Part 52.21 OAC rule 3745-31-10 through 20	See A.I.2.a.
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per megagram (6.8 lb of formaldehyde per ton) of glass pulled.
	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	See A.I.2.b. 7.94 lbs particulate emissions (PE)/hr, 34.76 tons PE/year (See A.I.2.c.) 2.40 lbs organic compounds (OC)/hr, 10.53 tons OC/year 0.88 lb nitrogen oxides (NOx)/hr, 3.83 tons NOx/year 2.11 lbs carbon monoxide (CO)/hr, 9.26 tons CO/year 0.99 lb sulfur dioxide (SO2)/hr, 4.35 tons SO2/year 0.39 lb fluorides/hr, 1.71 tons fluorides/yr
	OAC rule 3745-21-07(G)	Exempt (See A.II.1.)
	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).

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

2. Additional Terms and Conditions

2.a Based on the "Prevention of Significant Deterioration" (PSD) analysis conducted to ensure the application of "Best Available Control Technology" (BACT), it has been determined that no control technologies for PE are cost effective.

2.b The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21, OAC rules 3745-31-10 through 20, OAC rule 3745-17-07(A), OAC rule 3745-21-07(G), and 40 CFR, Part 63, Subpart NNN.

2.c All PE is assumed to be PM10.

II. Operational Restrictions

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

2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain records of the following information for this emissions unit:

   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.

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 minimize or eliminate the visible emissions.

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

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.2.

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

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382;

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturers's instructions; and

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process;

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate;

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions;

   d. A schedule for monitoring the process parameter(s); and

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended;

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions; and

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site;

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche; and

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation;

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected;

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day during which a photochemically reactive material was employed. 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 visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

1. Emissions Testing: 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 fluorides.

c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rate: for PE, Methods 1 - 5 of 40 CFR, Part 60; for fluorides, Method 13 or Method 26 as specified in 40 CFR Part 60, Appendix A.

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

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

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

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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

2. Compliance Methods Requirements: Compliance with the emission limitations in section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.a Emission Limitations: 7.94 lbs PE/hr, 34.76 tons PE/yr

Applicable Compliance Method: Compliance with the hourly allowable PE limitation above shall be based on the results of stack testing conducted in accordance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.b Emission Limitations: 2.40 lbs OC/hr, 10.53 tons OC/yr

Applicable Compliance Method: The hourly allowable OC emission limitation was established by multiplying the maximum process weight rate (as indicated in the permit application) by an emission factor derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation by testing in accordance with Method 18, Method 25, or Method 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

V. Testing Requirements (continued)

2.c Emission Limitations: 0.88 lb NOx/hr, 3.83 tons NOx/yr

Applicable Compliance Method: The hourly allowable NOx emission limitation was established by multiplying the maximum process weight rate (as indicated in the permit application) by an emission factor derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.d Emission Limitations: 2.11 lbs CO/hr, 9.26 tons CO/yr

Applicable Compliance Method: The hourly allowable CO emission limitation was established by multiplying the maximum process weight rate (as indicated in the permit application) by an emission factor derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.e Emission Limitation: 0.99 lb SO2/hr, 4.35 tons SO2/yr

Applicable Compliance Method: The hourly allowable SO2 emission limitation was established by multiplying the maximum process weight rate (as indicated in the permit application) by an emission factor derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 6 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.f Emission Limitations: 0.39 lb fluorides/hr, 1.71 tons fluorides/yr

Applicable Compliance Method: Compliance with the hourly allowable fluorides emission limitation shall be determined based on the results of emission testing conducted in accordance with Methods 13 or 26 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.g Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

V. Testing Requirements (continued)

2.h Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. The purpose of the experimental production run;

b. The affected line;

c. How the established process parameters will deviate from previously approved levels;

d. The duration of the experimental production run;

e. The date and time of the experimental production run; and

f. A description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

1. The permittee must implement a Quality Improvement Plan (QIP) consistent with the compliance assurance monitoring provisions of 40 CFR part 64, subpart D when the process parameter(s) is outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 5 percent of the total operating time in a 6-month block reporting period.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass Forming and Collection - Unit 32 (P012)

Activity Description: This process operates by melting glass using natural gas to make 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass forming and collection unit #32	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 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	See A.I.2.a.
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. Additional Terms and Conditions

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

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 lbs/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

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

II. Operational Restrictions (continued)

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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 minimize or eliminate the visible emissions.

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

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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 must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

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

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

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 pursuant to OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

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

a. The emission testing shall be conducted within 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 method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 - 5 of 40 CFR, Part 60, Appendix A, as measured by fronth-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 the Ohio EPA, Northwest District Office.

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

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

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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

V. Testing Requirements (continued)

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

   a. The purpose of the experimental production run;

   b. The affected line;

   c. How the established process parameters will deviate from previously approved levels;

   d. The duration of the experimental production run;

   e. The date and time of the experimental production run; and

   f. A description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass Forming and Collection - Unit 33 (P013)

Activity Description: This process operates by melting glass using natural gas to make 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass forming and collection unit #33	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 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	See A.I.2.a.
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

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 lbs/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

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

II. Operational Restrictions (continued)

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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 minimize or eliminate the visible emissions.

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

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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 must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

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

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

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 pursuant to OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

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

a. The emission testing shall be conducted within 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 method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 - 5 of 40 CFR, Part 60, Appendix A, as measured by fronth-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 the Ohio EPA, Northwest District Office.

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

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

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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

V. Testing Requirements (continued)

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

   a. The purpose of the experimental production run;

   b. The affected line;

   c. How the established process parameters will deviate from previously approved levels;

   d. The duration of the experimental production run;

   e. The date and time of the experimental production run; and

   f. A description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass Forming and Collection - Unit 34 (P014)

Activity Description: This process operates by melting glass using natural gas to make 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass forming and collection unit #34	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 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	See A.I.2.a.
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

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 lbs/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

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

II. Operational Restrictions (continued)

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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 minimize or eliminate the visible emissions.

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

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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 must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

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

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

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 pursuant to OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

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

a. The emission testing shall be conducted within 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 method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 - 5 of 40 CFR, Part 60, Appendix A, as measured by fronth-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 the Ohio EPA, Northwest District Office.

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

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

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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

V. Testing Requirements (continued)

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. The purpose of the experimental production run;

b. The affected line;

c. How the established process parameters will deviate from previously approved levels;

d. The duration of the experimental production run;

e. The date and time of the experimental production run; and

f. A description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass Forming and Collection - Unit 35 (P015)

Activity Description: This process operates by melting glass using natural gas to make 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass forming and collection unit #35	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 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	See A.I.2.a.
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

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 lbs/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

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

II. Operational Restrictions (continued)

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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 minimize or eliminate the visible emissions.

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

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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 must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

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

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

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 pursuant to OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

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

a. The emission testing shall be conducted within 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 method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 - 5 of 40 CFR, Part 60, Appendix A, as measured by fronth-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 the Ohio EPA, Northwest District Office.

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

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

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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

V. Testing Requirements (continued)

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

   a. The purpose of the experimental production run;

   b. The affected line;

   c. How the established process parameters will deviate from previously approved levels;

   d. The duration of the experimental production run;

   e. The date and time of the experimental production run; and

   f. A description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass Forming and Collection - Unit 36 (P016)

Activity Description: This process operates by melting glass using natural gas to make 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass forming and collection unit #36	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 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	See A.I.2.a.
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

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 lbs/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

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

II. Operational Restrictions (continued)

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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 minimize or eliminate the visible emissions.

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

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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 must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

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

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

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 pursuant to OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

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

a. The emission testing shall be conducted within 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 method(s) shall be employed to demonstrate compliance with the allowable mass emission rate: Methods 1 - 5 of 40 CFR, Part 60, Appendix A, as measured by fronth-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 the Ohio EPA, Northwest District Office.

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

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

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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

V. Testing Requirements (continued)

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

   a. The purpose of the experimental production run;

   b. The affected line;

   c. How the established process parameters will deviate from previously approved levels;

   d. The duration of the experimental production run;

   e. The date and time of the experimental production run; and

   f. A description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sear Roll: Unit 31 (P017)

Activity Description: The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass sear roll operation; unit #31	OAC rule 3745-17-11 (B)(1)	1.49 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07 (A)	Visible PE from the stack servicing emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See section A.II.1.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

1. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.
3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).
4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each month for this emissions unit:

   a. the company identification for each liquid organic material employed; and

   b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382;

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions; and

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit 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.

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

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation: 1.49 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sear Roll: Unit 32 (P018)

Activity Description: The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass sear roll operation; unit #32	OAC rule 3745-17-11 (B)(1)	1.49 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07 (A)	Visible PE from the stack servicing emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See section A.II.1.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

1. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.
3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).
4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each month for this emissions unit:

   a. the company identification for each liquid organic material employed; and

   b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382;

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions; and

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit 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.

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

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation: 1.49 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sear Roll: Unit 33 (P019)

Activity Description: The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass sear roll operation; unit #33	OAC rule 3745-17-11 (B)(1)	1.39 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07 (A)	Visible PE from the stack servicing emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See section A.II.1.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

1. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.
3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).
4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each month for this emissions unit:

   a. the company identification for each liquid organic material employed; and

   b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382;

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions; and

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

a. Procedures for the proper operation and maintenance of the process.

b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

d. A schedule for monitoring the process parameter(s).

e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit 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.

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

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation: 1.39 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sear Roll: Unit 34 (P020)

Activity Description: The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass sear roll operation; unit #34	OAC rule 3745-17-11 (B)(1)	1.62 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07 (A)	Visible PE from the stack servicing emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See section A.II.1.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

1. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.
3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).
4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each month for this emissions unit:

   a. the company identification for each liquid organic material employed; and

   b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382;

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions; and

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit 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.

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

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation: 1.62 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sear Roll: Unit 35 (P021)

Activity Description: The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass sear roll operation; unit #35	OAC rule 3745-17-11 (B)(1)	1.87 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07 (A)	Visible PE from the stack servicing emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See section A.II.1.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

1. The use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.
2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.
3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).
4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each month for this emissions unit:

   a. the company identification for each liquid organic material employed; and

   b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382;

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions; and

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit 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.

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

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation: 1.87 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Sear Roll: Unit 36 (P022)

Activity Description: The process is used to partially cure the fiberglass sections prior to entering the curing ovens.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass sear roll operation; unit #36	OAC rule 3745-17-11(B)(1)	2.45 lbs particulate emissions (PE)/hr
	OAC rule 3745-17-07 (A)	Visible PE from the stack servicing emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
	OAC rule 3745-21-07(G)	none (See section A.II.1.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

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

2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain the following information each month for this emissions unit:

   a. the company identification for each liquid organic material employed; and

   b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382;

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions; and

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

a. Procedures for the proper operation and maintenance of the process.

b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

d. A schedule for monitoring the process parameter(s).

e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

    a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

    b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

    c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

    a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

    b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

    c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit 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.

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

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

V. Testing Requirements (continued)

1.a Emission Limitation: 2.45 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Curing Oven: Unit 31 (P023)

Activity Description: Used to complete cure of fiberglass sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired fiberglass curing oven; unit #31	OAC rule 3745-17-11(B)(1)	1.49 lbs particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	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 6-minute average except as provided by rule.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.b.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

II. Operational Restrictions (continued)

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

3. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitation: 1.49 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Curing Oven: Unit 32 (P024)

Activity Description: Used to complete cure of fiberglass sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired fiberglass curing oven; unit #32	OAC rule 3745-17-11(B)(1)	1.49 lbs particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	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 6-minute average except as provided by rule.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.b.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

II. Operational Restrictions (continued)

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

3. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitation: 1.49 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Curing Oven: Unit 33 (P025)

Activity Description: Used to complete cure of fiberglass sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired fiberglass curing oven; unit #33	OAC rule 3745-17-11(B)(1)	1.39 lbs particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	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 6-minute average except as provided by rule.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.b.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

II. Operational Restrictions (continued)

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

3. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

a. Procedures for the proper operation and maintenance of the process.

b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

d. A schedule for monitoring the process parameter(s).

e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitation: 1.39 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Curing Oven: Unit 34 (P026)

Activity Description: Used to complete cure of fiberglass sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired fiberglass curing oven; unit #34	OAC rule 3745-17-11(B)(1)	1.62 lbs particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	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 6-minute average except as provided by rule.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.b.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

II. Operational Restrictions (continued)

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

3. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitation: 1.62 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Curing Oven: Unit 35 (P027)

Activity Description: Used to complete cure of fiberglass sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired fiberglass curing oven; unit #35	OAC rule 3745-17-11(B)(1)	1.85 lbs particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	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 6-minute average except as provided by rule.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.b.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

II. Operational Restrictions (continued)

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

3. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitation: 1.85 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Curing Oven: Unit 36 (P028)

Activity Description: Used to complete cure of fiberglass sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
natural gas-fired fiberglass curing oven; unit #36	OAC rule 3745-17-11(B)(1)	2.49 lbs particulate emissions (PE)/hr
	OAC rule 3745-21-07(G)	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 6-minute average except as provided by rule.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.b.)
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.

2. **Additional Terms and Conditions**

2.a This emissions unit is located in Defiance County (which is not a "Priority I" county as indicated in paragraph (A) of OAC rule 3745-21-06) and is not a "new source." Therefore, pursuant to OAC rule 3745-21-07(A), it is exempt from the requirements of OAC rule 3745-21-07(G).

2.b There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for this emissions unit because the process weight rate is less than 1,000 pounds/hour.

II. Operational Restrictions

1. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

2. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

II. Operational Restrictions (continued)

3. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

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.

2. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.

3. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR Part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

4. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

5. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

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

6. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

7. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

8. The permittee must monitor and record the formulation of each batch of binder used.

9. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

10. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

11. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

12. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

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

13. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

14. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

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

2. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitation: 2.49 lbs PE/hr

Applicable Compliance Method: If required, compliance with the hourly PE limitation above shall be based on emission testing conducted in accordance with OAC rule 3745-17-03(B)(10).

V. Testing Requirements (continued)

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

1.c Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Slitting, Cutting & Grinding: Unit 31 (P031)

Activity Description: Process used to finish the final 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
line #31 product finishing unit/ with 4 baghouses	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	1.10 lbs particulate emissions (PE)/hr, 4.82 tons PE/yr (See A.I.2.c.)
		See A.I.2.b.
		See A.I.2.a.
	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).
	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.

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 BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) based upon a request by the permittee to voluntarily lower the allowable emissions of PE to federally enforceable limitations of 1.10 lbs per hour (this allowable emission limitation is consistent with a 99% removal efficiency) and 4.82 tons per year based on the use of a control system consisting of baghouse(s) and cyclone(s) connected in series.

The new PE limitations were applied to PSD modeling requirements to demonstrate that the PSD, significant impact levels were not triggered.

2.c All PE is assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across each baghouse serving this emissions unit (Baghouses #1, #2, #3 and #4) shall be maintained within the range of 4.0 - 7.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each 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 each baghouse on a once per shift basis.

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 any one of the four baghouses serving this emissions unit 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.

V. Testing Requirements

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

1.a Emission Limitations: 1.10 lbs PE/hr, 4.82 tons PE/yr

Applicable Compliance Method: The hourly allowable PE limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method-
If required, the permittee shall demonstrate compliance with the visible PE limitation above 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.

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Slitting, Cutting & Grinding: Unit 32 (P032)

Activity Description: Process used to finish the final 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
line #32 product finishing unit/ with 4 baghouses	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	1.10 lbs particulate emissions (PE)/hr, 4.82 tons PE/yr (See A.I.2.c.)
		See A.I.2.b.
		See A.I.2.a.
	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).
	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.

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 BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) based upon a request by the permittee to voluntarily lower the allowable emissions of PE to federally enforceable limitations of 1.10 lbs per hour (this allowable emission limitation is consistent with a 99% removal efficiency) and 4.82 tons per year based on the use of a control system consisting of baghouse(s) and cyclone(s) connected in series.

The new PE limitations were applied to PSD modeling requirements to demonstrate that the PSD, significant impact levels were not triggered.

2.c All PE is assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across each baghouse serving this emissions unit (Baghouses #1, #2, #3 and #4) shall be maintained within the range of 4.0 - 7.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each 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 each baghouse on a once per shift basis.

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 any one of the four baghouses serving this emissions unit 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.

V. Testing Requirements

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

1.a Emission Limitations: 1.10 lbs PE/hr, 4.82 tons PE/yr

Applicable Compliance Method: The hourly allowable PE limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method-
If required, the permittee shall demonstrate compliance with the visible PE limitation above 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.

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Slitting, Cutting & Grinding: Unit 33 (P033)

Activity Description: Process used to finish the final 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
line #33 product finishing unit/ with 4 baghouses	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	1.10 lbs particulate emissions (PE)/hr, 4.82 tons PE/yr (See A.I.2.c.) See A.I.2.b. See A.I.2.a.
	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).
	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.

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 BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) based upon a request by the permittee to voluntarily lower the allowable emissions of PE to federally enforceable limitations of 1.10 lbs per hour (this allowable emission limitation is consistent with a 99% removal efficiency) and 4.82 tons per year based on the use of a control system consisting of baghouse(s) and cyclone(s) connected in series.

The new PE limitations were applied to PSD modeling requirements to demonstrate that the PSD, significant impact levels were not triggered.

2.c All PE is assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across each baghouse serving this emissions unit (Baghouses #1, #2, #3 and #4) shall be maintained within the range of 4.0 - 7.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each 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 each baghouse on a once per shift basis.

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 any one of the four baghouses serving this emissions unit 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.

V. Testing Requirements

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

1.a Emission Limitations: 1.10 lbs PE/hr, 4.82 tons PE/yr

Applicable Compliance Method: The hourly allowable PE limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method-
If required, the permittee shall demonstrate compliance with the visible PE limitation above 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.

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Slitting, Cutting & Grinding: Unit 34 (P034)

Activity Description: Process used to finish the final 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
line #34 product finishing unit/ with 4 baghouses	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	1.10 lbs particulate emissions (PE)/hr, 4.82 tons PE/yr (See A.I.2.c.)
		See A.I.2.b.
		See A.I.2.a.
	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).
	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.

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 BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) based upon a request by the permittee to voluntarily lower the allowable emissions of PE to federally enforceable limitations of 1.10 lbs per hour (this allowable emission limitation is consistent with a 99% removal efficiency) and 4.82 tons per year based on the use of a control system consisting of baghouse(s) and cyclone(s) connected in series.

The new PE limitations were applied to PSD modeling requirements to demonstrate that the PSD, significant impact levels were not triggered.

2.c All PE is assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across each baghouse serving this emissions unit (Baghouses #1, #2, #3 and #4) shall be maintained within the range of 4.0 - 7.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each 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 each baghouse on a once per shift basis.

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 any one of the four baghouses serving this emissions unit 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.

V. Testing Requirements

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

1.a Emission Limitations: 1.10 lbs PE/hr, 4.82 tons PE/yr

Applicable Compliance Method: The hourly allowable PE limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method-
If required, the permittee shall demonstrate compliance with the visible PE limitation above 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.

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Slitting, Cutting & Grinding: Unit 35 (P035)

Activity Description: Process used to finish the final 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
line #35 product finishing unit/ with 4 baghouses	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	1.10 lbs particulate emissions (PE)/hr, 4.82 tons PE/yr (See A.I.2.c.) See A.I.2.b. See A.I.2.a.
	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).
	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.

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 BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) based upon a request by the permittee to voluntarily lower the allowable emissions of PE to federally enforceable limitations of 1.10 lbs per hour (this allowable emission limitation is consistent with a 99% removal efficiency) and 4.82 tons per year based on the use of a control system consisting of baghouse(s) and cyclone(s) connected in series.

The new PE limitations were applied to PSD modeling requirements to demonstrate that the PSD, significant impact levels were not triggered.

2.c All PE is assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across each baghouse serving this emissions unit (Baghouses #1, #2, #3 and #4) shall be maintained within the range of 4.0 - 7.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each 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 each baghouse on a once per shift basis.

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 any one of the four baghouses serving this emissions unit 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.

V. Testing Requirements

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

1.a Emission Limitations: 1.10 lbs PE/hr, 4.82 tons PE/yr

Applicable Compliance Method: The hourly allowable PE limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method-
If required, the permittee shall demonstrate compliance with the visible PE limitation above 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.

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Slitting, Cutting & Grinding: Unit 36 (P036)

Activity Description: Process used to finish the final 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
line #36 product finishing unit	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	See A.I.2.a and b. 1.40 lbs particulate emissions (PE)/hr, 6.13 tons PE/yr (See A.I.2.c.)
	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).
	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.

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 BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) based upon a request by the permittee to voluntarily lower the allowable emissions PE to federally enforceable limitations of 1.40 lbs per hour (this allowable emission limitation is consistent with a 99% removal efficiency) and 6.13 tons per year.

The new PE limitations were applied to PSD modeling requirements to demonstrate that the PSD significant impact levels were not triggered.

2.c All PE is assumed to be PM10.

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 (or a similar emissions unit was in compliance) 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 on a once per shift basis.

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 serving this emissions unit 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.

V. Testing Requirements

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

1.a Emission Limitations: 1.40 lbs PE/hr, 6.13 tons PE/yr

Applicable Compliance Method:
The hourly allowable PE limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.b Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method-
If required, the permittee shall demonstrate compliance with the visible PE limitation above 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.

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Handwrap Line/Curing Oven #38 (P040)

Activity Description: Natural gas fired oven, used to cure fiberglass pipe insulation sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
hand wrap pipe insulation oven #38	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	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)	none (See A.II.1.)
	OAC rule 3745-31-05(A)(3) (PTI #03-6652)	0.23 lb PE/hr, 1.04 tons PE/yr 0.26 lb organic compounds/hr, 1.14 tons OC/yr See A.I.2.a.
	40 CFR Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per mega gram (6.8 lb of formaldehyde per ton) of glass pulled.
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.b.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.c.)

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), 3745-21-07(G), 3745-21-08(B), 3745-23-06(B) and 3745-18-06(E) and 40 CFR Part 63, Subpart NNN.

2. Additional Terms and Conditions (continued)

2.b The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-6652.

2.c The SO2 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 use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.

2. The permittee must operate the process such that the monitored process parameter(s) is not outside the limit(s) established during the performance test as specified in 40 CFR part 63.1384(a)(10) for more than 10 percent of the total operating time in a 6-month block reporting period.

3. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

4. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR part 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

   a. the company identification for each liquid organic material employed; and

   b. documentation on whether or not each liquid organic material employed is a photochemically reactive material.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.2.

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

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

4. The permittee must prepare a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must establish a correlation between formaldehyde emissions and a process parameter(s) to be monitored.

6. The permittee must monitor the established parameter(s) according to the procedures in the operations, maintenance, and monitoring plan.

7. The permittee must include as part of their operations, maintenance, and monitoring plan the following information:

   a. Procedures for the proper operation and maintenance of the process.

   b. Process parameter(s) to be monitored to demonstrate compliance with the applicable emission limits in 40 CFR part 63.1382. Examples of process parameters include loss on ignition (LOI), binder solids content, and binder application rate.

   c. Correlation(s) between process parameter(s) to be monitored and formaldehyde emissions.

   d. A schedule for monitoring the process parameter(s).

   e. Record keeping procedures, consistent with the record keeping requirements of 40 CFR Part 63.1386, to show that the process parameter value(s) established during the performance test is not exceeded.

8. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

9. The permittee must monitor and record the formulation of each batch of binder used.

10. The permittee must monitor and record at least once every 8 hours, the product (LOI) and product density of each bonded wool fiberglass product manufactured.

11. For all process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The owner or operator shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

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

12. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

    a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

    b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

    c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

13. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) of this part and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

14. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

    a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

    b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

    c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

15. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

    a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

    b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

    c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which a photochemically reactive material was employed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

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

3. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the record keeping requirements of paragraph (d) of this section. When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

1.a Emission Limitations: 0.23 lb PE/hr, 1.04 tons PE/yr

Applicable Compliance Method: The hourly allowable PE limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.b Emission Limitations: 0.26 lb OC/hr, 1.14 tons OC/yr

Applicable Compliance Method: The hourly emission limitation represents the emissions unit's potential to emit.

If required, the permittee shall demonstrate compliance with the hourly OC emission limitation 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

1.c Emission Limitation-
Visible PE shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

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

V. Testing Requirements (continued)

1.d Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

2. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

a. the purpose of the experimental production run;

b. the affected line;

c. how the established process parameters will deviate from previously approved levels;

d. the duration of the experimental production run;

e. the date and time of the experimental production run; and

f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Fiberglass Forming and Collection: Unit 37 (P042)

Activity Description: This process operates by melting glass using natural gas to make 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass forming line, with venturi scrubber	40 CFR Part 52.21 OAC rule 3745-31-10 through 20	See A.I.2.a.
	40 CFR, Part 63, Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per megagram (6.8 lb of formaldehyde per ton) of glass pulled.
	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	5.83 lbs particulate emissions (PE)/hr, 25.54 tons PE/yr (see A.I.2.c) 1.81 lbs organic compounds (OC)/hr, 7.93 tons OC/yr 2.85 lbs nitrogen oxides (NOx)/hr, 12.48 tons NOx/yr 2.22 lbs carbon monoxide (CO)/hr, 9.72 tons CO/yr 1.22 lbs sulfur dioxide (SO2)/hr, 5.34 tons SO2/yr 0.48 lb fluorides/hr, 2.1 tons fluorides/yr The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21, OAC rule 3745-31-10 through 20, 40 CFR, Part 63, Subpart NNN, and OAC rule 3745-17-07(A), and OAC rule 3745-21-07(G).
	OAC rule 3745-21-07(G)	none (See A.II.1.)

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	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).
	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.

2. Additional Terms and Conditions

2.a The permittee shall employ best available control technology (BACT) to control all the PE from this emissions unit. BACT has been determined to be the use of a venturi scrubber.

2.b In 1994 PTI # 03-07940 was issued requiring emissions units P042 and P043 to be controlled with a venturi scrubber. The use of a venturi scrubber meeting a mass emission limitation of 5.83 lbs PE/hr was established as "Best Available Technology" (BAT) under OAC rule 3745-31-05. The BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) from a request by the permittee to voluntarily limit the allowable PE for purposes of avoiding PSD. The BACT determination was based on the venturi scrubber already being installed, thus the cost effectiveness analysis did not include installed capital costs.

2.c All PE is assumed to be PM10.

II. Operational Restrictions

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

2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 5 inches of water at all times while the emissions unit is in operation.

3. The scrubber water flow rate shall be continuously maintained at a value of not less than 300 gallons per minute at all times while the emissions unit is in operation.

4. The permittee must operate each scrubber such that each monitored parameter is not outside the limit(s) established during the performance test as specified in 40 CFR 63.1384(a)(11) for more than 10 percent of the total operating time in a 6-month block reporting period.

5. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

6. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

   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.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The pressure drop monitor is to be certified by its manufacturer to be accurate within +/- 250 pascals (+/- 1 inch water gauge) over its operating range, and the flow rate monitor is to be certified by its manufacturer to be accurate within +/- 5 percent over its operating range. The permittee must also continuously monitor and record the feed rate of any chemical(s) added to the scrubbing liquid.

3. The permittee shall collect and record the following information each day:

   a. the pressure drop across the scrubber, in inches of water, on once per shift basis;

   b. the scrubber water flow rate, in gallons per minute, on once per shift basis; and

   c. a log of the downtime for the control device and monitoring equipment, when the associated emissions unit was in operation.

4. The permittee must prepare for each flame attenuation manufacturing line subject to the provisions 40 CFR 63.1380, a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

6. The permittee must monitor and record the formulation of each batch of binder used.

7. The permittee must monitor and record at least once every 8 hours, the product Loss on Ignition (LOI) and product density of each bonded wool fiberglass product manufactured.

8. For all control device and process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The permittee shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

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

9. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

10. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

11. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

12. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which a photochemically reactive material was employed. These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

IV. Reporting Requirements (continued)

2. The permittee shall submit quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

   These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

3. The permittee shall submit quarterly reports that include a log of the downtime for the control device and monitoring equipment, when the associated emissions unit was in operation. These reports shall be submitted by March 31, June 30, September 30, and December 31 of each and shall cover the previous calendar quarter.

4. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the recordkeeping requirements of 40 CFR part 63.1386(d). When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

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

   b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.

   c. The following test method(s) shall be employed to demonstrate compliance with the requirements specified in A.V.2.b:

   for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A;

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

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

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

   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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

V. Testing Requirements (continued)

2. Compliance Methods Requirements: Compliance with the emission limitations in section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.a Emission Limitations: 5.83 lbs PE/hr, 25.54 tons PE/yr

Applicable Compliance Method: Compliance with the hourly PE limitation above shall be based on the results of stack testing conducted pursuant 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.b Emission Limitations: 1.81 lbs OC/hr, 7.93 tons OC/yr

Applicable Compliance Method: The hourly allowable OC emission limitation was established by multiplying the maximum process weight rate (tons/hr) [as indicated in the permit application] by an emission factor (lbs/tons] derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance hourly allowable OC emission limitation by testing in accordance with Method 18, Method 25, or Method 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.c Emission Limitations: 2.85 lbs NOx/hr, 12.48 tons NOx/yr

Applicable Compliance Method: The hourly allowable NOx emission limitation was established by multiplying the maximum process weight rate (tons/hr) [as indicated in the permit application] by an emission factor (lbs/tons] derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance hourly allowable NOx emission limitation by testing in accordance with Methods 1 - 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.d Emission Limitations: 2.22 lbs CO/hr, 9.72 tons CO/yr

Applicable Compliance Method: The hourly allowable CO emission limitation was established by multiplying the maximum process weight rate (tons/hr) [as indicated in the permit application] by an emission factor (lbs/tons] derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance hourly allowable CO emission limitation by testing in accordance with Methods 1 - 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

V. Testing Requirements (continued)

2.e Emission Limitations: 1.22 lbs SO2/hr, 5.34 tons SO2/yr

Applicable Compliance Method: The hourly allowable SO2 emission limitation was established by multiplying the maximum process weight rate (tons/hr) [as indicated in the permit application] by an emission factor (lbs/tons] derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance hourly allowable SO2 emission limitation by testing in accordance with Methods 1 - 4 and 6 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.f Emission Limitations: 0.48 lb fluorides/hr, 2.10 tons fluorides/yr

Applicable Compliance Method: Compliance with the hourly allowable fluorides emission limitation shall be determined based on the results of emission testing conducted in accordance with Methods 13 or 26 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.g Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the above emission limit pursuant to OAC rule 3745-17-03(B)(1).

2.h Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

V. Testing Requirements (continued)

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

   a. the purpose of the experimental production run;

   b. the affected line;

   c. how the established process parameters will deviate from previously approved levels;

   d. the duration of the experimental production run;

   e. the date and time of the experimental production run; and

   f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

1. The permittee must implement a Quality Improvement Plan (QIP) consistent with the compliance assurance monitoring provisions of 40 CFR, Part 64, Subpart D when any scrubber parameter is outside the limit(s) established during the performance test as specified in 40 CFR 63.1384(a)(11) for more than 5 percent of the total operating time in a 6-month block reporting period.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Curing Oven & Sear Roll: Unit 37 (P043)

Activity Description: Used to cure the fiberglass pipe sections.

A. State and Federally Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass curing oven and sear roll operation; unit 37	40 CFR Part 52.21 OAC rule 3745-31-10 through 20	See A.I.2.a.
	40 CFR Part 63 Subpart NNN	The permittee shall not discharge or cause to be discharged into the atmosphere in excess of 3.4 kg of formaldehyde per megagram (6.8 lb of formaldehyde per ton) of glass pulled.
	OAC rule 3745-17-11(B)(1)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	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.II.1).

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
	OAC rule 3745-31-05 (PTI #03-13522)	0.79 lb PE/hr, 3.46 tons PE/year (see A.I.2.c) 1.02 lbs organic compounds (OC)/hr, 4.47 tons OC/year 1.67 lbs nitrogen oxides (NOx)/hr, 7.32 tons NOx/year 2.22 lbs carbon monoxide (CO)/hr, 9.72 tons CO/year The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21, OAC rule 3745-31-10 through 20, 40 CFR, Part 63, Subpart NNN, and OAC rule 3745-17-07(A), OAC rule 3745-21-08(B), OAC rule 3745-23-06(B) and OAC rule 3745-18-06(E) and OAC rule 3745-21-07(G).
	OAC rules 3745-21-08(B) and 3745-23-06(B)	See A.I.2.d.
	OAC rule 3745-18-06(E)	None, exempt pursuant to OAC rule 3745-18-06(C) (See A.I.2.e.)

2. Additional Terms and Conditions

2.a The permittee shall employ best available control technology (BACT) to control all the PE from this emissions unit. BACT has been determined to be the use of a venturi scrubber (see A.I.2.c).

2.b In 1994 PTI # 03-07940 was issued requiring emissions units P042 and P043 to be controlled with a venturi scrubber. The use of a venturi scrubber meeting a mass emission limitation of 5.83 lbs PE/hr was established as "Best Available Technology" (BAT) under OAC rule 3745-31-05. The BAT determination was made in accordance with OAC rule 3745-31-02(A)(2) from a request by the permittee to voluntarily limit the allowable PE for purposes of avoiding PSD. The BACT determination was based on the venturi scrubber already being installed, thus the cost effectiveness analysis did not include installed capital costs.

2.c All PE is assumed to be PM10.

2.d The permittee has satisfied the "best available control techniques and operating practices" and "latest available control techniques and operating practices" required pursuant to OAC rules 3745-21-08 and 3745-23-06, respectively by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in Permit to Install 03-13522.

2.e The SO2 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 use of any photochemically reactive material in this emissions unit, as defined in OAC rule 3745-21-01(C)(5), is prohibited.

II. Operational Restrictions (continued)

2. The pressure drop across the scrubber shall be continuously maintained at a value of not less than 5 inches of water at all times while the emissions unit is in operation.

3. The scrubber water flow rate shall be continuously maintained at a value of not less than 300 gallons per minute at all times while the emissions unit is in operation.

4. The permittee must operate each scrubber such that each monitored parameter is not outside the limit(s) established during the performance test as specified in 40 CFR 63.1384(a)(11) for more than 10 percent of the total operating time in a 6-month block reporting period.

5. The permittee must use a resin in the formulation of binder such that the free-formaldehyde content of the resin used does not exceed the free-formaldehyde range contained in the specification for the resin used during the performance test as specified in 40 CFR 63.1384(a)(9).

6. The permittee must use a binder formulation that does not vary from the specification and operating range established and used during the performance test as specified in 40 CFR 63.1384(a)(9). For the purposes of this standard, adding or increasing the quantity of urea and/or lignin in the binder formulation does not constitute a change in the binder formulation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall maintain monthly records of the following information for this emissions unit:

   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.

2. The permittee shall properly operate and maintain equipment to continuously monitor the static pressure drop across the scrubber and the scrubber water flow rate while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

3. The permittee shall collect and record the following information each day:

   a. the pressure drop across the scrubber, in inches of water, on once per shift basis;

   b. the scrubber water flow rate, in gallons per minute, on once per shift basis; and

   c. a log of the downtime for the control device and monitoring equipment, when the associated emissions unit was in operation.

4. The permittee must prepare for each flame attenuation manufacturing line subject to the provisions 40 CFR 63.1380, a written operations, maintenance, and monitoring plan. The plan must be submitted to the Director for review and approval as part of the application for a part 70 permit. The plan must include the following information:

   a. Procedures for the proper operation and maintenance of process modifications used to meet the emission limits in 40 CFR part 63.1382.

   b. Procedures for the proper operation and maintenance of monitoring devices used to determine compliance, including quarterly calibration and certification of accuracy of each monitoring device according to the manufacturer's instructions.

   c. Corrective actions to be taken when process parameters deviate from the limit(s) established during initial performance tests.

5. The permittee must monitor and record the free-formaldehyde content of each resin shipment received and used in the formulation of binder.

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

6. The permittee must monitor and record the formulation of each batch of binder used.

7. The permittee must monitor and record at least once every 8 hours, the product Loss on Ignition (LOI) and product density of each bonded wool fiberglass product manufactured.

8. For all control device and process operating parameters measured during the initial performance tests, the permittee may change the limits established during the initial performance tests if additional performance testing is conducted to verify that, at the new control device or process parameter levels, they comply with the applicable emission limits in 40 CFR part 63.1382. The permittee shall conduct all additional performance tests according to the procedures 40 CFR part 63, subpart A and in 40 CFR part 63.1384.

9. The permittee shall develop and implement a written plan as described in 40 CFR part 63.6(e)(3) that contains specific procedures to be followed for operating the source and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process modifications and control systems used to comply with the standard. In addition to the information required in 40 CFR part 63.6(e)(3), the plan shall include:

   a. Procedures to determine and record the cause of the malfunction and the time the malfunction began and ended.

   b. Corrective actions to be taken in the event of a malfunction of a control device or process modification, including procedures for recording the actions taken to correct the malfunction or minimize emissions.

   c. A maintenance schedule for each control device and process modification that is consistent with the manufacturer's instructions and recommendations for routine and long-term maintenance.

10. The permittee shall also keep records of each event as required by 40 CFR part 63.10(b) and record and report if an action taken during a startup, shutdown, or malfunction is not consistent with the procedures in the plan as described in 40 CFR part 63.10(e)(3)(iv).

11. As required by 40 CFR part 63.10(b), the permittee shall maintain files of all information (including all reports and notifications) required by the general provisions and this subpart:

    a. The permittee must retain each record for at least 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. The most recent 2 years of records must be retained at the facility. The remaining 3 years of records may be retained off site.

    b. The permittee may retain records on microfilm, on a computer, on computer disks, on magnetic tape, or on microfiche.

    c. The permittee may report required information on paper or on a labeled computer disk using commonly available and EPA-compatible computer software.

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

12. In addition to the general records required by 40 CFR part 63.10(b)(2), the permittee shall maintain records of the following information:

a. The formulation of each binder batch and the LOI and density for each product manufactured on a flame attenuation manufacturing line subject to the provisions of this subpart, and the free formaldehyde content of each resin shipment received and used in the binder formulation.

b. Process parameter level(s) flame attenuation manufacturing lines that use process modifications to comply with the emission limits, including any period when the parameter level(s) deviated from the established limit(s), the date and time of the deviation, when corrective actions were initiated, the cause of the deviation, an explanation of the corrective actions taken, and when the cause of the deviation was corrected.

c. Glass pull rate, including any period when the pull rate exceeded the average pull rate established during the performance test by more than 20 percent, the date and time of the exceedance, when corrective actions were initiated, the cause of the exceedance, an explanation of the corrective actions taken, and when the cause of the exceedance was corrected.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify each month during which a photochemically reactive material was employed. 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 quarterly deviation (excursion) reports that identify all periods of time during which the following scrubber parameters were not maintained at or above the required levels:

   a. the static pressure drop across the scrubber; and

   b. the scrubber water flow rate.

   These deviation reports shall be submitted in accordance with paragraph A.1.c of the General Terms and Conditions of this permit.

3. The permittee shall submit quarterly reports that include a log of the downtime for the control device and monitoring equipment, when the associated emissions unit was in operation. These reports shall be submitted by March 31, June 30, September 30, and December 31 of each and shall cover the previous calendar quarter.

4. As required by 40 CFR part 63.10(e)(3)(v), the permittee shall report semiannually if measured emissions are in excess of the applicable standard or a monitored parameter deviates from the levels established during the performance test. The report shall contain the information specified in 40 CFR part 63.10(c) as well as the additional records required by the recordkeeping requirements of 40 CFR part 63.1386(d). When no deviations have occurred, the permittee shall submit a report stating that no excess emissions occurred during the reporting period.

V. Testing Requirements

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

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

   b. The emissions testing shall be conducted to demonstrate compliance with the allowable mass emission rate for PE.

   c. The following test method(s) shall be employed to demonstrate compliance with the requirements specified in A.V.2.b:

   for PE, Methods 1 - 5 of 40 CFR, Part 60, Appendix A;

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

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

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

   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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

2. Compliance Methods Requirements: Compliance with the emission limitations in section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.a Emission Limitations: 0.79 lb PE/hr, 3.46 tons PE/yr

Applicable Compliance Method: Compliance with the hourly PE limitation above shall be based on the results of stack testing conducted pursuant 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

V. Testing Requirements (continued)

2.b Emission Limitations: 1.02 lbs OC/hr, 4.47 tons OC/yr

Applicable Compliance Method: The hourly allowable OC emission limitation was established by multiplying the maximum process weight rate (tons/hr) [as indicated in the permit application] by an emission factor (lbs/tons] derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance hourly allowable OC emission limitation by testing in accordance with Method 18, Method 25, or Method 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.c Emission Limitations: 1.67 lbs NOx/hr, 7.32 tons NOx/yr

Applicable Compliance Method: The hourly allowable NOx emission limitation was established by multiplying the maximum process weight rate (tons/hr) [as indicated in the permit application] by an emission factor (lbs/tons] derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance hourly allowable NOx emission limitation by testing in accordance with Methods 1 - 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.d Emission Limitations: 2.22 lbs CO/hr, 9.72 tons CO/yr

Applicable Compliance Method: The hourly allowable CO emission limitation was established by multiplying the maximum process weight rate (tons/hr) [as indicated in the permit application] by an emission factor (lbs/tons] derived from stack testing of a similar emissions unit.

If required, the permittee shall demonstrate compliance hourly allowable CO emission limitation by testing in accordance with Methods 1 - 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.e Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the above emission limit pursuant to OAC rule 3745-17-03(B)(1).

2.f Emission Limitation-
6.8 lbs of formaldehyde per ton of glass pulled.

Applicable Compliance Method-
The permittee shall demonstrate compliance with the allowable limitation above pursuant to the record keeping requirements established in section A.III of this permit.

If required the permittee shall demonstrate compliance by testing in accordance with Methods 316 or 318 of 40 CFR, Part 63, Appendix A.

V. Testing Requirements (continued)

3. Unless disapproved by the Director, the permittee of a flame attenuation manufacturing line regulated by this subpart may conduct short-term experimental production runs using binder formulations or other process modifications where the process parameter values would be outside those established during performance tests without first conducting performance tests. Such runs must not exceed 1 week in duration unless the Director approves a longer period. The permittee must notify the Director and postmark or deliver the notification at least 15 days prior to commencement of the short-term experimental production runs. The Director must inform the permittee of a decision to disapprove or must request additional information prior to the date of the short-term experimental production runs. Notification of intent to perform an experimental short-term production run shall include the following information:

   a. the purpose of the experimental production run;

   b. the affected line;

   c. how the established process parameters will deviate from previously approved levels;

   d. the duration of the experimental production run;

   e. the date and time of the experimental production run; and

   f. a description of any emission testing to be performed during the experimental production run.

VI. Miscellaneous Requirements

1. The permittee must implement a Quality Improvement Plan (QIP) consistent with the compliance assurance monitoring provisions of 40 CFR, Part 64, Subpart D when any scrubber parameter is outside the limit(s) established during the performance test as specified in 40 CFR 63.1384(a)(11) for more than 5 percent of the total operating time in a 6-month block reporting period.

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

Part III - Terms and Conditions for Emissions Units

Emissions Unit ID: Slitting, Cutting & Grinding: Unit 37 (P044)

Activity Description: Process used to finish the final 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.

Operations, Property, and/or Equipment	Applicable Rules/ Requirements	Applicable Emissions Limitations/Control Measures
fiberglass slitting, cutting, and grinding operation with cyclones and two baghouses	40 CFR Part 52.21 OAC rule 3745-31-10 through 20	See A.I.2.a.
	OAC rule 3745-31-05(A)(3) (PTI# 03-13522)	The requirements of this rule also include compliance with the requirements of 40 CFR Part 52.21 and OAC rules 3745-31-10 through 20 and 3745-17-07(A). 0.86 lb particulate emissions (PE)/hr, 3.77 tons PE/yr (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.
	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**

2.a The permittee shall employ best available control technology (BACT) to control all the PE from this emissions unit. BACT has been determined to be the use of a control system consisting of baghouse(s) and cyclone(s) connected in series. The control system shall achieve a mass outlet rate of no more than 0.86 lb PE/hr (this mass outlet rate is consistent with a 99% removal efficiency).

2.b All PE is assumed to be PM10.

II. Operational Restrictions

1. The pressure drop across each baghouse serving this emissions unit (baghouses #1, #2, #3 and #4) shall be maintained within the range of 4.0 - 7.0 inches of water while the emissions unit is in operation.

III. Monitoring and/or Record Keeping Requirements

1. The permittee shall properly operate and maintain equipment to monitor the pressure drop across each 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 each baghouse on a once per shift basis.

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.

3. Notwithstanding the frequency of reporting requirements specified in section A.IV, the permittee may reduce the frequency of visual observations for this emissions unit 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.2.

   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 either of the baghouses serving this emissions unit did not comply with the allowable range specified in section A.II.1 of this permit. 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 visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Director (the Ohio EPA, Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

V. Testing Requirements

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

   a. The emissions testing shall be conducted 6 prior to permit expiration.

   b. The emissions testing shall be conducted to demonstrate compliance with the mass allowable emission rate of 0.4 lb PE/hr.

   c. The following test method shall be employed to demonstrate compliance with the PE limitation: Methods 1 - 5 of 40 CFR, Part 60, Appendix A.

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

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 Director (the Ohio EPA, Northwest District Office). The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Director (the Ohio EPA, Northwest District Office's) refusal to accept the results of the emission test(s).

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

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 Director (the Ohio EPA, Northwest District Office) 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 Director (the Ohio EPA, Northwest District Office).

2. Compliance Methods Requirements: Compliance with the emission limitations in section A.I of the terms and conditions of this permit shall be determined in accordance with the following methods:

2.a Emission Limitations: 0.86 lb PE/hr, 3.77 tons PE/yr

Applicable Compliance Method: Compliance with the hourly PE limitation above shall be based on the results of stack testing conducted pursuant 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 calculated by multiplying the hourly emission limitation by 8760 and dividing by 2000).

2.b Emission Limitation: Visible PE shall not exceed 20% opacity, as a 6-minute average, except as provided by rule

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with the above emission limit pursuant to OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

None

B. State Enforceable Section

I. Applicable Emissions Limitations and/or Control Requirements

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

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

2. **Additional Terms and Conditions**

None

II. Operational Restrictions

None

III. Monitoring and/or Record Keeping Requirements

None

IV. Reporting Requirements

None

V. Testing Requirements

None

VI. Miscellaneous Requirements

None

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