State of Ohio Environmental Protection Agency

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Columbus, Ohio 43215

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

9/14/2009

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Carry Jo Perry
Johns Manville / Plant #01 - wtv1
6050 River Road
Waterville, OH 43566

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0448000012
Permit Number: P0104989
Permit Type: OAC Chapter 3745-31 Modification
County: Lucas

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully.

The issuance of this PTI is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

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 Compliance Assistance and Pollution Prevention at (614) 644-3469. If you have any questions regarding this permit, please contact the Toledo Department of Environmental Services. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page http://www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Toledo Department of Environmental Services

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install
for
Johns Manville / Plant #01 - wtv1

Facility ID: 0448000012
Permit Number: P0104989
Permit Type: OAC Chapter 3745-31 Modification
Issued: 9/14/2009
Effective: 9/14/2009

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Johns Manville / Plant #01 - wtv1

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Authorization

Facility ID: 0448000012
Facility Description: Fiber Glass Manufacturer
Application Number(s): A0037537, A0037965
Permit Number: P0104989
Permit Description: Combining of direct chop classifiers #1-4 (P041-P044) with the corresponding direct chop ovens #1-#4 (P037-P040) into combined emission units P061-P064. Also requesting an increase in PM10 and VOC due to new binders.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $1,000.00
Issue Date: 9/14/2009
Effective Date: 9/14/2009

This document constitutes issuance to:

Johns Manville / Plant #01 - wtv1
6050 River Road
Waterville, OH 43566

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0104989
Permit Description: Combining of direct chop classifiers #1-4 (P041-P044) with the corresponding direct chop ovens #1-#4 (P037-P040) into combined emission units P061-P064. Also requesting an increase in PM10 and VOC due to new binders.

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

Emissions Unit ID:	**P061**
Company Equipment ID:	Direct Chop Oven and Classifier #1 Leg #5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P062**
Company Equipment ID:	Direct Chop Oven & Classifier #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P063**
Company Equipment ID:	Direct Chop Oven & Classifier #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P064**
Company Equipment ID:	Direct Chop Oven & Classifier #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

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

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

2. Severability Clause

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

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

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

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

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

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

4. Monitoring and Related Record Keeping and Reporting Requirements

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

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

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

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

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Toledo Department of Environmental Services.

(2) Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Toledo Department of Environmental Services. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the Toledo Department of Environmental Services every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

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

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the Toledo Department of Environmental Services in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

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

6. Compliance Requirements

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

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

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

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

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

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

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

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

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

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

7. Best Available Technology

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

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Toledo Department of Environmental Services.

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

(i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

10. Applicability

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

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

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

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

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed through completion of the annual PER covering the last period of operation of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the PER covering the last period the emissions unit operated.

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

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

12. Permit-To-Operate Application

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

13. Construction Compliance Certification

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

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

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

14. Public Disclosure

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

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

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

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The Toledo Department of Environmental Services must be notified in writing of any transfer of this permit.

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

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

   a) None.

C. Emissions Unit Terms and Conditions

1. P061, Direct Chop Oven and Classifier #1 Leg #5

Operations, Property and/or Equipment Description:

Direct Chop Oven & Classifier #1 with baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 2.23 pounds per ton of glass and 14.16 tons per year.
		See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average unless otherwise specified by the rules.
c.	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 5.38 pounds per hour.
d.	OAC rule 3745-21-07(B)	See b)(2)c.
e.	OAC rule 3745-21-08(B)	See b)(2)d.
f.	OAC rule 3745-31-05(D)	See b)(2)e. and b)(2)f.
g.	OAC rules 3745-31-10 thru 20	Particulate matter emission of less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 0.70 pounds per ton of glass and 4.46 tons per year.
h.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)g. and b)(2)h.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-07(B).

b. The pound per ton and tons per year emission limitations for VOC were established for PTI purposes to reflect the potential to emit for these emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limitations.

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

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

d. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with all applicable rules.

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

e. Combined annual emissions from P061 through P064 shall not exceed 0.020 ton of SO2, 2.99 tons of CO, 3.56 tons of NOx, and 33.63 tons of VOC per rolling, 12-month period.

f. The combined emissions of PM_{10} from P061 through P064 shall not exceed 11.34 tons as a rolling, 12-month summation.

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

h. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM_{10} emissions from this air contaminant source since the calculated annual emission rate for PE and PM_{10} is each less than 10 tons/year, taking into account the baghouse required by the federally enforceable rule limit of 4.46 tons of PM_{10} per year under OAC rule 3745-31-10 through 20.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

(2) The permittee shall operate the baghouse whenever this emissions unit is in operation.

(3) The combined volume of natural gas combusted in emissions units P061 through P064 shall not exceed 71.106 mmscf per rolling, 12-month period.

(4) The combined throughput of glass fibers in emissions units P061 through P064 shall not exceed 30,165.2 tons per rolling, 12-month period.

(5) The permittee shall initiate corrective action within 1 hour of an alarm from a bag leak detection system and complete corrective actions in a timely manner. Example corrective actions may include:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media, or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; and

f. shutting down the process producing the particulate emissions.

d) Monitoring and/or Recordkeeping 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.

(2) The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the emissions unit was in operation.

(3) The permittee shall maintain records, on a monthly basis, of the combined volume of natural gas combusted, in mmscf, in emissions units P061 through P064 as a rolling, 12-month summation.

(4) The permittee shall maintain records, on a monthly basis, of the throughput of glass fibers, in tons, for this emissions unit as a rolling, 12-month summation.

(5) The permittee shall maintain records, on a monthly basis, of the rolling, 12-month emissions of PM_{10} from emission units P061 through P064, as calculated in f)(2)c.

(6) The permittee shall maintain records, on a monthly basis, of the combined throughput of glass fibers, in tons, for emissions units P061 through P064 as a rolling, 12-month summation.

(7) The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system.

a. A triboelectric bag leak detection system shall be installed, operated, adjusted, and maintained in a manner consistent with the U.S. Environmental Protection Agency guidance, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems including, but not limited to, devices using light scattering and other effects, shall be installed,

operated, adjusted, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

b. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PE emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grain per actual cubic foot) or less.

c. The bag leak detection system sensor shall produce an output of relative particulate emissions.

d. The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PE emissions over a preset level is detected and the alarm shall be located such that it can be heard by the appropriate plant personnel.

e. The bag leak detection system shall be installed downstream of the baghouse. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors.

f. Initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

g. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

The permittee shall maintain records of any bag leak detection system alarms, including the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the weekly 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.

e) Reporting Requirements

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

a. all periods of time during which any bag leak detection system alarms were sounded. The reports shall include a summary of the date and time of the alarm(s), when corrective actions were initiated, the cause of the alarm(s), an explanation of the corrective actions taken, and when the cause of the alarm(s) was corrected.

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

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

(3) The permittee shall submit quarterly written reports that identify:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous 3-month period.

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

f) Testing Requirements

(1) Compliance with the emission limitation(s)in b)(1) in this permit shall be determined according to the following methods:

a. Emission Limitation:

20% opacity, as a 6-minute average

Applicable Compliance Method;

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(1); or other U.S. EPA approved test method, with prior approval from the Ohio EPA.

b. Emission Limitation:

5.38 pound of PE per hour

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(10), or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

c. Emission Limitation:

0.70 pound of PM10 per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

d. Emission Limitation:

4.46 ton of PM10 per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.70 pound of PM10 per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

e. Emission Limitation:

2.23 pounds of VOC per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 25 of 40 CFR Part 60 Appendix A using the methods and

procedures specified in OAC rule 3745-21-10, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

f. Emission Limitation:

14.16 tons of VOC per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 2.23 pounds of VOC per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

(2) Compliance with the combined emission limitation(s) in b)(1) for emissions units P061 through P064 shall be determined according to the following methods:

a. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 2.99 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (84 pounds of CO emissions per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

b. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 3.56 ton of NOx per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (100 pounds of NOx per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

c. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 11.34 tons of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test(s) which demonstrated compliance with this emission limitation for PM10 (in pounds PM10 per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P062 through P064.

d. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 0.02 ton SO2, per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98 (0.6 pound of SO2 per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

e. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 33.63 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test which demonstrated compliance with this emission limitation for VOC (in pounds VOC per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P062 through P064.

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

a. The emission testing shall be conducted within 6 months after issuance of the permit and thereafter when required by the Toledo Division of Environmental Services or Ohio EPA Central Office.

b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For PM10, Methods 201 and 202 of 40 CFR Part 51, Appendix M. For VOC, Method 25 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

The 3-hour average process weight rate, in tons of glass dried per hour, shall be determined during the stack testing to allow a determination of an emission factor in pounds of the regulated pollutant per ton of glass dried.

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

Personnel from the Toledo Division of Environmental Services or Ohio EPA Central 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 of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services or Ohio EPA Central Office.

g) Miscellaneous Requirements

(1) None.

2. P062, Direct Chop Oven & Classifier #2

Operations, Property and/or Equipment Description:

Direct Chop Oven & Classifier #2 with baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 2.23 pounds per ton of glass and 14.16 tons per year.
		See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average unless otherwise specified by the rules.
c.	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 5.38 pounds per hour.
d.	OAC rule 3745-21-07(B)	See b)(2)c.
e.	OAC rule 3745-21-08(B)	See b)(2)d.
f.	OAC rule 3745-31-05(D)	See b)(2)e. and b)(2)f.
g.	OAC rules 3745-31-10 thru 20	Particulate matter emission of less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 0.80 pounds per ton of glass and 5.08 tons per year.
h.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)g. and b)(2)h.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-07(B).

b. The pound per ton emission limitation for VOC was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

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

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

d. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with all applicable rules.

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

e. Combined annual emissions from P061 through P064 shall not exceed 0.020 ton of SO2, 2.99 tons of CO, 3.56 tons of NOx, and 33.63 tons of VOC per rolling, 12-month period.

f. The combined emissions of PM_{10} from P061 through P064 shall not exceed 11.34 tons as a rolling, 12-month summation.

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

h. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM_{10} emissions from this air contaminant source since the calculated annual emission rate for PE and PM_{10} is each less than 10 tons/year, taking into account the baghouse required by the federally enforceable rule limit of 5.08 tons of PM_{10} per year under OAC rule 3745-31-10 through 20.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

(2) The permittee shall operate the baghouse whenever this emissions unit is in operation.

(3) The combined volume of natural gas combusted in emissions units P061 through P064 shall not exceed 71.106 mmscf per rolling, 12-month period.

(4) The permittee shall maintain records, on a monthly basis, of the throughput of glass fibers, in tons, for this emissions unit as a rolling, 12-month summation.

(5) The combined throughput of glass fibers in emissions units P061 through P064 shall not exceed 30,165.2 tons per rolling, 12-month period.

(6) The permittee shall initiate corrective action within 1 hour of an alarm from a bag leak detection system and complete corrective actions in a timely manner. Example corrective actions may include:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media, or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; and

f. shutting down the process producing the particulate emissions.

d) Monitoring and/or Recordkeeping 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.

(2) The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the emissions unit was in operation.

(3) The permittee shall maintain records, on a monthly basis, of the combined volume of natural gas combusted, in mmscf, in emissions units P061 through P064 as a rolling, 12-month summation.

(4) The permittee shall maintain records, on a monthly basis, of the throughput of glass fibers, in tons, for this emissions unit as a rolling, 12-month summation.

(5) The permittee shall maintain records, on a monthly basis, of the rolling, 12-month emissions of PM_{10} from emission units P061 through P064, as calculated in f)(2)c.

(6) The permittee shall maintain records, on a monthly basis, of the combined throughput of glass fibers, in tons, for emissions units P061 through P064 as a rolling, 12-month summation.

(7) The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system.

a. A triboelectric bag leak detection system shall be installed, operated, adjusted, and maintained in a manner consistent with the U.S. Environmental Protection Agency guidance, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-

015, September 1997). Other bag leak detection systems including, but not limited to, devices using light scattering and other effects, shall be installed, operated, adjusted, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

b. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PE emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grain per actual cubic foot) or less.

c. The bag leak detection system sensor shall produce an output of relative particulate emissions.

d. The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PE emissions over a preset level is detected and the alarm shall be located such that it can be heard by the appropriate plant personnel.

e. The bag leak detection system shall be installed downstream of the baghouse. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors.

f. Initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

g. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

The permittee shall maintain records of any bag leak detection system alarms, including the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the weekly 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.

e) Reporting Requirements

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

a. all periods of time during which any bag leak detection system alarms were sounded. The reports shall include a summary of the date and time of the alarm(s), when corrective actions were initiated, the cause of the alarm(s), an explanation of the corrective actions taken, and when the cause of the alarm(s) was corrected.

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

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

(3) The permittee shall submit quarterly written reports that identify:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous 3-month period.

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

f) Testing Requirements

(1) Compliance with the emission limitation(s)in b)(1) in this permit shall be determined according to the following methods:

a. Emission Limitation:

20% opacity, as a 6-minute average

Applicable Compliance Method;

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(1); or other U.S. EPA approved test method, with prior approval from the Ohio EPA.

b. Emission Limitation:

5.38 pound of PE per hour

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(10), or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

c. Emission Limitation:

0.80 pound of PM10 per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

d. Emission Limitation:

5.08 ton of PM10 per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.80 pound of PM10 per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

e. Emission Limitation:

2.23 pounds of VOC per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 and 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

f. Emission Limitation:

14.16 tons of VOC per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 2.23 pounds of VOC per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

(2) Compliance with the combined emission limitation(s) in b)(1) for emissions units P061 through P064 shall be determined according to the following methods:

a. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 2.99 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (84 pounds of CO emissions per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

b. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 3.56 ton of NOx per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (100 pounds of NOx per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

c. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 11.34 tons of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test(s) which demonstrated compliance with this emission limitation for PM10 (in pounds PM10 per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P061, P063, and P064.

d. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 0.02 ton SO2, per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98 (0.6 pound of SO2 per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

e. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 33.63 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test which demonstrated compliance with this emission limitation for VOC (in pounds VOC per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P061, P063, and P064.

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

a. The emission testing shall be conducted within 6 months after issuance of the permit and thereafter when required by the Toledo Division of Environmental Services or Ohio EPA Central Office.

b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For PM10, Methods 201 and 202 of 40 CFR Part 51, Applendix M. For VOC, Method 25 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

The 3-hour average process weight rate, in tons of glass dried per hour, shall be determined during the stack testing to allow a determination of an emission factor in pounds of the regulated pollutant per ton of glass dried.

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

Personnel from the Toledo Division of Environmental Services or Ohio EPA Central 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 of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services or Ohio EPA Central Office.

g) Miscellaneous Requirements

(1) None.

3. P063, Direct Chop Oven & Classifier #3

Operations, Property and/or Equipment Description:

Direct Chop Oven & Classifier #3 with baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 2.23 pounds per ton of glass and 14.16 tons per year.
		See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average unless otherwise specified by the rules.
c.	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 5.38 pounds per hour.
d.	OAC rule 3745-21-07(B)	See b)(2)c.
e.	OAC rule 3745-21-08(B)	See b)(2)d.
f.	OAC rule 3745-31-05(D)	See b)(2)e. and b)(2)f.
g.	OAC rules 3745-31-10 thru 20	Particulate matter emission of less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 0.70 pounds per ton of glass and 4.46 tons per year.
h.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)g. and b)(2)h.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-07(B).

b. The pound per ton emission limitation for VOC was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

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

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

d. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with all applicable rules.

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

e. Combined annual emissions from P061 through P064 shall not exceed 0.020 ton of SO2, 2.99 tons of CO, 3.56 tons of NOx, and 33.63 tons of VOC per rolling, 12-month period.

f. The combined emissions of PM_{10} from P061 through P064 shall not exceed 11.34 tons as a rolling, 12-month summation.

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

h. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM_{10} emissions from this air contaminant source since the calculated annual emission rate for PE and PM_{10} is each less than 10 tons/year, taking into account the baghouse required by the federally enforceable rule limit of 4.46 tons of PM_{10} per year under OAC rule 3745-31-10 through 20.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

(2) The permittee shall operate the baghouse whenever this emissions unit is in operation.

(3) The combined volume of natural gas combusted in emissions units P061 through P064 shall not exceed 71.106 mmscf per rolling, 12-month period.

(4) The combined throughput of glass fibers in emissions units P061 through P064 shall not exceed 30,165.2 tons per rolling, 12-month period.

(5) The permittee shall initiate corrective action within 1 hour of an alarm from a bag leak detection system and complete corrective actions in a timely manner. Example corrective actions may include:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media, or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; and

f. shutting down the process producing the particulate emissions.

d) Monitoring and/or Recordkeeping 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.

(2) The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the emissions unit was in operation.

(3) The permittee shall maintain records, on a monthly basis, of the combined volume of natural gas combusted, in mmscf, in emissions units P061 through P064 as a rolling, 12-month summation.

(4) The permittee shall maintain records, on a monthly basis, of the throughput of glass fibers, in tons, for this emissions unit as a rolling, 12-month summation.

(5) The permittee shall maintain records, on a monthly basis, of the rolling, 12-month emissions of PM_{10} from emission units P061 through P064, as calculated in f)(2)c.

(6) The permittee shall maintain records, on a monthly basis, of the combined throughput of glass fibers, in tons, for emissions units P061 through P064 as a rolling, 12-month summation.

(7) The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system.

a. A triboelectric bag leak detection system shall be installed, operated, adjusted, and maintained in a manner consistent with the U.S. Environmental Protection Agency guidance, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems including, but not limited to, devices using light scattering and other effects, shall be installed,

operated, adjusted, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

b. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PE emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grain per actual cubic foot) or less.

c. The bag leak detection system sensor shall produce an output of relative particulate emissions.

d. The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PE emissions over a preset level is detected and the alarm shall be located such that it can be heard by the appropriate plant personnel.

e. The bag leak detection system shall be installed downstream of the baghouse. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors.

f. Initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

g. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

The permittee shall maintain records of any bag leak detection system alarms, including the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the weekly 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.

e) Reporting Requirements

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

a. all periods of time during which any bag leak detection system alarms were sounded. The reports shall include a summary of the date and time of the alarm(s), when corrective actions were initiated, the cause of the alarm(s), an explanation of the corrective actions taken, and when the cause of the alarm(s) was corrected.

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

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

(3) The permittee shall submit quarterly written reports that identify:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous 3-month period.

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

f) Testing Requirements

(1) Compliance with the emission limitation(s)in b)(1) in this permit shall be determined according to the following methods:

a. Emission Limitation:

20% opacity, as a 6-minute average

Applicable Compliance Method;

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(1); or other U.S. EPA approved test method, with prior approval from the Ohio EPA.

b. Emission Limitation:

5.38 pound of PE per hour

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(10), or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

c. Emission Limitation:

0.70 pound of PM10 per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

d. Emission Limitation:

4.46 ton of PM10 per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.70 pound of PM10 per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

e. Emission Limitation:

2.23 pounds of VOC per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1

through 4 and 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

f. Emission Limitation:

14.16 tons of VOC per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 2.23 pounds of VOC per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

(2) Compliance with the combined emission limitation(s) in b)(1) for emissions units P061 through P064 shall be determined according to the following methods:

a. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 2.99 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (84 pounds of CO emissions per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

b. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 3.56 ton of NOx per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (100 pounds of NOx per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

c. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 11.34 tons of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test(s) which demonstrated compliance with this emission limitation for PM10 (in pounds PM10 per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P061, P062, and P064.

d. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 0.02 ton SO2, per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98 (0.6 pound of SO2 per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

e. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 33.63 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test which demonstrated compliance with this emission limitation for VOC (in pounds VOC per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P061, P062, and P064.

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

a. The emission testing shall be conducted within 6 months after issuance of the permit and thereafter when required by the Toledo Division of Environmental Services or Ohio EPA Central Office.

b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For PM10, Methods 201 and 202 of 40 CFR Part 51, Applendix M. For VOC, Method 25 of 40 CFR Part 60 Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

The 3-hour average process weight rate, in tons of glass dried per hour, shall be determined during the stack testing to allow a determination of an emission factor in pounds of the regulated pollutant per ton of glass dried.

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

Personnel from the Toledo Division of Environmental Services or Ohio EPA Central 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 of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services or Ohio EPA Central Office.

g) Miscellaneous Requirements

(1) None.

4. P064, Direct Chop Oven & Classifier #4

Operations, Property and/or Equipment Description:

Direct Chop Oven & Classifier #4 with baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 2.23 pounds per ton of glass and 14.16 tons per year.
		See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions shall not exceed 20% opacity as a 6-minute average unless otherwise specified by the rules.
c.	OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 5.38 pounds per hour.
d.	OAC rule 3745-21-07(B)	See b)(2)c.
e.	OAC rule 3745-21-08(B)	See b)(2)d.
f.	OAC rule 3745-31-05(D)	See b)(2)e. and b)(2)f.
g.	OAC rules 3745-31-10 thru 20	Particulate matter emission of less than or equal to 10 microns in diameter (PM_{10}) shall not exceed 0.80 pounds per ton of glass and 5.08 tons per year.
h.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)g. and b)(2)h.

(2) Additional Terms and Conditions

a. The requirements of OAC rule 3745-31-05(A)(3) also include compliance with the requirements of OAC rule 3745-21-07(B).

b. The pound per ton emission limitation for VOC was established for PTI purposes to reflect the potential to emit for this emissions unit. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

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

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

d. The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with all applicable rules.

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

e. Combined annual emissions from P061 through P064 shall not exceed 0.020 ton of SO2, 2.99 tons of CO, 3.56 tons of NOx, and 33.63 tons of VOC per rolling, 12-month period.

f. The combined emissions of PM_{10} from P061 through P064 shall not exceed 11.34 tons as a rolling, 12-month summation.

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

h. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE and PM_{10} emissions from this air contaminant source since the calculated annual emission rate for PE and PM_{10} is each less than 10 tons/year, taking into account the baghouse required by the federally enforceable rule limit of 5.08 tons of PM_{10} per year under OAC rule 3745-31-10 through 20.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

(2) The permittee shall operate the baghouse whenever this emissions unit is in operation.

(3) The combined volume of natural gas combusted in emissions units P061 through P064 shall not exceed 71.106 mmscf per rolling, 12-month period.

(4) The combined throughput of glass fibers in emissions units P061 through P064 shall not exceed 30,165.2 tons per rolling, 12-month period.

(5) The permittee shall initiate corrective action within 1 hour of an alarm from a bag leak detection system and complete corrective actions in a timely manner. Example corrective actions may include:

a. inspecting the baghouse for air leaks, torn or broken bags or filter media, or any other conditions that may cause an increase in emissions;

b. sealing off defective bags or filter media;

c. replacing defective bags or filter media, or otherwise repairing the control device;

d. sealing off a defective baghouse compartment;

e. cleaning the bag leak detection system probe, or otherwise repairing the bag leak detection system; and

f. shutting down the process producing the particulate emissions.

d) Monitoring and/or Recordkeeping 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.

(2) The permittee shall maintain daily records that document any time periods when the baghouse was not in service when the emissions unit was in operation.

(3) The permittee shall maintain records, on a monthly basis, of the combined volume of natural gas combusted, in mmscf, in emissions units P061 through P064 as a rolling, 12-month summation.

(4) The permittee shall maintain records, on a monthly basis, of the throughput of glass fibers, in tons, for this emissions unit as a rolling, 12-month summation.

(5) The permittee shall maintain records, on a monthly basis, of the rolling, 12-month emissions of PM_{10} from emission units P061 through P064, as calculated in f)(2)c.

(6) The permittee shall maintain records, on a monthly basis, of the combined throughput of glass fibers, in tons, for emissions units P061 through P064 as a rolling, 12-month summation.

(7) The permittee shall install, calibrate, maintain, and continuously operate a bag leak detection system.

a. A triboelectric bag leak detection system shall be installed, operated, adjusted, and maintained in a manner consistent with the U.S. Environmental Protection Agency guidance, "Fabric Filter Bag Leak Detection Guidance" (EPA-454/R-98-015, September 1997). Other bag leak detection systems including, but not limited to, devices using light scattering and other effects, shall be installed,

operated, adjusted, and maintained in a manner consistent with the manufacturer's written specifications and recommendations.

b. The bag leak detection system shall be certified by the manufacturer to be capable of detecting PE emissions at concentrations of 10 milligrams per actual cubic meter (0.0044 grain per actual cubic foot) or less.

c. The bag leak detection system sensor shall produce an output of relative particulate emissions.

d. The bag leak detection system shall be equipped with an alarm system that will sound automatically when an increase in relative PE emissions over a preset level is detected and the alarm shall be located such that it can be heard by the appropriate plant personnel.

e. The bag leak detection system shall be installed downstream of the baghouse. Where multiple bag leak detection systems are required, the system instrumentation and alarm may be shared among the monitors.

f. Initial adjustment of the system shall, at a minimum, consist of establishing the baseline output by adjusting the range and the averaging period of the device and establishing the alarm set points and the alarm delay time.

g. Following the initial adjustment, the permittee shall not adjust the range, averaging period, alarm setpoints, or alarm delay time. In no event shall the range be increased by more than 100 percent or decreased more than 50 percent over a 365-day period unless a responsible official certifies, by written report, that the baghouse has been inspected and found to be in good operating condition.

The permittee shall maintain records of any bag leak detection system alarms, including the date and time of the alarm, when corrective actions were initiated, the cause of the alarm, an explanation of the corrective actions taken, and when the cause of the alarm was corrected.

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

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

If visible emissions are present, a visible emission incident has occurred. The observer does not have to document the exact start and end times for the visible emission incident under item d. above or continue the weekly 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.

e) Reporting Requirements

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

a. all periods of time during which any bag leak detection system alarms were sounded. The reports shall include a summary of the date and time of the alarm(s), when corrective actions were initiated, the cause of the alarm(s), an explanation of the corrective actions taken, and when the cause of the alarm(s) was corrected.

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

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

(3) The permittee shall submit quarterly written reports that identify:

a. all days during which any visible particulate emissions were observed from the stack serving this emissions unit; and

b. any corrective actions taken to minimize or eliminate the visible particulate emissions.

These reports shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) by January 31, April 30, July 31 and October 31 of each year and shall cover the previous 3-month period.

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

f) Testing Requirements

(1) Compliance with the emission limitation(s)in b)(1) in this permit shall be determined according to the following methods:

a. Emission Limitation:

20% opacity, as a 6-minute average

Applicable Compliance Method;

If required, compliance shall be determined through visible emission observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(1); or other U.S. EPA approved test method, with prior approval from the Ohio EPA.

b. Emission Limitation:

5.38 pound of PE per hour

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 5 of 40 CFR Part 60 Appendix A, using the methods and procedures specified in OAC rule 3745-17-03(B)(10), or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

c. Emission Limitation:

0.80 pound of PM10 per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1 through 4 of 40 CFR Part 60, Appendix A and Methods 201 and 202 of 40 CFR Part 51, Appendix M, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

d. Emission Limitation:

5.08 ton of PM10 per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 0.80 pound of PM10 per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

e. Emission Limitation:

2.23 pounds of VOC per ton of glass

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission testing performed in accordance with Methods 1

through 4 and 25 of 40 CFR Part 60 Appendix A using the methods and procedures specified in OAC rule 3745-21-10, or other U.S. EPA-approved test method, with prior approval from the Ohio EPA.

f. Emission Limitation:

14.16 tons of VOC per year

Applicable Compliance Method:

This emission limitation was established to reflect the potential to emit for this emissions unit. Compliance may be demonstrated through calculations performed as follows: multiply the short term emission rate of 2.23 pounds of VOC per ton of glass by the maximum process rate of 1.45 tons of glass per hour by 8,760 hours per year and divide by 2,000 pounds per ton.

(2) Compliance with the combined emission limitation(s) in b)(1) for emissions units P061 through P064 shall be determined according to the following methods:

a. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 2.99 tons of CO per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (84 pounds of CO emissions per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

b. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 3.56 ton of NOx per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-1 dated 7/98 (100 pounds of NOx per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

c. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 11.34 tons of PM10 per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test(s) which demonstrated compliance with this emission limitation for PM10 (in pounds PM10 per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P061 through P063.

d. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 0.02 ton SO2, per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor specified in USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Table 1.4-2 dated 7/98 (0.6 pound of SO2 per mmscf) by the actual volume of natural gas combusted in emissions units P061 through P064 per rolling, 12-month period (in mmscft, as recorded in d)(3) above), and then dividing by 2000 pounds per ton.

e. Emission Limitation:

The combined emissions from P061 through P064 shall not exceed 33.63 tons of VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the emission factor determined during the most recent stack test which demonstrated compliance with this emission limitation for VOC (in pounds VOC per ton of glass throughput) by the throughput of glass fibers, in tons, for this emissions units per rolling, 12-month period (in tons, as recorded in d)(4) above). To this amount shall be added the corresponding emissions on a rolling, 12-month basis from emission units P061 through P063.

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

a. The emission testing shall be conducted within 6 months after issuance of the permit and thereafter when required by the Toledo Division of Environmental Services or Ohio EPA Central Office.

b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): For PM10, Methods 201 and 202 of 40 CFR Part 51, Applendix M. For VOC, Method 25 of 40 CFR Part 60 Appendix A.

Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA.

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

The 3-hour average process weight rate, in tons of glass dried per hour, shall be determined during the stack testing to allow a determination of an emission factor in pounds of the regulated pollutant per ton of glass dried.

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

Personnel from the Toledo Division of Environmental Services or Ohio EPA Central 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 of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Toledo Division of Environmental Services within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Toledo Division of Environmental Services or Ohio EPA Central Office.

g) Miscellaneous Requirements

(1) None.