



State of Ohio Environmental Protection Agency

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10/27/2008

Certified Mail

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

Yes	TOXIC REVIEW
Yes	PSD
No	SYNTHETIC MINOR
Yes	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
Yes	MODELING SUBMITTED

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0487010012
Permit Number: 04-01200
Permit Type: Administrative Modification
County: Wood

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

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



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install
for
Pilkington North America Inc

Facility ID: 0487010012
Permit Number: 04-01200
Permit Type: Administrative Modification
Issued: 10/27/2008
Effective: 10/27/2008



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install
for
Pilkington North America Inc

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State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 04-01200
Facility ID: 0487010012
Effective Date: 10/27/2008

Authorization

Facility ID: 0487010012

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

Application Number(s): A0005812

Permit Number: 04-01200

Permit Description: This PTI modification adds two air toxics also has changes to the existing monitoring, recordkeeping, reporting and testing terms.

Permit Type: Administrative Modification

Permit Fee: \$1,250.00

Issue Date: 10/27/2008

Effective Date: 10/27/2008

This document constitutes issuance to:

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

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



State of Ohio Environmental Protection Agency
 Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 04-01200
Facility ID: 0487010012
Effective Date: 10/27/2008

Authorization (continued)

Permit Number: 04-01200
 Permit Description: This PTI modification adds two air toxics also has changes to the existing monitoring, recordkeeping, reporting and testing terms.

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

Emissions Unit ID:	P003
Company Equipment ID:	6F3 Float Glass Melting Furnace
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 04-01200
Facility ID: 0487010012
Effective Date: 10/27/2008

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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 04-01200
Facility ID: 0487010012
Effective Date: 10/27/2008

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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 04-01200
Facility ID: 0487010012
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B. Facility-Wide Terms and Conditions



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 04-01200
Facility ID: 0487010012
Effective Date: 10/27/2008

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.



State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Final Permit-to-Install
Permit Number: 04-01200
Facility ID: 0487010012
Effective Date: 10/27/2008

C. Emissions Unit Terms and Conditions



1. P003, 6F3 Float Glass Melting Furnace

Operations, Property and/or Equipment Description:

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

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

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

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	220 lbs/hr of nitrogen oxides (NOx), 100 lbs/hr of sulfur dioxide (SO ₂), 4.5 lbs/hr and 20 TPY of volatile organic compounds (VOC), and see b)(2)c. and b)(2)e.
b.	OAC rule 3745-17-07(C)	see b)(2)a.
c.	OAC rule 3745-17-11(B)(1)	41 lbs/hr of particulate emissions (PE)
d.	OAC rule 3745-18-06(E)(2)	see b)(2)b.
e.	OAC rule 3745-21-07(B)	see b)(2)d.
f.	OAC rule 3745-21-08(B)	see b)(2)d.
g.	OAC rule 3745-23-06(B)	see b)(2)d.
h.	OAC rule 3745-31-05(D) Synthetic Minor to avoid PSD	144 TPY of PE, based upon a rolling, 365-day summation of the daily emissions, 945 TPY of NOx, based upon a rolling, 12-month summation of the monthly emissions, 272 TPY of SO ₂ , based upon a rolling, 365-day summation of the daily emissions, and see b)(2)e.
i.	OAC rule 3745-31-10 thru 20	200 lbs/hr CO and 438 TPY of CO based upon a rolling, 12-month summation of



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		the monthly emissions; and 3.36 lb CO per ton glass draw.

(2) Additional Terms and Conditions

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

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

- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) or 3745-17-07(C), OAC rule 3745-17-11(B)(1), OAC rule 3745-31-05(D) and OAC rule 3745-31-10 through 20.
- d. The permittee has satisfied the “best available control techniques and operating practices” required pursuant to OAC rule 3745-21-08(B) and the “latest available control techniques and operating practices” required pursuant to OAC rules 3745-21-07(B) and 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.
- e. The emission limits for PE and SO₂ were determined using the following emission factors: 1.2 lbs PE per ton of glass draw and 2.37 lbs of SO₂ per ton of glass draw. The annual tons of glass draw operational restriction at c)(1) are based on these emission factors. If stack testing shows higher emission factors, further restrictions on the annual tons of glass draw will be required.

c) Operational Restrictions



- (1) The production rate of glass draw shall not exceed 229,535 tons per year, based upon a rolling, 365-day summation of the daily production rate. This production level was initially based upon the established emission factor for SO₂ [see b)(2)e.]. If future stack testing results in different emission factors being developed and approved by Ohio EPA, for particulates based on the color/type (i.e., dark, light or clear) of glass produced or sulfur dioxide, the calculated allowable production restriction will adjust based upon the formula stated below. The allowable 365-day production rate shall be calculated each day using the most current emission factor for particulates for the color/type of glass produced and the most current emission factor for sulfur dioxide.

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

where:

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

EL = the emission limit, 272 TPY of SO₂ or 144 TPY of PE (tons per rolling 365-day period)

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

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

Each EF_x will come from the most current stack test for PE (lb of PE per ton of glass draw for the color/type of glass produced) or the most current emission factor for SO₂ (lb of SO₂ per ton of glass draw).

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

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

To ensure enforceability during the first 365 days of operation following the issuance of this permit, the permittee shall not exceed the production rate specified in the following table:

Month(s)	Maximum Allowable Cumulative Production Rate of glass draw (Tons)
1	20,000
1-2	40,000
1-3	60,000
1-4	80,000
1-5	100,000
1-6	120,000
1-7	140,000



1-8	160,000
1-9	180,000
1-10	200,000
1-11	220,000
1-12	229,535

After the first 365 days of operation following the issuance of this permit, compliance with the annual glass draw production rate limitation shall be based upon a rolling, 365-day summation of the daily glass-draw production rate.

- (2) The salt cake usage rate, in pounds per ton of glass draw, shall not exceed the rate determined during the most recent stack test which demonstrated compliance with the emission limitation.
- (3) The permittee shall test the decrepitation of dolomite used for glass production on a biweekly basis. If the dolomite decrepitation value (percentage) obtained from biweekly testing exceeds the highest acceptable dolomite decrepitation value for the particular color/type of glass produced plus 0.7%, then the permittee shall perform a new particulate stack test as soon as practical after receipt of the dolomite decrepitation test result, and while using the type of dolomite that caused the exceedance. Ohio EPA reserves the right to propose a change in the 0.7% dolomite decrepitation buffer if stack test results indicate that particulate emissions are approaching the short-term emission limit. The "highest acceptable dolomite decrepitation value" shall mean the highest dolomite decrepitation test result, expressed as a percentage, that was measured in association with a Method 5 stack test that yielded an average emission rate less than or equal to 41 lbs/hr of particulate emissions for a particular color/type of glass.
- (4) The 365-day, rolling summation of the daily emissions of particulates is calculated by multiplying the current emission factor(s) (tons of particulates per ton of glass draw) determined from the most recent stack test that demonstrated compliance for the type of glass produced, times the daily production rate (tons of glass draw per day); and adding this quantity to the summation of the previous 364 days. The calculation of the 365-day, rolling summation of the daily emissions of sulfur dioxide shall use the emission factor(s) (tons of sulfur dioxide per ton of glass draw) determined from the most recent stack test which demonstrated compliance.

d) Monitoring and/or Recordkeeping Requirements

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



- e. any corrective actions taken to eliminate the visible emissions.

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

- (2) The permittee shall maintain monthly records of the following:
 - a. the tons of glass draw;
 - b. the total number of hours this emissions unit was in operation;
 - c. the monthly average production rate of glass, in tons of glass draw per hour, (a. ÷ b.);
 - d. the rolling, 12-month summation of CO, in tons;
 - e. the rolling, 12-month summation of NO_x, in tons;
 - f. the salt cake usage, in pounds; and
 - g. the salt cake usage rate, in pounds per ton of glass draw (f. ÷ a.).
- (3) The permittee shall maintain biweekly records of the test results for the dolomite decrepitation value (percentage) matched to the color/type of glass produced.
- (4) The permittee shall maintain daily records of the following:
 - a. actual production rate, in tons of glass draw per day;
 - b. the glass color/type produced;
 - c. the current emission factor for the glass color/type made that day (ton of emissions per ton of glass draw) for particulates and sulfur dioxide. If there is a change of glass color/type during the day, the higher emission factor must be used for that day's calculation;
 - d. the calculation of the rolling, 365-day summation of the daily particulate emissions and sulfur dioxide emissions (tons per year).;
 - e. the calculation of the allowable 365-day annual production rate using the equation in c)(1) based upon the weighted average particulate emission factor for the color/type of glass produced or the sulfur dioxide emission factor; and
 - f. the calculation of the actual rolling, 365-day summation of the daily production rate (in tons of glass draw per year).



(5) NOx CEM Monitoring and Recordkeeping

- a. The permittee shall install, operate and maintain the equipment to continuously monitor and record NOx from this emissions unit in units of the applicable standard). Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.
- b. The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units of pounds per hour as a rolling, 24-hour average, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

(6) CO CEM Monitoring and Recordkeeping

- a. The permittee shall install, operate and maintain equipment to continuously monitor and record CO from this emissions unit in units of the applicable standard. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.
- b. The permittee shall maintain records of all data obtained by the continuous CO monitoring system including, but not limited to, parts per million CO on an instantaneous (one minute) basis, emissions of CO in units of pounds per hour as a rolling, 3-hour average, results of daily zero/span calibration checks, and magnitude of manual calibration adjustments.

(7) Compliance with the Air Toxics Policy

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

- a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):
 - i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists= (ACGIH) AThreshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices®; or



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

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

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

Toxic Contaminant: Selenium
 TLV (mg/m3): 0.2
 Maximum Hourly Emission Rate (lbs/hr): 3.81
 Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 1.21
 MAGLC (ug/m3): 4.76

Toxic Contaminant: Sulfuric Acid Mist
 TLV (mg/m3): 1000
 Maximum Hourly Emission Rate (lbs/hr): 2.67
 Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 0.86
 MAGLC (ug/m3): 23.8

Toxic Contaminant: Hydrogen Chloride
 TLV (mg/m3): 2.98
 Maximum Hourly Emission Rate (lbs/hr): 7.31
 Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 1.68
 MAGLC (ug/m3): 71.0

Toxic Contaminant: Hydrogen Fluoride
 TLV (mg/m3): 08.18
 Maximum Hourly Emission Rate (lbs/hr): 1.25
 Predicted 1-Hour Maximum Ground Level Concentration (ug/m3): 0.29
 MAGLC (ug/m3): 196

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



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

- (8) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration⁶, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:
- a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;
 - b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and
 - c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the ⁶Toxic Air Contaminant Statute⁶ will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to a non-restrictive change to a parameter or process operation, where compliance with the ⁶Toxic Air Contaminant Statute⁶, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final PTI, PTIO, or FEPTIO (as applicable) prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

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

- (9) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the ⁶Toxic Air Contaminant Statute⁶, ORC 3704.03(F):
- a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
 - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the ⁶Toxic Air Contaminant Statute⁶, ORC 3704.03(F);



- c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the AToxic Air Contaminant Statute[®], ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
- d. the documentation of the initial evaluation of compliance with the AToxic Air Contaminant Statute[®], ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

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

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

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

e) Reporting Requirements

- (1) The permittee shall submit deviation (excursion) reports which (a) identify all days during which any abnormal visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible particulate emissions.
- (2) The permittee shall submit deviation (excursion) reports which identify all exceedences of the rolling 12-month emission limitations for CO, and NOx.
- (3) The permittee shall submit quarterly summations of the daily records for glass draw color/type, the calculated, allowable production rate, hours of operation, the rolling, 365-day summation of particulate emissions and the rolling, 365-day summation of sulfur dioxide emissions. These reports shall be submitted along with the deviation reports and cover the same time period.
- (4) The permittee shall submit quarterly, a summary of the biweekly dolomite decrepitation value for each particular color/glass type.
- (5) The deviation reports shall be submitted in accordance with the requirements specified in Part A - Standard Terms and Conditions in this permit. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.
- (6) The permittee shall submit a deviation (excursion) report within 30 days of any exceedance(s) of the rolling, 365-day particulates or sulfur dioxide emission limitation,



along with the cause and corrective action. This report shall be submitted in writing to The Toledo Division of Environmental Services.

- (7) The permittee shall submit a deviation (excursion) report within 30 days of any exceedance(s) of the rolling, 365-day actual production rate when compared to the calculated allowable 365 day production rate, along with the cause and corrective action. This report shall be submitted in writing to The Toledo Division of Environmental Services.
- (8) The permittee shall submit quarterly summations of the monthly records for the salt cake usage rate, in pounds per ton of glass draw. These reports shall be submitted along with the deviation reports required in e) of these terms and conditions and cover the same time period.
- (9) NOx CEM Reporting
 - a. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any), of all instances of NOx values in excess of the applicable limits specified in the terms and conditions of this permit. These reports shall also contain the total NOx emissions for the calendar quarter (in tons).
 - b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous NOx monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
 - c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line also shall be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.
 - d. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60.7. The summary shall be submitted to the



appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

(10) CO CEM Reporting

- a. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031 and 40 CFR Parts 60.7 and 60.13(h), the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting the date, commencement and completion times, duration, magnitude, reason (if known), and corrective actions taken (if any) of all instances of CO values in excess of any applicable limitation(s) specified in the terms and conditions of this permit, in units of the standard. These reports shall also contain the total CO emissions for the calendar quarter (in tons).
- b. The permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency documenting any continuous CO monitoring system downtime while the emissions unit was on line (date, time, duration and reason) along with any corrective action(s) taken. The permittee shall provide the emissions unit operating time during the reporting period and the date, time, reason and corrective action(s) taken for each time period of emissions unit and control equipment malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report.
- c. If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect along with the emissions unit operating time during the reporting period and the date, time, reason, and corrective action(s) taken for each time period of emissions unit, control equipment, and/or monitoring system malfunctions. The total operating time of the emissions unit and the total operating time of the analyzer while the emissions unit was on line shall also be included in the quarterly report. These quarterly excess emission reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.
- d. Pursuant to OAC rules 3745-15-04, 3745-35-02, and ORC sections 3704.03(I) and 3704.031, the permittee shall submit a summary of the excess emission report pursuant to 40 CFR Part 60 section 60.7. The summary shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following the end of each calendar quarter in a manner prescribed by the Director.

(11) AIR TOXICS POLICY REPORTING

The permittee shall submit annual reports to the appropriate Ohio EPA District Office or local air agency, documenting any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the AToxic Air Contaminant Statute^o, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. If no changes to the emissions unit or the exhaust stack have been made, then the report shall include a statement to this effect. This report



shall be postmarked or delivered no later than January 31 following the end of each calendar year.

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

f) Testing Requirements

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

a. Emission Limitation:

37.6% opacity as a 6-minute average (based on the EVEL established on the December 2001 stack test)

Applicable Compliance Method:

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

b. Emission Limitation:

3.36 lb CO per ton glass draw

Applicable Compliance Method:

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

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

c. Emission Limitation:

200 lbs/hr CO

Applicable Compliance Method:

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

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

d. Emission Limitation:



438 TPY CO

Applicable Compliance Method:

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

e. Emission Limitation:

220 lbs/hr of NOx

Applicable Compliance Method:

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

[40 CFR 60.13] and [40 CFR Part 60, Appendices B & F]

f. Emission Limitation:

945 TPY of NOx

Applicable Compliance Method:

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

g. Emission Limitation:

41 lbs/hr of PE

Applicable Compliance Method:

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

h. Emission Limitation:

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



Applicable Compliance Method:

Multiply the current emission factor for particulates, determined from the most recent stack test that demonstrated compliance, for the type of glass produced, times the daily production rate (tons of glass draw per day) and add this quantity to the summation of the previous 364-days and divide by 2000 lbs/ton. The rolling, 365-day summation of the glass draw, in tons, shall also be determined through the monitoring and record keeping requirements of d)(4).

i. Emission Limitation:

100 lbs/hr of SO₂

Applicable Compliance Method:

Multiply the sulfur dioxide emission factor determined during the most recent stack test that demonstrated compliance, in pounds of SO₂ per ton of glass draw, by the production rate of glass (tons of glass draw per hour), established through the record keeping requirements of d)(4). If required, the permittee shall perform emission testing in accordance with the requirements of 40 CFR 60, Appendix A, Method 6 and the methods and procedures of OAC rule 3745-18-04.

j. Emission Limitation:

272 TPY of SO₂ based on a rolling, 365-day summation

Applicable Compliance Method:

Multiply the SO₂ emission factor determined during the most recent stack test that demonstrated compliance, in pounds of SO₂ emissions per ton of glass draw, times the daily tons of glass draw and add it to the previous rolling, 364-day summation, and divide by 2000 lbs/ton. The rolling, 365-day summation of the glass draw, in tons, shall also be determined through the monitoring and record keeping requirements of d)(4).

k. Emission Limitation:

4.5 lbs/hr VOC

Applicable Compliance Method:

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

l. Emission Limitation:

20 TPY of VOC

Applicable Compliance Method:



Multiply the VOC emission factor determined during the most recent stack test that demonstrated compliance, in pound(s) of VOC emissions per ton of glass draw, times the rolling, 365 day summation of the glass draw, in tons, and divide by 2000 lbs/ton. The rolling, 365 day summation of the glass draw, in tons, shall be determined by the monitoring and recordkeeping requirements of d)(4).

- (2) The permittee shall conduct, or have conducted, emission testing for emissions unit P003 in accordance with the following requirements:
 - a. Initial emission testing shall be completed within 180 days of start-up or within 60 days after reaching full production of the unit. (NOTE: This requirement applied to the original PTI and is not required for the PTI modification.)
 - b. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rate(s) for CO, PE, SO₂, NO_x, VOC, opacity and Acid Mist.
 - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

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

The permittee may request to use an alternative method or procedure. The Ohio EPA will consider the request, including any evaluation of the applicability, necessity, and validity of the alternative, and may approve the use of the alternative if such approval does not contravene any other applicable requirement.

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

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

Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures



provide a valid characterization of the emissions from the emissions unit and/or performance of the control equipment.

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

(3) DOLOMITE TESTING

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

(4) NOx CEM Initial Certification

- a. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 6 for approval by the Ohio EPA, Central Office.
- b. Within 180 days of the effective date of this permit, the permittee shall conduct certification tests of such equipment pursuant to ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 6.

(5) CO CEM Initial Certification

- a. Prior to the installation of the continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specification 4 and 6 for approval by the Ohio EPA, Central Office.



- b. Within 180 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous CO monitoring system pursuant to ORC section 3704.03(I), 40 CFR Part 60, Appendix B, Performance Specification 4 and 6. Personnel from the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. In accordance with OAC rule 3745-15-04, all copies of the test results shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days after the test is completed. Copies of the test results shall be sent to the appropriate Ohio EPA District Office or local air agency and the Ohio EPA, Central Office. Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets all requirements of ORC section 3704.03(I) and 40 CFR Part 60, Appendix B, Performance Specification 4 and 6.
- (6) The permittee shall conduct the audits stated in f)(5)a. and b. or (f)(5)a. and c. Each CEMS must be audited at least once each calendar quarter. Successive quarterly audits shall occur no closer than 2 months. The audits shall be conducted as follows:
- a. Relative Accuracy Test Audit (RATA). The RATA must be conducted at least once every four calendar quarters. Conduct the RATA as described for the RA test procedure in the applicable Performance Specifications (PS) in Appendix B (e.g., PS 4 and 6 for CO and PS 6 for NOX). In addition, analyze the appropriate performance audit samples received from USEPA as described in the applicable sampling methods (e.g., Method 7).
 - i. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Toledo Division of Environmental Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Toledo Division of Environmental Services refusal to accept the results of the emission test(s).
 - ii. Personnel from the Toledo Division of Environmental Services shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
 - b. Cylinder Gas Audit (CGA). If applicable, a CGA may be conducted in three of four calendar quarters, but in no more than three quarters in succession.
 - c. Relative Accuracy Audit (RAA). The RAA may be conducted three of four calendar quarters, but in no more than three quarters in succession. To conduct a RAA, follow the procedure described in the applicable PS in Appendix B for the relative accuracy test, except that only three sets of measurement data are required. Analyses of USEPA performance audit samples are also required.



g) Miscellaneous Requirements

- (1) The emissions unit described in this Permit to Install is subject to the applicable provisions of the Prevention of Significant Deterioration (PSD) regulations as promulgated by the United States Environmental Protection Agency 40 CFR 52.21. The authority to apply and enforce the PSD regulations has been delegated to the Ohio Environmental Protection Agency. The terms and conditions of this permit and the requirements of the PSD regulations are also enforceable by the United States Environmental Protection Agency.

In accordance with 40 CFR 124.15, 124.19 and 124.20, the following shall apply: (1) the effective date of this permit shall be 30 days after the service of notice to any public commentors of the final decision to issue, modify, or revoke and re-issue the permit, unless the service of notice is by mail, in which case the effective date of the permit shall be 33 days after the service of notice; and (2) if an appeal is made to the Environmental Appeals Board of the United States Environmental Protection Agency, the effective date of the permit is suspended until such time as the appeal is resolved or denied.

Appeals will be addressed to:

United States Environmental Protection Agency
Environmental Appeals Board
401 M Street, SW (MC-113do)
Washington, DC 20460

- (2) Quality Assurance/Quality Control for NO_x CEMs

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous NO_x monitoring system designed to ensure continuous valid and representative readings of NO_x emissions in units of the applicable standard. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

- (3) Quality Assurance/Quality Control for CO CEMs

Within 180 days of the effective date of this permit, the permittee shall develop a written quality assurance/quality control plan for the continuous CO monitoring system designed to ensure continuous valid and representative readings of CO. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous CO monitoring system must be kept on site and available for inspection during regular office hours.