



*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

TO: Interested Parties / Applicant  
DATE: September 17, 2007  
RE: Owens-Brockway Glass Container / 095-17520-00012  
FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### **Notice of Decision: Approval – Effective Immediately**

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204.

For an **initial Title V Operating Permit**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **thirty (30)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a **Title V Operating Permit renewal**, a petition for administrative review must be submitted to the Office of Environmental Adjudication within **fifteen (15)** days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impracticable to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency  
401 M Street  
Washington, D.C. 20406

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



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100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
MC 61-53 IGCN 1003  
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# PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY AND CITY OF ANDERSON, AIR MANAGEMENT DIVISION

**Owens-Brockway Glass Container, Inc.  
2481 South Brookside Road  
Lapel, Indiana 46051**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

**The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T095-17520-00012	
Original signed by:  Nisha Sizemore, Branch Chief Office of Air Quality	Issuance Date: September 17, 2007  Expiration Date: September 17, 2012

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Anderson, Air Management Division. The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]

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The Permittee owns and operates a stationary glass container manufacturing source.

Source Address:	2481 South Brookside Road, Lapel, IN 46051
Mailing Address:	2481 South Brookside Road, Lapel, IN 46051
General Source Phone Number:	765-534-3121
SIC Code:	3221
County Location:	Madison
Source Location Status:	Nonattainment for 8-hour ozone standard Attainment for all other criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, under Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) one (1) natural gas or propane fired glass melting furnace, referred to as Furnace #32, constructed in March 1987 and modified in 1998, with a maximum raw material input capacity of 22.2 tons per hour and a maximum heat input capacity of 84.7 million British thermal units per hour, producing 15.04 tons of glass per hour, with emissions exhausting to the stack referred to as Furnace Stack B. Under 40 CFR 60, Subpart CC, this is considered an affected glass melting furnace;
- (b) one (1) natural gas or number 2 fuel oil fired glass melting furnace, referred to as Furnace #6, constructed in 1970, with a maximum raw material input capacity of 15.5 tons per hour and a maximum heat input capacity of 64.0 million British thermal units per hour, producing 11 tons of glass per hour, with emissions exhausting to the stack referred to as Furnace Stack A;
- (c) receiving and storage operations, constructed prior to 1970, with a maximum capacity of 150 tons per hour, with particulate emissions controlled by pressure relief bags and exhausting inside the building; and
- (d) raw material mixing operations, constructed prior to 1970, with a maximum capacity of 200 tons per hour, with particulate emissions controlled by a dust collector and exhausting inside the building.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) one (1) cullet crushing operation [326 IAC 6-3-2];
- (b) mold lubrication operation, consisting of mold swabbing and automated mold sooting, including, four (4) forming machines [326 IAC 6-3-2];
- (c) hot end surface treatment (HEST) process with a baghouse [326 IAC 6-3-2];
- (d) the following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2];
- (e) one (1) batch house central vacuum system, as a trivial activity per 326 IAC 2-7-1(40)(G)(i) [326 IAC 6-3-2];
- (f) one (1) enclosed pneumatic blaster used to clean glass container molds, installed July 2000, using 10.96 pounds glass bead blast media per hour, with one (1) dust collector for particulate matter control exhausting outdoors [326 IAC 6-3-2];
- (g) eleven (11) cold cleaner parts washing stations used for maintenance purposes [326 IAC 8-3-2];
- (h) paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

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This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

## **SECTION B GENERAL CONDITIONS**

### **B.1 Definitions [326 IAC 2-7-1]**

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Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### **B.2 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]**

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- (a) This permit, T095-17520-00012, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ and AOAM, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

### **B.3 Term of Conditions [326 IAC 2-1.1-9.5]**

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Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

### **B.4 Enforceability [326 IAC 2-7-7]**

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- (a) Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM and AOAM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by the City of Anderson, Air Management Division.

### **B.5 Severability [326 IAC 2-7-5(5)]**

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The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

### **B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]**

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

### **B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]**

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- (a) The Permittee shall furnish to IDEM, OAQ and AOAM, within a reasonable time, any information that IDEM, OAQ and AOAM may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ and AOAM copies of records required to be kept by this permit.

- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) the "Responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

and

United States Environmental Protection Agency, Region V  
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and AOAM on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
  - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

- (2) The compliance status;
- (3) Whether compliance was continuous or intermittent;
- (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ and AOAM may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
  - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ and AOAM upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ and AOAM. IDEM, OAQ and AOAM may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.11 Emergency Provisions [326 IAC 2-7-16]**

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- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
  - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and AOAM within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or  
Telephone Number: 317-233-0178 (ask for Compliance Section)  
Facsimile Number: 317-233-6865  
City of Anderson, Air Management Division phone: (765) 648-6158; fax: (765) 648-5924

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ and AOAM may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ and AOAM by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.  
  
This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, or AOAM shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
  - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
  - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
- (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, or AOAM has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, or AOAM has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

- (a) All terms and conditions of permits established prior to T095-17520-00012 and issued pursuant to permitting programs approved into the state implementation plan have been either:
  - (1) incorporated as originally stated,
  - (2) revised under 326 IAC 2-7-10.5, or
  - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination  
[326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

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- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, or AOAM determines any of the following:
  - (1) That this permit contains a material mistake.
  - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
  - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ, or AOAM to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, or AOAM at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or AOAM may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

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- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and AOAM and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

- (b) A timely renewal application is one that is:
- (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
  - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and AOAM on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ and AOAM takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ and AOAM any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- and
- City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011
- Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
  
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

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- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
  - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
  - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
  - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
  - (4) The Permittee notifies the:  
  
Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
  
and  
  
City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011  
  
and  
  
United States Environmental Protection Agency, Region V  
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)  
77 West Jackson Boulevard  
Chicago, Illinois 60604-3590  
  
in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ and AOAM in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
- (1) A brief description of the change within the source;
  - (2) The date on which the change will occur;
  - (3) Any change in emissions; and
  - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

**B.21 Source Modification Requirement [326 IAC 2-7-10.5][326 IAC 2-2-2][326 IAC 2-3-2]**

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- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and/or 326 IAC 2-3-2.

**B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]**

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Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, and AOAM or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this

permit;

- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ, and AOAM within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, or AOAM the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.25 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

## SECTION C SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

**C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

**C.2 Opacity [326 IAC 5-1]**

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]**

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

**C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]**

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

**C.5 Fugitive Dust Emissions [326 IAC 6-4]**

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

**C.6 Stack Height [326 IAC 1-7]**

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
  - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
  - (2) If there is a change in the following:
    - (A) Asbestos removal or demolition start date;
    - (B) Removal or demolition contractor; or
    - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
Asbestos Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (e) **Procedures for Asbestos Emission Control**  
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**  
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Accredited Asbestos Inspector**  
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

### **Testing Requirements [326 IAC 2-7-6(1)]**

#### **C.8 Performance Testing [326 IAC 3-6]**

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- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ and AOAM not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and AOAM if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

## **Compliance Requirements [326 IAC 2-1.1-11]**

### **C.9 Compliance Requirements [326 IAC 2-1.1-11]**

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The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

## **Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]**

### **C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]**

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Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a source modification shall be implemented when operation begins.

### **C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

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Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

### **C.12 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]**

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- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]**

**C.13 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

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Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on February 3, 1999.
- (b) Upon direct notification by IDEM, OAQ and AOAM that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level.  
[326 IAC 1-5-3]

**C.14 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]**

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If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

**C.15 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]**

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- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
  - (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
    - (1) initial inspection and evaluation;
    - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
    - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
  - (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
    - (1) monitoring results;
    - (2) review of operation and maintenance procedures and records;
    - (3) inspection of the control device, associated capture system, and the process.
  - (d) Failure to take reasonable response steps shall be considered a deviation from the permit.

- (e) The Permittee shall maintain the following records:
  - (1) monitoring data;
  - (2) monitor performance data, if applicable; and
  - (3) corrective actions taken.

**C.16 Actions Related to Noncompliance Demonstrated by a Stack Test**

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- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**C.17 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]**

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- (a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
  - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
  - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-50 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

The emission statement does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

- (b) The emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ and AOAM on or before the date it is due.

C.18 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]  
[326 IAC 2-3]

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- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or AOAM makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or AOAM within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a “project” (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit or an emission unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1 (ee)) and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1 (rr) and/or IAC 2-3-1 (mm)), the Permittee shall comply with the following:
  - (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.
    - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
    - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
      - (i) Baseline actual emissions;
      - (ii) Projected actual emissions;
      - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and
      - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
  - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
  - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]  
[326 IAC 2-3]

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- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:
- Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251
- and
- City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, and AOAM on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ and AOAM:
- (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and
  - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).

- (g) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ and AOAM. The general public may request this information from the IDEM, OAQ and AOAM under 326 IAC 17.1.

### **Stratospheric Ozone Protection**

#### **C.22 Compliance with 40 CFR 82 and 326 IAC 22-1**

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Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (a) one (1) natural gas or propane fired glass melting furnace, referred to as Furnace #32, constructed in March 1987 and modified in 1998, with a maximum raw material input capacity of 22.2 tons per hour and a maximum heat input capacity of 84.7 million British thermal units per hour, producing 15.04 tons of glass per hour with emissions exhausting to the stack referred to as Furnace Stack B. Under 40 CFR 60, Subpart CC, this is considered an affected glass melting furnace.

(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.1.1 PSD Minor Limit [326 IAC 2-2]

Pursuant to PC(48) 1633, issued on January 19, 1987, and revised by this Part 70 renewal permit T095-17520-00012:

- (a) PM/PM<sub>10</sub> emissions from furnace #32 shall be limited to 55 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The PM/PM<sub>10</sub> emissions will be determined from the following equation:

$$\text{PM (tons/month)} = E_{\text{PM}} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

$$\text{PM}_{10} \text{ (tons/month)} = E_{\text{PM}_{10}} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

where:

$E_{\text{PM}}$  = pounds PM/ton glass produced determined from the most recent IDEM approved stack test

$E_{\text{PM}_{10}}$  = pounds PM<sub>10</sub>/ton glass produced determined from the most recent IDEM approved stack test

- (b) NO<sub>x</sub> emissions from furnace #32 shall be limited to 443 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

The NO<sub>x</sub> emissions will be determined from the following equation:

$$\text{NO}_x \text{ (tons/month)} = E_{\text{NO}_x} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

where:

$E_{\text{NO}_x}$  = pounds NO<sub>x</sub>/ton glass produced determined from the most recent IDEM approved stack test

Compliance with these limits shall render the requirements of 326 IAC 2-2, PSD, not applicable to the 1987 modification of furnace #32 for emissions of PM/PM<sub>10</sub> and NO<sub>x</sub>.

D.1.2 PSD Best Available Control Technology Limit [326 IAC 2-2-3 (PSD)]

Pursuant to 326 IAC 2-2-3 (PSD) and CP 095-8204-00012 issued March 10, 1998, the Permittee shall comply with the following Best Available Control Technology (BACT) limits for furnace #32:

- (a) The fuel used in furnace #32 shall be limited to natural gas or an alternate fuel with a pounds SO<sub>2</sub>/MMBtu emission rate less than or equal to that of natural gas (0.0006 lbs SO<sub>2</sub>/MMBtu),
- (b) The sulfur content input to the amber glass batch shall be limited to 0.3% by weight, and
- (c) The SO<sub>2</sub> emission rate shall not exceed 193.4 tons per year.

D.1.3 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes), the allowable particulate emission rate from glass melting furnace #32 shall not exceed 32.7 pounds per hour when operating at a process weight rate of 22.2 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

D.1.4 Arsenic [40 CFR Part 61, Subpart N]

Commercial arsenic shall not be used as a raw material in furnace #32. Therefore, the requirements of 40 CFR Part 61.160, Subpart N (National Emission Standards For Inorganic Arsenic Emissions From Glass Manufacturing Plants) shall not apply.

D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for furnace #32.

**Compliance Determination Requirements**

D.1.6 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

- (a) In order to demonstrate compliance with Conditions D.1.1, D.1.2(c) and D.1.13 during amber glass production, the Permittee shall perform PM/PM<sub>10</sub>, NO<sub>x</sub> and SO<sub>2</sub> emissions testing on furnace #32 stack B utilizing methods as approved by the Commissioner. During the testing the Permittee shall also determine the furnace bridgwall optical temperature to determine compliance with Condition D.1.8. These tests shall be performed at a minimum of ninety percent (90%) glass production rate and data shall be extrapolated for peak load operation. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with the Section C-Performance Testing.

- (b) Within one-hundred and eighty (180) days of commencing flint and green glass production, the Permittee shall perform PM/PM<sub>10</sub>, NO<sub>x</sub> and SO<sub>2</sub> emissions testing on furnace #32 stack B in order to demonstrate compliance with the Conditions D.1.1, D.1.2(c) and D.1.13 utilizing methods as approved by the Commissioner. During the testing the Permittee shall also determine the furnace bridgeway optical temperature to determine compliance with Condition D.1.8. These tests shall be performed at a minimum of ninety percent (90%) glass production rate and data shall be extrapolated for peak load operation. This testing shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration. PM<sub>10</sub> includes filterable and condensable PM<sub>10</sub>. Testing shall be conducted in accordance with Section C- Performance Testing.

#### D.1.7 Sulfur Dioxide Emissions and Sulfur Content

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- (a) Compliance with Condition D.1.2(b) shall be determined for each glass batch formulation as follows.

- (1) For each of the batch ingredients, multiply pounds (lbs) of material per batch and weight percent (%) sulfur to give the amount of sulfur from that batch ingredient. The percent sulfur used for the calculation is from available data (analytical test data or supplier data).
- (2) Summation of the results from paragraph (1) will give total pounds (lbs) of sulfur in the batch.
- (3) Total pounds (lbs) of sulfur in the batch is divided by total pounds (lbs) of one batch and this ratio is multiplied by 100 to give percent sulfur by weight in the batch.

- (b) Compliance with Condition D.1.2(c) shall be determined as follows:

$$\text{SO}_2 \text{ (tons/month)} = E_{\text{SO}_2} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

where:

$E_{\text{SO}_2}$  = pounds SO<sub>2</sub>/ton glass produced determined from the most recent IDEM approved stack test

#### Compliance Monitoring Requirements [326 IAC 2-7-6(1)][326 IAC 2-7-5(1)]

##### D.1.8 Bridgeway Temperature [40 CFR Part 60 Subpart CC] [326 IAC 3-5]

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- (a) In lieu of installing a continuous opacity monitor (COM), the alternate procedure approved by EPA on July 8, 1987, and by CP 095-8204 issued on March 10, 1998, of using maximum bridgeway temperature as demonstration of particulate compliance shall be accepted. A continuous monitoring system shall be calibrated, maintained, and operated on the furnace to measure the bridgeway optical temperature. A bridgeway optical temperature of 2,859 degrees F, or the temperature established during the most recent performance test, shall be maintained as the maximum temperature during furnace operation.
- (b) The Permittee shall determine the bridgeway optical temperature from the most recent valid stack test during amber glass production that demonstrates compliance with the limits in Condition D.1.13, as approved by IDEM.

#### D.1.9 Visible Emissions Notations

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- (a) Daily visible emission notations of the furnace stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

#### **Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

##### D.1.10 Record Keeping Requirements

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- (a) To document compliance with Conditions D.1.1 and D.1.2(c), the Permittee shall maintain records in accordance with (1) and (2) below.
  - (1) Amount (tons) and type of glass produced each month at Furnace #32;
  - (2) Amount (tons) of SO<sub>2</sub>, PM/PM<sub>10</sub> and NO<sub>x</sub> emitted each month and during each compliance period.
- (b) To document compliance with Conditions D.1.2(a) and (b), the Permittee shall maintain records in accordance with (1) through (5) below.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel usage since last compliance determination period;
  - (3) To certify compliance with burning only natural gas or equivalent lower sulfur containing fuel, the Permittee shall maintain records of fuel used.
  - (4) If the material supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
    - (A) Material supplier certifications;
    - (B) The name of the supplier; and
    - (C) A statement from the supplier that certifies the sulfur content of the material used as input to the batch.
  - (5) If Permittee analysis is used to demonstrate compliance, the analytical method used and approved by IDEM, OAQ shall be maintained along with the computational methods and results.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (c) To document compliance with Condition D.1.4, the Permittee shall certify in accordance with Section B - Annual Compliance Certification, that no commercial arsenic has been utilized at the furnace during the compliance period.
- (d) To document compliance with Conditions D.1.8, D.1.13 and D.1.14, the Permittee shall maintain all continuous optical temperature records for the furnace and the temperature used to demonstrate compliance during the most recent compliant stack test.
- (e) To document compliance with Condition D.1.9, the permittee shall maintain records of daily visible emission notations of the furnace stack exhaust. The Permittee shall include in their daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (f) All records shall be maintained in accordance with Section C-General Record Keeping Requirements of this permit.

#### D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.2(c), and D.1.7(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

#### **New Source Performance Standards (NSPS) Requirements [326 IAC 2-8-4(1)]**

#### D.1.12 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for furnace #32 except as otherwise specified in 40 CFR Part 60, Subpart CC.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue,  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251

and

City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8th Street  
Anderson, IN 46011

D.1.13 NSPS Requirements [40 CFR Part 60, Subpart CC] [326 IAC 12]

Pursuant to 40 CFR Part 60, Subpart CC (Standards of Performance for Glass Manufacturing Plants), the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart CC, which are incorporated by reference as 326 IAC 12 for furnace #32 as specified as follows.

**§ 60.290 Applicability and designation of affected facility.**

(a) Each glass melting furnace is an affected facility to which the provisions of this subpart apply.

(b) Any facility under paragraph (a) of this section that commences construction or modification after June 15, 1979, is subject to the requirements of this subpart.

(c) This subpart does not apply to hand glass melting furnaces, glass melting furnaces designed to produce less than 4.55 Mg (5 tons) of glass per day and all-electric melters.

[45 FR 66751, Oct. 7, 1980, as amended at 65 FR 61759, Oct. 17, 2000]

**§ 60.291 Definitions.**

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act and in subpart A of this part, unless otherwise required by the context.

*All-electric melter* means a glass melting furnace in which all the heat required for melting is provided by electric current from electrodes submerged in the molten glass, although some fossil fuel may be charged to the furnace as raw material only.

*Borosilicate recipe* means glass product composition of the following approximate ranges of weight proportions: 60 to 80 percent silicon dioxide, 4 to 10 percent total R<sub>2</sub>O (e.g., Na<sub>2</sub>O and K<sub>2</sub>O), 5 to 35 percent boric oxides, and 0 to 13 percent other oxides.

*Container glass* means glass made of soda-lime recipe, clear or colored, which is pressed and/or blown into bottles, jars, ampoules, and other products listed in Standard Industrial Classification 3221 (SIC 3221).

*Experimental furnace* means a glass melting furnace with the sole purpose of operating to evaluate glass melting processes, technologies, or glass products. An experimental furnace does not produce glass that is sold (except for further research and development purposes) or that is used as a raw material for nonexperimental furnaces.

*Flat glass* means glass made of soda-lime recipe and produced into continuous flat sheets and other products listed in SIC 3211.

*Flow channels* means appendages used for conditioning and distributing molten glass to forming apparatuses and are a permanently separate source of emissions such that no mixing of emissions occurs with emissions from the melter cooling system prior to their being vented to the atmosphere.

*Glass melting furnace* means a unit comprising a refractory vessel in which raw materials are charged, melted at high temperature, refined, and conditioned to produce molten glass. The unit includes foundations, superstructure and retaining walls, raw material charger systems, heat exchangers, melter cooling system, exhaust system, refractory brick work, fuel supply and electrical boosting equipment, integral control systems and instrumentation, and appendages for conditioning and distributing molten glass to forming apparatuses. The forming apparatuses, including the float bath used in flat glass manufacturing and flow channels in wool fiberglass and textile fiberglass manufacturing, are not considered part of the glass melting furnace.

*Glass produced* means the weight of the glass pulled from the glass melting furnace.

*Hand glass melting furnace* means a glass melting furnace where the molten glass is removed from the furnace by a glassworker using a blowpipe or a pontil.

*Lead recipe* means glass product composition of the following ranges of weight proportions: 50 to 60 percent silicon dioxide, 18 to 35 percent lead oxides, 5 to 20 percent total  $R_2O$  (e.g.,  $Na_2O$  and  $K_2O$ ), 0 to 8 percent total  $R_2O_3$  (e.g.,  $Al_2O_3$ ), 0 to 15 percent total RO (e.g., CaO, MgO), other than lead oxide, and 5 to 10 percent other oxides.

*Pressed and blown glass* means glass which is pressed, blown, or both, including textile fiberglass, noncontinuous flat glass, noncontainer glass, and other products listed in SIC 3229. It is separated into:

- (1) Glass of borosilicate recipe.
- (2) Glass of soda-lime and lead recipes.
- (3) Glass of opal, fluoride, and other recipes.

*Rebricking* means cold replacement of damaged or worn refractory parts of the glass melting furnace. Rebricking includes replacement of the refractories comprising the bottom, sidewalls, or roof of the melting vessel; replacement of refractory work in the heat exchanger; replacement of refractory portions of the glass conditioning and distribution system.

*Soda-lime recipe* means glass product composition of the following ranges of weight proportions: 60 to 75 percent silicon dioxide, 10 to 17 percent total  $R_2O$  (e.g.,  $Na_2O$  and  $K_2O$ ), 8 to 20 percent total RO but not to include any  $PbO$  (e.g., CaO, and MgO), 0 to 8 percent total  $R_2O_3$  (e.g.,  $Al_2O_3$ ), and 1 to 5 percent other oxides.

*Textile fiberglass* means fibrous glass in the form of continuous strands having uniform thickness.

*With modified-processes* means using any technique designed to minimize emissions without the use of add-on pollution controls.

*Wool fiberglass* means fibrous glass of random texture, including fiberglass insulation, and other products listed in SIC 3296.

[45 FR 66751, Oct. 7, 1980, as amended at 49 FR 41035, Oct. 19, 1984; 65 FR 61759, Oct. 17, 2000]

### **§ 60.293 Standards for particulate matter from glass melting furnace with modified-processes.**

(a) An owner or operator of a glass melting furnaces with modified-processes is not subject to the provisions of §60.292 if the affected facility complies with the provisions of this section.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator of a glass melting furnace with modified-processes subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the affected facility:

(1) Particulate matter at emission rates exceeding 0.5 gram of particulate per kilogram of glass produced (g/kg) as measured according to paragraph (e) of this section for container glass, flat glass, and pressed and blown glass with a soda-lime recipe melting furnaces.

(d)(1) After receipt and consideration of written application, the Administrator may approve alternative continuous monitoring systems for the measurement of one or more process or operating parameters that is or are demonstrated to enable accurate and representative monitoring of an emission limit specified in paragraph (b) of this section.

(2) After the Administrator approves an alternative continuous monitoring system for an affected facility, the requirements of paragraphs (c) (1) through (5) of this section will not apply for that affected facility.

(f) Test methods and procedures as specified in §60.296 shall be used to determine compliance with this section except that to determine compliance for any glass melting furnace using modified processes and fired with either a gaseous fuel or a liquid fuel containing less than 0.50 weight percent sulfur, Method 5 shall be used with the probe and filter holder heating system in the sampling train set to provide a gas temperature of  $120 \pm 14$  °C ( $248 \pm 25$  °F).

[49 FR 41036, Oct. 19, 1984, as amended at 64 FR 7466, Feb. 12, 1999; 65 FR 61759, Oct. 17, 2000]

**§ 60.296 Test methods and procedures.**

(a) If a glass melting furnace with modified processes is changed to one without modified processes or if a glass melting furnace without modified processes is changed to one with modified processes, the owner or operator shall notify the Administrator at least 60 days before the change is scheduled to occur.

(c) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(d) The owner or operator shall determine compliance with the particulate matter standards in §§60.292 and 60.293 as follows:

(1) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

$$E=(c_s Q_{sd}-A)/P$$

where:

E=emission rate of particulate matter, g/kg.

$c_s$ =concentration of particulate matter, g/dsm.

$Q_{sd}$ =volumetric flow rate, dscm/hr.

A=zero production rate correction

=227 g/hr for container glass, pressed and blown (soda-lime and lead) glass, and pressed and blown (other than borosilicate, soda-lime, and lead) glass.

=454 g/hr for pressed and blown (borosilicate) glass, wool fiberglass, and flat glass.

P=glass production rate, kg/hr.

(2) Method 5 shall be used to determine the particulate matter concentration ( $c_s$ ) and volumetric flow rate ( $Q_{sd}$ ) of the effluent gas. The sampling time and sample volume for each run shall be at least 60 minutes and 0.90 dscm (31.8 dscf). The probe and filter holder heating system may be set to provide a gas temperature no greater than  $177 \pm 14$  °C ( $350 \pm 25$  °F), except under the conditions specified in §60.293(e).

(3) Direct measurement or material balance using good engineering practice shall be used to determine the amount of glass pulled during the performance test. The rate of glass produced is defined as the weight of glass pulled from the affected facility during the performance test divided by the number of hours taken to perform the performance test.

[54 FR 6674, Feb. 14, 1989; 54 FR 21344, May 17, 1989, as amended at 65 FR 61759, Oct. 17, 2000]

**D.1.14 NSPS Requirements [40 CFR Part 60, Subpart CC] [326 IAC 12]**

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In accordance with 40 CFR 60.293(d), the Permittee shall comply with the alternative monitoring system requirements at condition D.1.8 approved by US EPA on July 8, 1987.

## SECTION D.2 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]:

- (b) One (1) natural gas or number 2 fuel oil fired glass melting furnace, referred to as Furnace #6, constructed in 1970, with a maximum raw material input capacity of 15.5 tons per hour and a maximum heat input capacity of 64.0 million British Thermal Units per hour, producing 11 tons of glass per hour with emissions exhausting to the stack referred to as Furnace Stack A

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.2.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the Furnace #6 shall not exceed 25.7 pounds per hour when operating at a process weight rate of 15.5 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

#### D.2.2 Sulfur Dioxide (SO<sub>2</sub>) [326 IAC 7-1]

Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emission Limitations) the SO<sub>2</sub> emissions from Furnace #6, with a maximum heat input capacity of 64.0 MMBtu per hour, shall not exceed five tenths (0.5) pound per MMBtu heat input when combusting #2 fuel oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average.

#### D.2.3 Arsenic [40 CFR Part 61.160, Subpart N]

Commercial arsenic shall not be used as a raw material in furnace #6. Therefore, the requirements of 40 CFR Part 61.160, Subpart N (National Emission Standards For Inorganic Arsenic Emissions From Glass Manufacturing Plants) shall not apply.

#### D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility.

### Compliance Determination Requirements

#### D.2.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options when burning No. 2 fuel oil in the furnace.

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
- (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or,

- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, method 19.
  - (A) Oil samples may be collected from the fuel tank immediately after fuel tank is filled and before any oil is combusted; and
  - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the Furnace #6, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

### **Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]**

#### **D.2.6 Visible Emissions Notations**

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- (a) Daily visible emission notations of the Furnace #6 stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, reading shall be taken during that part of the operation that would normally be expected to cause the greatest emissions for that specific process.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

### **Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

#### **D.2.7 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.2, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained from (1) through (6) shall be taken monthly and shall be complete and suffice to establish compliance with the SO<sub>2</sub> emission limit established in D.2.2.
  - (1) Calendar dates covered in the compliance determination period;
  - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions associated with the burning of the fuel oil;

- (3) A certification, signed by the owner or operator, that the records of the fuel supplied certifications represent all of the fuel combusted during the period; and If the fuel supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
- (4) Fuel supplier certifications;
- (5) The name of the fuel supplier; and
- (6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.2.3, the Permittee shall certify in accordance with Section B - Annual Compliance Certification, that no commercial arsenic has been utilized at the furnace during the compliance period.
- (c) To document compliance with Condition D.2.6, the Permittee shall maintain records of daily visible emission notations of the furnace stack exhaust. The Permittee shall include in their daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (d) All records shall be maintained in accordance with Section C-General Record Keeping Requirements, of this permit.

### SECTION D.3 FACILITY OPERATION CONDITIONS

#### Facility Description [326 IAC 2-7-5(15)]:

- (c) Receiving and storage operations, constructed prior to 1970, with a maximum capacity of 150 tons per hour, with emissions controlled by pressure relief bags and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

#### Emission Limitations and Standards [326 IAC 2-7-5(1)]

##### D.3.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Process), the allowable particulate emission rate from the receiving and storage operation shall not exceed 55.4 pounds per hour when operating at the maximum capacity of 150 tons per hour.

This limitation is based on the following equation:

Interpolation and extrapolation of the data for the process weight greater than sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55 (P^{0.11}) - 40 \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour}$$

##### D.3.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A preventive Maintenance Plan, in accordance with Section B – Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

## SECTION D.4 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

(d) raw material mixing operations, constructed prior to 1970, with a maximum capacity of 200 tons per hour, with emissions controlled by a dust collector and exhausting inside the building.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### D.4.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Process), the allowable particulate emission rate from the raw materials mixing operation shall not exceed 58.5 pounds per hour when operating at the maximum capacity of 200 tons per hour.

This limitation is based on the following equation:

Interpolation and extrapolation of the data for the process weight greater than sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55 (P^{0.11}) - 40 \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour}$$

#### D.4.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

## SECTION D.5 FACILITY OPERATING CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]

The following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(12):

- (a) one (1) cullet crushing operation [326 IAC 6-3-2];
- (b) mold lubrication operation, consisting of mold swabbing and automated mold sooting, including, four (4) forming machines [326 IAC 6-3-2];
- (c) hot end surface treatment (HEST) process with a baghouse [326 IAC 6-3-2];
- (d) the following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2];
- (e) one (1) batch house central vacuum system, as a trivial activity per 326 IAC 2-7-1(40)(G)(i) [326 IAC 6-3-2];
- (f) one (1) enclosed pneumatic blaster used to clean glass container molds, installed July 2000, using 10.96 pounds glass bead blast media per hour, with one (1) dust collector for particulate matter control exhausting outdoors [326 IAC 6-3-2];
- (g) eleven (11) cold cleaner parts washing stations used for maintenance purposes [326 IAC 8-3-2];
- (h) paved and unpaved roads and parking lots with public access. [326 IAC 6-4].

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-7-5(1)]

#### Process Weight Activities

##### D.5.1 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Process), the allowable particulate emission rate from the insignificant activities, including cullet crushing, mold lubrication, HEST, cutting and welding, pneumatic blaster and vacuum system processes, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

#### Degreasing Operations

##### D.5.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**and  
City of Anderson, Air Management Division**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Owens-Brockway Glass Container Inc.  
Source Address: 2481 South Brookside Road, Lapel, Indiana 46051  
Mailing Address: 2481 South Brookside Road, Lapel, Indiana 46051  
Part 70 Permit No.: T095-17520-00012

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify) \_\_\_\_\_
- Report (specify) \_\_\_\_\_
- Notification (specify) \_\_\_\_\_
- Affidavit (specify) \_\_\_\_\_
- Other (specify) \_\_\_\_\_

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**COMPLIANCE BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: 317-233-0178  
Fax: 317-233-6865**

**and  
City of Anderson, Air Management Division  
P.O. Box 2100  
120 East 8<sup>th</sup> Street  
Anderson, Indiana 46018  
Phone: 317-646-9835  
Fax: 317-646-9657**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Owens-Brockway Glass Container Inc.  
Source Address: 2481 South Brookside Road, Lapel, Indiana 46051  
Mailing Address: 2481 South Brookside Road, Lapel, Indiana 46051  
Part 70 Permit No.: T095-17520-00012

**This form consists of 2 pages**

**Page 1 of 2**

- |  |
|--|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)  |
| <input checked="" type="checkbox"/> The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and                    |
| <input checked="" type="checkbox"/> The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16. |

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A

**Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency?    Y    N
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

A certification is not required for this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Owens-Brockway Glass Container Inc.  
 Source Address: 2481 South Brookside Road, Lapel, Indiana 46051  
 Mailing Address: 2481 South Brookside Road, Lapel, Indiana 46051  
 Part 70 Permit No.: T095-17520-00012  
 Facility: Furnace #32  
 Parameter: PM/PM<sub>10</sub> Emissions  
 Limit: 55 tons per twelve (12) month period with compliance determine at the end of each month

The PM/PM<sub>10</sub> emissions will be determined from the following equation:

$$PM \text{ (tons/month)} = E_{PM} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times (\text{ton}/2000 \text{ pounds})$$

$$PM_{10} \text{ (tons/month)} = E_{PM_{10}} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times (\text{ton}/2000 \text{ pounds})$$

where:

$E_{PM}$  = pounds PM/ton glass produced determined from the most recent IDEM approved stack test

$E_{PM_{10}}$  = pounds PM<sub>10</sub>/ton glass produced determined from the most recent IDEM approved stack test

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Columns 1+2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.  
 Deviation has been reported on:

Submitted by:  
 Title / Position:  
 Signature:  
 Date:  
 Phone:

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Owens-Brockway Glass Container Inc.  
Source Address: 2481 South Brookside Road, Lapel, Indiana 46051  
Mailing Address: 2481 South Brookside Road, Lapel, Indiana 46051  
Part 70 Permit No.: T095-17520-00012  
Facility: Furnace #32  
Parameter: NO<sub>x</sub> Emissions  
Limit: 443 tons per twelve (12) month period with compliance determine at the end of each month

The NO<sub>x</sub> emissions will be determined from the following equation:

$$\text{NO}_x \text{ (tons/month)} = E_{\text{NO}_x} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times (\text{ton}/2000 \text{ pounds})$$

where:

$E_{\text{NO}_x}$  = pounds NO<sub>x</sub>/ton glass produced determined from the most recent IDEM approved stack test

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Columns 1+2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.  
Deviation has been reported on:

Submitted by:  
Title / Position:  
Signature:  
Date:  
Phone:

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

Source Name: Owens-Brockway Glass Container Inc.  
 Source Address: 2481 South Brookside Road, Lapel, Indiana 46051  
 Mailing Address: 2481 South Brookside Road, Lapel, Indiana 46051  
 Part 70 Permit No.: T095-17520-00012  
 Facility: Furnace #32  
 Parameter: SO<sub>2</sub> Emissions  
 Limit: 193.4 tons per twelve (12) month period with compliance determine at the end of each month

The SO<sub>2</sub> emissions will be determined from the following equation:

$$SO_2 \text{ (tons/month)} = E_{SO_2} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times (\text{ton}/2000 \text{ pounds})$$

where:

$E_{SO_2}$  = pounds SO<sub>2</sub>/ton glass produced determined from the most recent IDEM approved stack test

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Columns 1+2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.  
 Deviation has been reported on:

Submitted by:  
 Title / Position:  
 Signature:  
 Date:  
 Phone:

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY  
 COMPLIANCE DATA SECTION  
 and  
 Anderson Office of Air Management**

**PART 70 OPERATING PERMIT  
 QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Owens-Brockway Glass Container Inc.  
 Source Address: 2481 South Brookside Road, Lapel, Indiana 46051  
 Mailing Address: 2481 South Brookside Road, Lapel, Indiana 46051  
 Part 70 Permit No.: T095-17520-00012

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement (specify permit condition #)</b>	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

Form Completed By: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

Attach a signed certification to complete

**Indiana Department of Environmental Management  
Office of Air Quality  
and City of Anderson, Air Management Division**

Addendum to the  
Technical Support Document for a Part 70 Operating Permit Renewal

**Source Background and Description**

Source Name:	Owens-Brockway Glass Container, Inc.
Source Location:	2481 South Brookside Road, Lapel, Indiana 46051
County:	Madison
SIC Code:	3221
Operation Permit No.:	T095-17520-00012
Permit Reviewer:	Michael Hirtler/EVP

On April 12, 2007, the Office of Air Quality (OAQ) had a notice published in the Herald Bulletin, Anderson, Indiana, stating that Owens-Brockway Glass Container, Inc. had applied for a Part 70 Operating Permit Renewal to operate a glass container manufacturing source. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 25, 2007, U.S. EPA, Region 5 provided IDEM, OAQ with one (1) comment on the draft Title V Renewal. On May 8, 2007, Owens-Brockway Glass Container, Inc. submitted comments on the proposed permit. Additional comments and clarifying information were submitted on May 23, 2007 and June 12, 2007 by Owens-Brockway Glass Container, Inc. Finally, on August 21, 2007, the City of Anderson, Air Management Division, submitted one (1) comment. The summary of the comments and corresponding responses is as follows (additions in bold, deletions in ~~strikeout~~):

**EPA Region V Comment on the Draft Permit:**

Condition D.1.2: The SO<sub>2</sub> BACT limit is stated as 193.4 tons per year (tpy); however the BACT analysis in Construction Permit No.8204 stated the limit as 193.4 tpy, rolled monthly and 44.15 lb/hr. Please explain why the hourly limit was not included as an applicable requirement.

**Response to EPA Comment:**

Construction Permit CP095-8204-00012 was issued by IDEM, OAQ on March 10, 1998. This permit approved a modification to Furnace #32 to increase allowable SO<sub>2</sub> emissions to not exceed 193.4 tons per year. Condition D.1.2 reflects the furnace modification emission limitations established in CP095-8204, issued on March 10, 1998, pursuant to 326 IAC 2-2-3 (Best Available Control Technology). While the Technical Support Document (TSD) and draft Permit did make reference to the short term emission limit noted by EPA, the final construction permit did not restrict short term (lb/hour) SO<sub>2</sub> emissions because as a result of comment from the Permittee, after the Public Notice Period, the short term (lb/hour) limit was not carried into the final Permit. Condition D.1.2 is a PSD BACT determination from CP095-8204-00012; therefore, PSD BACT can not be revised by this permit. Although the source has tested furnace #32 for SO<sub>2</sub> emissions, the source will violate the BACT limit of 193.4 tons per year if the furnace is operated 8,760 hrs per year at the maximum glass production rate. Therefore, in order to calculate annual emissions and demonstrate compliance based on the stack test result, a method to determine annual SO<sub>2</sub> emissions has been included as new Condition D.1.7(b) (see **Response to Comment 2**). The addition of Condition D.1.7(b) was discussed with EPA, Region V.

## Owens-Brockway Glass Container, Inc. Comments on the Draft Permit:

### Comment 1:

#### Cover letter dated April 9, 2007:

The company is wrongly identified as "Smurfit Stone Container Enterprises". This should be changed to "Owens-Brockway Glass Container Inc."

### Response to Comment 1:

IDEM, OAQ acknowledges the incorrect company reference in the cover letter. This will be corrected in any future correspondence.

### Comment 2:

#### D.1.1 - Furnace 32 Emission Limitations:

As discussed with Mr. Trip Sinha of IDEM, OAQ, Owens-Brockway requests that the hourly emission limits proposed for PM/PM<sub>10</sub> and NO<sub>x</sub> be changed back to the tons/year limitations that are in the current Title V permit (T095-5995-00012). The 5/11/07 email from Michael Hirtler has already indicated that this change is necessary for SO<sub>2</sub> emissions. As with the SO<sub>2</sub> emissions, Owens-Brockway will calculate the monthly emission rate for PM/PM<sub>10</sub> and NO<sub>x</sub>, and then calculate a consecutive 12-month emission rate to compare with the annual emission limitation.

### Response to Comment 2:

IDEM, OAQ had established hourly PM, PM<sub>10</sub>, and NO<sub>x</sub> emissions rates, based on the recent stack test, to determine compliance with the annual PM, PM<sub>10</sub>, and NO<sub>x</sub> emission rates. In that compliance method, the Permittee does not have to record and report monthly production data. The Permittee's request to determine compliance with the annual PM, PM<sub>10</sub>, and NO<sub>x</sub> emissions rates based on the production rate of glass manufactured (tons), using the pollutant emission rates (pounds of pollutant per ton of glass manufactured) determined from the most recent stack test, is acceptable to IDEM, OAQ.

The Permittee will exceed the annual SO<sub>2</sub> emission limit of Condition D.1.2(c) based on the pounds per hour emission rate determined from the last stack test results (see TSD Appendix A); therefore, a condition D.1.7(b) under "Compliance Determination Requirements" has been established in this permit to determine compliance with the annual SO<sub>2</sub> emission limit of Condition D.1.2(c). This method is the same method to determine compliance with PM, PM<sub>10</sub>, and NO<sub>x</sub> annual emission limits.

Condition D.1.10 (Record Keeping) is revised accordingly, and new Condition D.1.11 is added to the permit to require calendar quarter reporting of compliance calculation results. Subsequent permit condition numbers are revised accordingly without replication herein. The permit is revised as shown below, with the new quarterly reporting form located at the end of this document.

#### D.1.1 PSD Minor Limit [326 IAC 2-2]

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Pursuant to PC(48) 1633, issued on January 19, 1987, and revised by this Part 70 renewal permit  
**T095-17520-00012:**

- (a) PM/PM<sub>10</sub> emissions from furnace #32 shall be ~~less than 12.56 pounds per hour;~~ and **limited to 55 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.**

**The PM/PM<sub>10</sub> emissions will be determined from the following equation:**

$$\text{PM (tons/month)} = E_{\text{PM}} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

$$\text{PM}_{10} \text{ (tons/month)} = E_{\text{PM}_{10}} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

where:

$E_{\text{PM}}$  = pounds PM/ton glass produced determined from the most recent IDEM approved stack test

$E_{\text{PM}_{10}}$  = pounds  $\text{PM}_{10}$ /ton glass produced; determined from the most recent IDEM approved stack test

- (b) ~~NO<sub>x</sub> emissions from furnace #32 shall be less than 401.14 pounds per hour. limited to 443 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.~~

The NO<sub>x</sub> emissions will be determined from the following equation:

$$\text{NO}_x \text{ (tons/month)} = E_{\text{NO}_x} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

where:

$E_{\text{NO}_x}$  = pounds NO<sub>x</sub>/ton glass produced determined from the most recent IDEM approved stack test

Compliance with these limits shall render the requirements of 326 IAC 2-2, PSD, not applicable to the 1987 modification of furnace #32 for emissions of PM/ $\text{PM}_{10}$  and NO<sub>x</sub>.

#### D.1.7 Sulfur Dioxide Emissions and Sulfur Content

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\* \* \*

- (b) ~~Compliance may also be determined by providing conducting a stack test for sulfur dioxide emissions from furnace #32 using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.~~

Compliance with Condition D.1.2(c) shall be determined as follows:

$$\text{SO}_2 \text{ (tons/month)} = E_{\text{SO}_2} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \\ \times \text{(ton/2000 pounds)}$$

where:

$E_{\text{SO}_2}$  = pounds SO<sub>2</sub>/ton glass produced determined from the most recent IDEM approved stack test

#### D.1.10 Record Keeping Requirements

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- (a) To document compliance with Conditions D.1.1 and D.1.2(c), the Permittee shall maintain records in accordance with (1) and (2) below.

- (1) Amount (tons) and type of glass produced each month at Furnace #32;
- (2) Amount (tons) of SO<sub>2</sub>, PM/ $\text{PM}_{10}$  and NO<sub>x</sub> emitted each month and during each compliance period.

### **D.1.11 Reporting Requirements**

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**A quarterly summary of the information to document compliance with Conditions D.1.1, D.1.2(c), and D.1.7(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).**

#### **Comment 3:**

##### D.1.2.(b) - Sulfur Content of batch for Furnace #32:

According to D.1.7(b), one of the options to demonstrate compliance with the sulfur content requirement is to conduct source testing for SO<sub>2</sub> emissions. Does the SO<sub>2</sub> source testing data required by D.1.6(a) also satisfy this requirement (in lieu of the material supplier certification (D.1.7(a)))?

##### D.1.7.(a) - Sulfur Content of batch for Furnace #32:

Owens-Brockway proposes to demonstrate compliance with the 0.3% by weight limit for sulfur in the mixed raw material feed with the following calculation. This calculation will be conducted and reported once per quarter and be reported with the quarterly reports (permit condition C.19 (a)).

1. For each of the batch ingredients, multiply pounds (lbs) of material per batch and weight percent (%) sulfur to give the amount of sulfur from that batch ingredient. The percent sulfur used for the calculation is from available data (analytical test data or supplier data).
2. Summation of the results from #1 will give total pounds (lbs) of sulfur in the batch.
3. Total pounds (lbs) of sulfur in the batch is divided by total pounds (lbs) of one batch and this ratio is multiplied by 100 to give percent sulfur by weight in the batch.

##### D.1.7.(a) - Sulfur Content of batch for Furnace #32:

Owens-Brockway believes the description of sulfur content monitoring may not have been complete, and there might be a misunderstanding in what we proposed.

Owens Brockway is not suggesting that we will determine sulfur content for each and every batch of raw materials. Rather, Owens-Brockway is stating that for each batch formulation, we will do the proposed sulfur content determination. In a given quarter, Furnace #32 might use several different batch formulations. The sulfur content of each batch formulation will be verified as part of the quarterly compliance report.

##### D.1.10(a) - Recordkeeping for Furnace #32:

Owens-Brockway understands the compliance determination period to be quarterly.

In addition, if material supplier certification is used to demonstrate compliance with the percent sulfur by weight requirement, then these clarifications are helpful:

- the material supplier notification may be provided by Owens-Brockway
- Owens-Brockway will, based on raw material analysis or other available data, confirm and document that the sulfur content of the batch is  $\leq$  0.3% by weight.

### Response to Comment 3:

The SO<sub>2</sub> stack testing option as draft Condition D.1.7(b) is incorrect. The 0.3 percent (weight) sulfur input limit of a glass batch cannot be determined by stack test, as such test would be pertinent to only that batch which was used in the testing. There is no way to know if the Permittee is using the composition in every batch formulation like the tested batch formulation. Therefore, the one time stack testing for 0.3% sulfur content is not an appropriate compliance demonstration method. The compliance methodology provided by the commenter under D.1.7(a) above, is acceptable to IDEM. Therefore, draft Condition D.1.7(b) and related D.1.10(a)(4) and (5) are revised as shown below. The Permittee is required to submit calculation results quarterly, as noted by the commenter above. Pursuant to Condition D.1.10, the Permittee is also required to maintain all records and data supporting the compliance computations for at least a five (5) year period, and provide the material supplier certification and related records as indicated in Condition D.1.10 below.

#### D.1.7 Sulfur Dioxide Emissions and Sulfur Content

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- (a) Compliance with Condition D.1.2(b) shall be determined **for each glass batch formulation as utilizing one of the following options.**
- ~~(a) The Permittee shall demonstrate that the sulfur content of the amber glass batch does not exceed 0.3% by weight by providing vendor analysis of material delivered, if accompanied by a vendor certification; or~~
- (1) **For each of the batch ingredients, multiply pounds (lbs) of material per batch and weight percent (%) sulfur to give the amount of sulfur from that batch ingredient. The percent sulfur used for the calculation is from available data (analytical test data or supplier data).**
  - (2) **Summation of the results from paragraph (1) will give total pounds (lbs) of sulfur in the batch.**
  - (3) **Total pounds (lbs) of sulfur in the batch is divided by total pounds (lbs) of one batch and this ratio is multiplied by 100 to give percent sulfur by weight in the batch.**

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#### D.1.10 Record Keeping Requirements

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- (a) To document compliance with Conditions D.1.2(a) and (b), the Permittee shall maintain records in accordance with (1) through ~~(6)~~ **(5)** below.

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- (4) If the material supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:
  - ~~(4)~~**(A)** Material supplier certifications;
  - ~~(5)~~**(B)** The name of the supplier; and
  - ~~(6)~~**(C)** A statement from the supplier that certifies the sulfur content of the material used as input to the batch.
- (5) **If Permittee analysis is used to demonstrate compliance, the analytical method used and approved by IDEM, OAQ shall be maintained along with the computational methods and results.**

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#### **Comment 4:**

##### D.1.8 - Bridgewall Temperature Monitoring:

The current draft permit has revised the bridgewall optical temperature (BWOT) monitoring conditions versus that found in the prior Title V permit. This permit condition has remained unchanged in a NSR permit issued in 1998, and in three issued Title V permits dated November 11, 1998, December 16, 1999 and December 18, 2001. In each of these permits the condition references the “*alternative procedure approved by EPA*”.

Owens-Brockway objects to the proposed change to this condition for the following reasons:

- The origin of this condition dates back to an operating permit issued March 1, 1987. At the time of issuance of the operating permit the Indiana Department of Environmental Management relied upon the EPA Regional office to review and approve this alternative monitoring system of bridgewall optical temperature.
- The proposed condition is not possible to meet as written. The sampling methodology cannot be conducted every 15 minutes and produce the data required to meet the procedure approved by U.S. EPA Region V.
- The original permit to operate (3/1/1987), which contained the alternative monitoring method approved by U.S. EPA Region V, includes a frequency for recording the required data (daily).
- Modifying a condition which has been accepted for over 20 years does not appear to be appropriate in the Title V permit renewal process. IDEM has had opportunity during two separate New Source Review permitting events to opine on sufficiency of this condition; once in 1987 during the modification which was the New Source Performance Standard triggering event, and in 1998 with the modification which increased the permissible SO<sub>2</sub> emission limit of this source. The Title V permitting process is not considered a method to impose new conditions on existing sources that already have monitoring conditions imposed as a result of the NSR program.

##### D.1.8 - Furnace 32 Bridgewall Temperature Monitoring:

The following additional information is provided by the Permittee:

###### *Furnace Operation*

To understand the use of BWOT monitoring in the furnace, it is first necessary to understand the operation of this furnace. This furnace is designed with regenerators filled with refractory bricks that are arranged in a checker work fashion and are located on either side of the furnace (see Figure 11.15-3 of EPA's AP-42 emission factor document). These 'checkers' serve the dual function of preheating the combustion air going into the furnace and recovering heat from the furnace exhaust. The specific function being performed is dependent upon the direction of air flow, and air flow is reversed approximately every 20 to 40 minutes. Time between reversals is part of the operational control of this furnace and is not necessarily a fixed amount.

Generally, if an individual were to look in the furnace peep-hole when combustion is occurring they would not be able to see the bridgewall. What you would see are the flames from the side port burners extending across the furnace. The exception to this is when the furnace is going through a reversal. During a reversal, the burners temporarily shut off and the bridgewall is accessible to view. When the burners are shut off, the furnace operator will use a hand-held pyrometer to take a temperature reading on the bridgewall. The pyrometer is pointed at the bridgewall across the entire length of the furnace to do this. The temperature is then recorded.

###### *Thermocouple Problems*

There are significant problems with respect to the concept of measuring the bridgewall temperature using a thermocouple, both with respect to physical and operational factors, and also from the perspective of regulatory requirements.

Owens-Brockway does not measure actual furnace temperatures with a thermocouple that is exposed to the furnace environment. If a thermocouple is used it is positioned in a block of refractory. A thermocouple positioned in the refractory does not give exact furnace temperatures, but rather is used to observe temperature trends. The trends are used to assist in furnace operation and to identify operational or structural problems.

If a thermocouple were to extend out of the refractory brick and into the furnace, a pattern of corrosion will develop and create a hole in the refractory brick at that point, resulting in structural and operational problems. Finally, it is not clear how a thermocouple would be positioned so as to measure the same temperature the BWOT monitoring is recording. The design of this furnace and refiner will also make it impossible to position a thermocouple in the bridgewall, as the refiner and furnace share the bridgewall (melter in front, refiner in back).

### *Basis for BWOT Monitoring*

In 1987 Brockway glass received a construction permit to modify Furnace B. This permit required a continuous opacity monitor to meet the NSPS monitoring requirements. Brockway had been using BWOT as a tool to monitor and understand furnace operation, and estimate emissions for several years. Because of this, they had significant data (as well as published technical papers) to show the correlation between BWOT and particulate emissions. This is the correlation that was critical for considering BWOT as a surrogate for NSPS monitoring of a glass melting furnace.

IDEM informed Brockway that although the agency had primacy for NSPS for Glass Melting Furnaces, it did not have primacy for approving alternatives to the opacity monitoring requirement. Brockway presented to U.S. EPA, Region V the proposal to use BWOT monitoring in place of continuous opacity monitoring. U.S. EPA reviewed the data submitted and granted approval to use BWOT monitoring in place of continuous opacity monitoring. The permit subsequently issued by IDEM clarified the BWOT monitoring to be daily.

The decision by US EPA and IDEM to approve BWOT monitoring to satisfy the monitoring requirements of NSPS Subpart CC for this furnace is a condition that Owens-Brockway has consistently adhered to for nearly 20 years. The BWOT temperature surrogate was approved by USEPA based upon the technical merits of extensive research by Brockway Glass. Owens-Brockway is not aware of any other alternative method which has been technically demonstrated as a parameter which can be used to estimate particulate emissions.

### *Conclusion*

Owens-Brockway has indicated why it is not appropriate to change the approved temperature monitoring approach on Furnace B. There have been no compliance issues with the existing monitoring approach that would indicate the need for a change in monitoring method. Furthermore, any change to the established BWOT monitoring would require approval by U.S. EPA Region V. The January 1987 construction permit requires that the daily maximum BWOT be less than the established maximum. Owens-Brockway has established that monitoring the BWOT approximately once every two hours assures compliance with this limit and is practical from the perspective of current facility staffing. We would not specify exactly every two hours because of potential variations in the reversal time.

### **Response to Comment 4:**

As specified in Condition D.1.8, U.S. EPA on July 8, 1987 approved the use of continuous bridgewall optical temperature (BWOT) monitoring in lieu of using a continuous opacity monitor (COM). After careful consideration of the information presented in this comment, as well as a review of the prior information approved by EPA in 1987, IDEM has determined that draft Condition D.1.8 cannot be revised without approval by U.S. EPA. IDEM, OAQ does not have primacy when approving alternative approaches to complying with a federal regulation, in this case 40 CFR 60, Subpart CC.

The preceding paragraph notwithstanding, IDEM does acknowledge the physical and operational characteristics of the melt furnace and the associated constraints of contact (i.e., thermocouple) versus non-contact (i.e., optical) temperature monitoring; however, IDEM recommends such information be presented by the Permittee to EPA for consideration, as was initially done in 1987. It is acknowledged that on June 14, 2007 Owens-Brockway forwarded BWOT monitoring information to EPA Region V for review and consideration. If EPA agrees that draft Condition D.1.8 should be revised to be consistent with historical BWOT monitoring practices, IDEM, OAQ will revise Condition D.1.8 accordingly. Presently, there are no changes to draft Condition D.1.8 due to this comment, except as indicated below.

#### D.1.8 Bridgwall Temperature [40 CFR Part 60 Subpart CC] [326 IAC 3-5]

- (a) In lieu of installing a continuous opacity monitor (COM), the alternate procedure approved by EPA on July 8, 1987, and by CP 095-8204 issued on March 10, 1998, of using maximum bridgwall temperature as demonstration of particulate compliance shall be accepted. A continuous monitoring system shall be calibrated, maintained, and operated on the furnace to measure the bridgwall optical temperature. ~~Continuous monitoring shall mean at least one (1) complete cycle (sampling, analyzing and data recording) for each successive fifteen (15) minute measuring period. The output of this system shall be recorded as a three-hour average.~~ A bridgwall optical temperature of 2,859 degrees F, or the temperature established during the most recent performance test, shall be maintained as the maximum temperature during furnace operation.
- (b) The Permittee shall determine the ~~three-hour average~~ bridgwall optical temperature from the most recent valid stack test during amber glass production that demonstrates compliance with the limits in Condition D.1.13, as approved by IDEM.

#### D.1.10 Record Keeping Requirements

\* \* \*

- (d) To document compliance with Conditions D.1.8, D.1.13 and D.1.14, the Permittee shall maintain all continuous optical temperature records for the furnace; ~~the three-hour average temperature readings;~~ and the ~~three-hour average~~ temperature used to demonstrate compliance during the most recent compliant stack test.

\* \* \*

#### **Comment 5:**

##### D.2.2 - Furnace #6 SO<sub>2</sub> emissions:

As currently written, the draft permit indicates an SO<sub>2</sub> emission limit of 0.5 lbs SO<sub>2</sub>/MMBtu heat input when the furnace is burning #2 fuel oil. Is it correct to state that the following requirements apply only when the furnace is burning #2 fuel oil?

- D.2.2 - Calculate a 30 day rolling weighted average
- D.2.5 - Provide vendor analysis of oil
- D.2.5 - Analysis of an oil sample
- D.2.7(a) - Recordkeeping requirements.

#### **Response to Comment 5:**

Condition D.2.2 specifies that the stated SO<sub>2</sub> emission limitation is applicable when combusting No. 2 fuel oil. Since the furnace can also fire natural gas as a fuel source, the SO<sub>2</sub> emission limitation of Condition D.2.2 would not apply during natural gas firing in the furnace. Likewise, the **Compliance Determination Requirements** at Condition D.2.5, including vendor analysis of fuel oil, and related record keeping requirements of Condition D.2.7(a) would be applicable only when firing fuel oil. The first sentence to Condition D.2.5 is revised to provide greater clarity on this requirement.

#### D.2.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance shall be determined utilizing one of the following options **when burning No. 2 fuel oil in the furnace.**

\* \* \*

#### Comment 6:

##### D.3.4 - Compliance Monitoring:

The paragraph following D.3.4(e) contains this statement:

"An inspection shall also be performed within three months of redirecting vents and every three months thereafter."

It is not clear what this statement means or what purpose it serves. Owens-Brockway recommends that it be removed.

##### D.3.6(a) - Recordkeeping:

Similar to the comment on Condition D.3.4 above, Condition D.3.6(a) contains the phrase "and the dates the vents are redirected." This should also be removed.

##### D.4.4 - Compliance Monitoring for Raw Material Mixing Operations

When the correct emission factor is used (0.029 lbs PM/ton - see Item #9), the uncontrolled potential PM emissions (PM10 also) for this unit are less than 100 tons/yr. Because of this, the Compliance Assurance Monitoring rule is not applicable, and the parametric monitoring is not required.

##### Appendix A - Emission Calculations

The emission factor used to calculate PM emissions for Storage and Receiving, and Weighing and Mixing is 0.65 lbs/ton. This is significantly higher than what is normally used for facility emission reporting. The more appropriate emission estimates are presented here:

##### D.3 - Raw Material Receiving and Storing

Raw material receiving - 0.18 lbs PM/ton (AP-42 13.2.4 Aggregate Handling and Storage Piles)  
Batch Transfer - 0.029 lbs PM/ton (AP-42 11.12-2 Concrete Batching)

##### D.4 - Raw Material Mixing

Raw material mixing - 0.06 lbs PM/ton (AP-42 11.12-2 Concrete Batching)

The correct PM10 emission factors are estimated to be 2/3 of the above PM emission factors.

##### D.3.4, D.4.4 - Compliance Monitoring Change

The 5/9/07 email from Michael Hirtler indicated that Owens-Brockway had not used the correct emission factor for emission units D.3 and D.4 (i.e., Storage and Receiving, and Weighing and Mixing Operations). Upon review, Owens-Brockway is in agreement to use the recommended emission factor. Therefore, the correct emission factor for uncontrolled emissions from units D.3 and D.4 is 0.0667 lbs PM/ton.

This is based on the following emission factor:

AP-42 11.19.1 - Sand and Gravel Processing (11/95)

Table 11.19.1-1

Sand handling, transfer, and storage with wet scrubber (0.0013 lbs/ton controlled)

Without the assumed 98% control --  $0.0013/0.02 = 0.065$  lbs/ton

Using this emission factor shows that the original positive CAM (compliance assurance monitoring) determination is no longer accurate. Therefore, monitoring that has been added to the permit for emission units D.3 and D.4 to accommodate the requirements of CAM should be removed. Compliance monitoring should not change from the current Title V permit.

#### **Response to Comment 6:**

IDEM, OAQ agrees with these comments. The draft source emission calculations contained in Appendix A to the Technical Support Document (TSD) use a reference to the fourth edition of EPA's AP-42 emission factor document, i.e., AP-42, Table 8.19.1-1. The current version of this document is the 5<sup>th</sup> edition, and the calculations should reflect emission factors from Table 11.19.1-1 (dated November 1995). Use of current emission factors for these operations results in an uncontrolled potential to emit (PTE) of PM/PM<sub>10</sub> from storage/receiving and weighing/mixing at 43.8 and 58.4 tons per year, respectively (see revised Appendix A to the TSD).

As indicated in the Technical Support Document (TSD) to the draft permit, Compliance Assurance Monitoring (CAM), 40 CFR Part 64, is applicable when the uncontrolled PTE of a regulated pollutant is 100 percent of the Title V applicability threshold, and the source uses control equipment to comply with an applicable emission limit or standard. Since the revised uncontrolled PTE of PM<sub>10</sub> is less than 100 tpy for each operation, CAM is not applicable to either operation. Also, it is shown by calculation that the Permittee is in compliance with the allowable particulate limit pursuant to 326 IAC 6-3-2 without the use of control equipment. As such, Sections D.3 and D.4 are revised and the affected conditions are deleted as follows.

#### **Compliance Demonstration Requirements**

##### ~~D.3.3 Particulate Control~~

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~~The pressure relief bags shall be in operation and control particulate emissions from the receiving and storage operations at all times this facility is in operation in order to comply with the limit in condition D.3.1.~~

#### **Compliance Monitoring Requirements ~~[326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~**

##### ~~D.3.4 Bag Inspections [40 CFR Part 64, Compliance Assurance Monitoring, CAM]~~

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~~An operation and maintenance (O&M) inspection shall be performed daily of all pressure relief bags controlling the receiving and storage operation. The daily inspection of the pressure relief bags shall, at a minimum, include the following:~~

- ~~(a) a check on the condition of the bags;~~
- ~~(b) inspection of the connection for the bags;~~
- ~~(c) confirmation that the bags are not blinded;~~
- ~~(d) physical observation to confirm that air around the bags appears normal; and~~
- ~~(e) replacement of all defective bags.~~

~~The Permittee shall maintain a record of the results of the daily inspection in accordance with condition D.3.6. An inspection shall also be performed within three months of redirecting vents and every three months thereafter.~~

~~D.3.5 Broken or Failed Bag Detection [40 CFR Part 64, Compliance Assurance Monitoring, CAM]~~

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- ~~(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).~~
- ~~(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B – Emergency Provisions).~~

~~Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.~~

~~Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]~~

~~D.3.6 Record keeping Requirements~~

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- ~~(a) To document compliance with Condition D.3.4, the Permittee shall maintain records of the results of the daily inspections, including corrective actions taken, as required under D.3.4 and the dates the vents are redirected.~~
- ~~(b) All records shall be maintained in accordance with Section C – General Record Keeping Requirements, of this permit.~~

~~Compliance Determination Requirements~~

~~D.4.3 Particulate Control~~

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- ~~(a) The dust collector shall be in operation and control particulate emissions from the raw material mixing operation at all times this facility is in operation in order to comply with the limit in condition D.4.1~~
- ~~(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

~~Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]~~

~~D.4.4 Parametric Monitoring [40 CFR Part 64, Compliance Assurance Monitoring, CAM]~~

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~~The Permittee shall record the pressure drop across the dust collector used in conjunction with the raw material mixing operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances shall be considered a deviation from this permit.~~

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

~~D.4.5 Broken or Failed Bag Detection [40 CFR Part 64, Compliance Assurance Monitoring, CAM]~~

- ~~(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~
- ~~(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~

~~Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or tribeflows.~~

**Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

~~D.4.6 Record Keeping Requirements~~

- ~~(a) To document compliance with Condition D.4.4, the Permittee shall maintain records once per day of the pressure drop during normal operation.~~
- ~~(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.~~

**Comment 7:**

Appendix A, Furnace emission calculations:

Calculation of Furnace emissions in Appendix A are incorrect because they are based on the raw material batch input, as opposed to the amount of glass produced.

The raw material input numbers that are in the permit are 22.20 tons/hr for Furnace 32 and 15.5 tons/hr for Furnace 6. These numbers are not used to determine furnace emissions.

The emission factors (i.e., 0.54, etc.) are in units of pounds (lbs) of emission per ton of glass produced.

In response to a request made by IDEM, OAQ on June 15, 2007, Owens-Brockway has provided the glass production rates for each furnace as follows. The estimated maximum glass production level for Furnace #32 is 361 tons/day which equals 15.04 tons glass per hour. This is reflected in the existing initial Title V permit. For Furnace #6, the maximum production rate is 11 tons glass per hour.

Appendix A, Delivery scoop coating emission calculations:

The most conservative emission estimate possible is to assume that for every pound of delivery scoop coating oil used one pound of emissions is generated. This is the assumption used in Appendix A and it is also the assumption the company has historically used. Two specific points should be made regarding this:

1. The company views the emissions from delivery scoop coating as PM/PM<sub>10</sub>, not VOC. The emissions from the delivery chutes are a combination of oil vapor, oil aerosol, products of incomplete combustion, CO<sub>2</sub> and H<sub>2</sub>O. It is assumed that these emissions are more likely captured by particulate sampling technology as opposed to organic compound sampling. This is not to imply that a particulate test is even possible.
2. Although not available at this time, the company believes it is possible to use best engineering judgment to demonstrate that only a portion of the oil is actually converted to air emissions. It is suspected that a portion of the oil is never vaporized and that some of the vaporized oil condenses out inside the facility. At some point in the future the company may choose to demonstrate this and modify the emission factor.

#### **Response to Comment 7:**

The emission rate computations of Appendix A are revised for the furnaces, in accordance with the first part of this comment and the telephone conversation between the Permittee and IDEM, OAQ on June 15, 2007. The facility descriptions are also revised at Section A.2 as shown below, with the same changes made to the equipment description boxes in Sections D.1 and D.2 without replication herein.

IDEM, OAQ acknowledges the comment made with respect to the pollutant type emitted from delivery scoop lubricant usage during gob transfer. IDEM assumed that all organic lubricant (white mineral oil) used would become airborne as an organic vapor. IDEM does recognize, though, that a portion of these total emissions could be considered as an aerosol which would be particulate matter. Should the Permittee wish to re-examine these emissions in the future to establish the amount and fraction of material emitted as organic vapor versus aerosol, the Permittee can provide relevant information to OAQ for consideration. There is no change to the permit due to this part of the comment.

#### **A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(15)]**

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This stationary source consists of the following emission units and pollution control devices:

- (a) one (1) natural gas or propane fired glass melting furnace, referred to as Furnace #32, constructed in March 1987 and modified in 1998, with a maximum raw material input capacity of 22.2 tons per hour and a maximum heat input capacity of 84.7 million British thermal units per hour, producing 15.04 tons of glass per hour, with emissions exhausting to the stack referred to as Furnace Stack B. Under 40 CFR 60, Subpart CC, this is considered an affected glass melting furnace;
- (b) one (1) natural gas or number 2 fuel oil fired glass melting furnace, referred to as Furnace #6, constructed in 1970, with a maximum raw material input capacity of 15.5 tons per hour and a maximum heat input capacity of 64.0 million British thermal units per hour, producing 11 tons of glass per hour, with emissions exhausting to the stack referred to as Furnace Stack A;

\* \* \*

Upon further review IDEM, OAQ has made the following changes to the Part 70 permit (additions in bold, deletions in ~~strikeout~~):

1. All occurrences of IDEM's mailing addresses have been updated in the permit. Any occurrences of the zip code 46204 have been revised to **46204-2251**, and all addresses have been revised to include a mail code (MC) as follows:

Asbestos Section:	<b>MC 61-52 IGCN 1003</b>
Compliance Branch:	<b>MC 61-53 IGCN 1003</b>
Permits Branch:	<b>MC 61-53 IGCN 1003</b>
Technical Support and Modeling Section:	<b>MC 61-50 IGCN 1003</b>

2. A grammatical change is made to Condition C.18(c) as shown below.

C.18 General Record Keeping Requirements[326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]  
[326 IAC 2-3]

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\* \* \*

- (c) If there is a "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit or an **emission unit, other than projects** at a source with ~~Plant-wide~~ a **Plantwide** Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1 (ee)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr) and/or IAC 2-3-1 (mm)), the Permittee shall comply with the following:

3. IDEM, OAQ issued Administrative Amendment 095-24396-00012 on March 22, 2007. This amendment included a minor revision for the source's location and mailing address to note that they are located on the southbound side of the street. As such, the permit cover page, Section A.1 and all reporting forms are revised in the permit without replication herein to correct the street address as shown below:

2481 **South** Brookside Road, Lapel, IN 46051

4. A minor grammatical change is made to Conditions D.1.10(e) and D.2.7(c) as follows:

D.1.10 Record Keeping Requirements

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\* \* \*

- (e) To document compliance with Condition D.1.9, the permittee shall maintain records of daily visible emission notations of the furnace stack exhaust. The Permittee shall include in their daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (~~i.e.~~ **e.g.** the process did not operate that day).

D.2.7 Record Keeping Requirements

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\* \* \*

- (c) To document compliance with Condition D.2.6, the Permittee shall maintain records of daily visible emission notations of the furnace stack exhaust. The Permittee shall include in their daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (~~i.e.~~ **e.g.** the process did not operate that day).
5. During this review, the *Anderson Office of Air Management* changed their name. The permit has been revised throughout without replication herein to refer to the new name for the local air agency as the *City of Anderson, Air Management Division*. The address of the local agency remains unchanged.

**City of Anderson, Air Management Division Comment on the Draft Permit:**

On August 9, 2007 an annual air compliance inspection at the Owens-Brockway Glass plant was conducted. It was determined during the inspection that an existing pneumatic blasting unit was not included in draft Part 70 No. T095-17520-00012. The enclosed glass bead blast unit, which is equipped with a dust collector for particulate control, operates daily in order to clean the metal molds used to make glass containers. The City requests the blasting unit be listed in the Part 70 permit renewal, if possible.

**Response to City of Anderson, Air Management Division Comment:**

On August 22, 2007, Owens-Brockway was contacted by IDEM, OAQ and they were requested to complete permit application forms PI-17 and CE-02 for the pneumatic blasting unit. The forms were completed and returned to IDEM on August 27, 2007. IDEM has determined that the pneumatic blaster is an insignificant activity pursuant to 326 IAC 2-7-1(21)(A) and (B), based on the following emission rate computations for particulate matter (PM and PM<sub>10</sub>, where PM<sub>10</sub> is assumed equal to PM):

Grit (Glass Bead) Blast Rate: 10.96 lb/hour (based on 2,000 pounds grit used per month; blaster operating rate of 6 hour day, 365 day/yr)  
AP-42, Table 13.2.6-1: 0.69 lb PM/1000 lb abrasive media (controlled (dust collector) factor)  
Dust collector control efficiency: 98%

$0.69 \text{ lb PM}/1000 \text{ lb abrasive} * 10.96 \text{ lb abrasive/hr} / (100-98)/100 = 0.378 \text{ lb/hr (uncontrolled); } 0.008 \text{ lb/hr (controlled)}$   
= 9.075 lb/day (uncontrolled); 0.181 lb/day (controlled)  
= 1.656 tpy (uncontrolled); 0.033 tpy (controlled)

Based on the above, Section A.3, the Section D.5 facility description box, and Condition D.5.1 of the permit are revised as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

\* \* \*

(f) **one (1) enclosed pneumatic blaster used to clean glass container molds, installed July 2000, using 10.96 pounds glass bead blast media per hour, with one (1) dust collector for particulate matter control exhausting outdoors [326 IAC 6-3-2];**

~~(g)~~(g) eleven (11) cold cleaner parts washing stations used for maintenance purposes [326 IAC 8-3-2];

~~(g)~~(h) paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

**Facility Description [326 IAC 2-7-5(15)]**

The following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(12):

- (a) one (1) cullet crushing operation [326 IAC 6-3-2];
- (b) mold lubrication operation, consisting of mold swabbing and automated mold sooting, including, four (4) forming machines [326 IAC 6-3-2];
- (c) hot end surface treatment (HEST) process with a baghouse [326 IAC 6-3-2];
- (d) the following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment [326 IAC 6-3-2];
- (e) one (1) batch house central vacuum system, as a trivial activity per 326 IAC 2-7-1(40)(G)(i) [326 IAC 6-3-2];
- (f) one (1) enclosed pneumatic blaster used to clean glass container molds, installed July 2000, using 10.96 pounds glass bead blast media per hour, with one (1) dust collector for particulate matter control exhausting outdoors [326 IAC 6-3-2];**
- ~~(g)~~ eleven (11) cold cleaner parts washing stations used for maintenance purposes [326 IAC 8-3-2];
- (h) paved and unpaved roads and parking lots with public access. [326 IAC 6-4]**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**D.5.1 Particulate [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Process), the allowable particulate emission rate from the insignificant activities, including cullet crushing, mold lubrication, HEST, cutting and welding, **pneumatic blaster** and vacuum system processes, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

**Source Name:** Owens-Brockway Glass Container Inc.  
**Source Address:** 2481 South Brookside Road, Lapel, Indiana 46051  
**Mailing Address:** 2481 South Brookside Road, Lapel, Indiana 46051  
**Part 70 Permit No.:** T095-17520-00012  
**Facility:** Furnace #32  
**Parameter:** PM/PM<sub>10</sub> Emissions  
**Limit:** 55 tons per twelve (12) month period with compliance determine at the end of each month

The PM/PM<sub>10</sub> emissions will be determined from the following equation:

$$PM \text{ (tons/month)} = E_{PM} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times (\text{ton}/2000 \text{ pounds})$$

$$PM_{10} \text{ (tons/month)} = E_{PM_{10}} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times (\text{ton}/2000 \text{ pounds})$$

where:

$E_{PM}$  = pounds PM/ton glass produced determined from the most recent IDEM approved stack test

$E_{PM_{10}}$  = pounds PM<sub>10</sub>/ton glass produced determined from the most recent IDEM approved stack test

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Columns 1+2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.  
 Deviation has been reported on:

**Submitted by:**  
**Title / Position:**  
**Signature:**  
**Date:**  
**Phone:**

Attach a signed certification to complete this report.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

### Part 70 Quarterly Report

**Source Name:** Owens-Brockway Glass Container Inc.  
**Source Address:** 2481 South Brookside Road, Lapel, Indiana 46051  
**Mailing Address:** 2481 South Brookside Road, Lapel, Indiana 46051  
**Part 70 Permit No.:** T095-17520-00012  
**Facility:** Furnace #32  
**Parameter:** NO<sub>x</sub> Emissions  
**Limit:** 443 tons per twelve (12) month period with compliance determine at the end of each month

The NO<sub>x</sub> emissions will be determined from the following equation:

$$\text{NO}_x \text{ (tons/month)} = E_{\text{NO}_x} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times \left(\frac{\text{ton}}{2000 \text{ pounds}}\right)$$

where:

**E<sub>NO<sub>x</sub></sub>** = pounds NO<sub>x</sub>/ton glass produced determined from the most recent IDEM approved stack test

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Columns 1+2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.  
 Deviation has been reported on:

**Submitted by:**  
**Title / Position:**  
**Signature:**  
**Date:**  
**Phone:**

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE DATA SECTION**

**Part 70 Quarterly Report**

**Source Name:** Owens-Brockway Glass Container Inc.  
**Source Address:** 2481 South Brookside Road, Lapel, Indiana 46051  
**Mailing Address:** 2481 South Brookside Road, Lapel, Indiana 46051  
**Part 70 Permit No.:** T095-17520-00012  
**Facility:** Furnace #32  
**Parameter:** SO<sub>2</sub> Emissions  
**Limit:** 193.4 tons per twelve (12) month period with compliance determine at the end of each month

The SO<sub>2</sub> emissions will be determined from the following equation:

$$\text{SO}_2 \text{ (tons/month)} = E_{\text{SO}_2} \text{ (lbs/ton)} \times \text{monthly glass production rate (tons)} \times (\text{ton}/2000 \text{ pounds})$$

where:

$E_{\text{SO}_2}$  = pounds SO<sub>2</sub>/ton glass produced determined from the most recent IDEM approved stack test

YEAR: \_\_\_\_\_

Month	Column 1	Column 2	Columns 1+2
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons)
Month 1			
Month 2			
Month 3			

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.  
Deviation has been reported on:

**Submitted by:**  
**Title / Position:**  
**Signature:**  
**Date:**  
**Phone:**

Attach a signed certification to complete this report.

**Indiana Department of Environmental Management  
Office of Air Quality  
and Anderson Office of Air Management**

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

**Source Background and Description**

<b>Source Name:</b>	<b>Owens-Brockway Glass Container, Inc.</b>
<b>Source Location:</b>	<b>2481 Brookside Road, Lapel, Indiana 46051</b>
<b>County:</b>	<b>Madison</b>
<b>SIC Code:</b>	<b>3221</b>
<b>Operation Permit No.:</b>	<b>T095-5995-00012</b>
<b>Operation Permit Issuance Date:</b>	<b>November 11, 1998</b>
<b>Permit Renewal No.:</b>	<b>T095-17520-00012</b>
<b>Permit Reviewer:</b>	<b>Michael Hirtler/EVP</b>

The Office of Air Quality (OAQ) has reviewed a Part 70 Operating Permit Renewal application from Owens-Brockway Glass Container, Inc. relating to the operation of a glass container manufacturing source.

This Part 70 operating permit contains provisions intended to satisfy the requirements of the construction permit rules.

**Permitted Emission Units and Pollution Control Equipment**

The source consists of the following permitted emission units and pollution control devices:

- (a) one (1) natural gas or propane fired glass melting furnace, referred to as Furnace #32, constructed in March 1987, with a maximum raw material input capacity of 22.2 tons per hour and a maximum heat input capacity of 84.7 million British thermal units per hour, with emissions exhausting to the stack referred to as Furnace Stack B. Under 40 CFR 60, Subpart CC, this is considered an affected glass melting furnace;
- (b) one (1) natural gas or number 2 fuel oil fired glass melting furnace, referred to as Furnace #6, constructed in 1970, with a maximum raw material input capacity of 15.5 tons per hour and a maximum heat input capacity of 64.0 million British thermal units per hour, with emissions exhausting to the stack referred to as Furnace Stack A;
- (c) receiving and storage operations, constructed prior to 1970, with a maximum capacity of 150 tons per hour, with particulate emissions controlled by pressure relief bags and exhausting inside the building; and
- (d) raw material mixing operations, constructed prior to 1970, with a maximum capacity of 200 tons per hour, with particulate emissions controlled by a dust collector and exhausting inside the building.

**Unpermitted Emission Units and Pollution Control Equipment**

There are no unpermitted emission units operating at this source during this review process.

## **New Emission Units and Pollution Control Equipment Receiving Advanced Source Modification Approval**

On June 23, 2003 IDEM, OAQ received a letter from the Permittee as a notification of their plan to install a central vacuum system in the raw materials batch house to be used for housekeeping activities. The notification letter was submitted pursuant to condition B.22 of the existing Part 70 permit. IDEM, OAQ has reviewed the information submitted by the Permittee and agrees that the system is an insignificant activity pursuant to 326 IAC 2-7-1(40)(G)(i). This insignificant activity, as OAQ Permit No. 095-17861-00012, is combined into this permit renewal.

### **Insignificant Activities**

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) one (1) cullet crushing operation; [326 IAC 6-3-2]
- (b) mold lubrication operation, consisting of mold swabbing and automated mold sooting, including four(4) forming machines; [326 IAC 6-3-2]
- (c) one (1) hot end surface treatment (HEST) process with a baghouse; [326 IAC 6-3-2]
- (d) four (4) bottle coaters;
- (e) four (4) natural gas-fired annealing lehrs;
- (f) eleven (11) cold cleaner parts washing stations used for maintenance purposes; [326 IAC 8-3-2] [326 IAC 8-3-5]
- (g) delivery scoop coating (as white mineral oil) usage;
- (h) solid film lubricant usage;
- (i) natural gas-fired combustion sources with heat input equal to or less than ten million Btu per hour;
- (j) propane or liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) Btu per hour;
- (k) storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons;
- (l) vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids;
- (m) the following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment; [326 IAC 6-3-2]
- (n) forced and induced draft cooling tower system not regulated under a NESHAP;
- (o) replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (p) heat exchanger cleaning and repair;
- (q) paved and unpaved roads and parking lots with public access; [326 IAC 6-4]

- (r) blowdown for any of the following: sight glass, boiler, compressors, pumps and cooling tower;
- (s) emergency generators including reciprocating engines not exceeding 16,000 horsepower;
- (t) mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C; and
- (u) one (1) batch house central vacuum system, as a trivial activity per 326 IAC 2-7-1(40)(g)(i). [326 IAC 6-3-2]

### Existing Approvals

The source has constructed or has been operating under the following previous approvals:

- (a) Part 70 No. T095-5995-00012, issued on November 11, 1998;
- (b) First Administrative Amendment No. 095-11530-00012, issued on December 16, 1999;
- (c) Second Administrative Amendment No. 095-15069-00012, issued on December 18, 2001; and
- (d) First Reopening No. R095-13387-00012, issued on January 7, 2002.
- (e) Third Administrative Amendment No. 095-24396-00012, issued on March 22, 2007.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous registrations and permits are superseded by this permit.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

- (a) Part 70 No. T095-5995-00012, issued on November 11, 1998, Conditions D.1.1, D.1.2, D.1.6, D.1.9, D.1.10 and D.1.11:

*Reason Changed:* PSD permit CP 095-8204-00012, issued on March 10, 1998, approved a modification to existing glass melting Furnace # 32. The related Technical Support Document (TSD) included emissions netting computations for the relevant pollutants, including PM and PM-10. The TSD indicated that the potential to emit for PM and PM-10 was limited to 55 tons per year for each pollutant such that the requirements of 326 IAC 2-2 do not apply. Condition D.1.1 of original Part 70 permit No. T095-5995 included the limit for PM, but omitted PM-10. Condition D.1.1 is corrected as shown below by specifying that PM and PM-10 are limited to 55 tons per year (tpy).

Condition D.1.6 required the Permittee to conduct stack testing to establish pollutant emission factors to be used to determine compliance with the pollutant emission limitations of condition D.1.1. On September 15, 1998 and October 14, 1998, the Permittee conducted IDEM witnessed stack testing for flint glass and green glass production and established emission factors for PM, PM10, SO<sub>2</sub>, and NO<sub>x</sub>. The respective emission factors for PM, PM10, SO<sub>2</sub>, and NO<sub>x</sub> of 0.33, 0.413, 1.16 and 2.69 lb/ton of glass produced have been verified by IDEM. IDEM witnessed stack testing for amber glass production was performed on August 21, 2003, resulting in emission factors of 0.54, 0.675, 3.38, 4.23 lb/ton of glass produced for PM, PM10, SO<sub>2</sub>, and NO<sub>x</sub> respectively. This also satisfies the applicable New Source Performance Standard

(NSPS) emission limit for particulate matter of 0.5 g/kg (1.0 lb/ton) of glass produced (see related NSPS discussion later in this document).

Since existing Condition D.1.1 combines both PSD minor limits (PM/PM-10 and NO<sub>x</sub>) and PSD BACT limits (SO<sub>2</sub>), IDEM has decided to separate D.1.1 into a PSD minor limit condition (as D.1.1) and a PSD BACT limit condition (as D.1.2). The PSD minor limits of Condition D.1.1 are now specified on a pound per hour basis which is consistent with the prior construction approval. The specific pollutant emission limits shall be verified through testing, and such makes the daily production limits of Condition D.1.1, and Conditions D.1.6, D.1.9 and D.1.11, superfluous and they are removed from the permit. The following shows the described permit changes:

**D.1.1 PSD Minor Limits [326 IAC 2-2 (Prevention of Significant Deterioration (PSD))]**

Pursuant to 326 IAC 2-2 (PSD) and CP 095-8204 issued March 10, 1998, the furnace shall have the following production and emission limitations based on a twelve (12) month rolling average, based on the type of glass produced:

Type of Glass	Amber	Flint (clear) and Green
Maximum Production	361 tons per day	412 tons per day
PM emissions	55 tons per year	55 tons per year
SO <sub>2</sub> emissions	193.4 tons per year	193.4 tons per year
NO <sub>x</sub> emissions	443 tons per year	443 tons per year

The PM limits are necessary in order to render PSD not applicable and will also satisfy the requirements of 326 IAC 6-3-2 (Process Operations) and the PM requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR Part 60.292, Subpart CC). The NO<sub>x</sub> limits are necessary in order to render PSD not applicable. The SO<sub>2</sub> limits for amber glass satisfy the requirements of PSD provided that the sulfur content of the amber glass batch shall not exceed 0.3% by weight.

Pursuant to PC(48) 1633, issued on January 19, 1987, and revised by this Part 70 renewal permit:

- (a) **PM/PM<sub>10</sub> emissions from furnace #32 shall be less than 12.56 pounds per hour; and**
- (b) **NO<sub>x</sub> emissions from furnace #32 shall be less than 101.14 pounds per hour.**

**Compliance with these limits shall render the requirements of 326 IAC 2-2, PSD, not applicable to the 1987 modification of furnace #32 for emissions of PM/PM<sub>10</sub> and NO<sub>x</sub>.**

**D.1.2 Fuel Usage PSD Best Available Control Technology Limit [326 IAC 2-2-3 (PSD)]**

Pursuant to 326 IAC 2-2-3 (PSD) and CP 095-8204-00012 issued March 10, 1998, the Permittee shall comply with the following Best Available Control Technology (BACT) limits for furnace #32:

- (a) The fuel used in furnace #32 shall be limited to natural gas or an alternate fuel with a pounds SO<sub>2</sub>/MMBtu emission rate less than or equal to that of natural gas (0.0006 lbs SO<sub>2</sub>/MMBtu),
- (b) **The sulfur content input to the amber glass batch shall be limited to 0.3% by weight, and**

**(c) The SO<sub>2</sub> emission rate shall not exceed 193.4 tons per year.**

**D.1.6 Emissions Limitations [326 IAC 2-2]**

Pursuant to CP 095-8204-00012 issued March 10, 1998, compliance with the emission limits in Condition D.1.1 shall be determined based on the following equations used to calculate daily emissions. These equations shall be used for amber glass production, and for flint (clear) glass production, and green glass production until emission factors (in pounds of pollutant per ton of glass produced) have been established from the performance tests, at which times the established emission factors will be used.

$$PM = 0.64 \times 969 \times C \times 10^{-3} \left( \frac{31500}{D+460} + 5.44 \right) \times 24/2000 \text{ (tons per day)}$$

$$SO_2 = (C/2000) \times (B - (A/100) \times 2000 \times 64/80) - PM \times 64/142 \text{ (tons per day)}$$

$$NO_x = 0.28 \times ((0.159 \times D - 387) \times (E - 8 \times E - 9) \times 10^{-3}/2000 \times F \times G \times 10^{-3} \text{ (tons per day)}$$

Where:

- A = retained SO<sub>3</sub> in glass made (%)
- B = batch input SO<sub>2</sub> (lbs per ton of glass made)
- C = glass melted (tons per day)
- D = maximum bridgewall optical temperature (°F)
- E = air: fuel ratio (A:F)
- F = fuel usage (MCF per day)
- G = fuel heat content (Btu per ft<sup>3</sup>)

**D.1.9 Record Keeping Requirements [326 IAC 2-2 (PSD)]**

Pursuant to CP 095-8204, records shall be kept of the following data and parameters on a daily basis for Furnace #32 and made available to the OAQ and the Anderson Office of Air Quality when requested:

- (1) maximum furnace bridgewall optical temperature (°F);
- (2) glass production rate (tons/day);
- (3) furnace air to gas ratio;
- (4) fuel usage;
- (5) percent cullet in material input;
- (6) SO<sub>x</sub> content of material input (lbs SO<sub>x</sub>/tons); and
- (7) percent SO<sub>x</sub> retention in the glass produced.

**D.1.10 Record Keeping Requirements**

**(a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (6) below.**

- (1) Calendar dates covered in the compliance determination period;**
- (2) Actual fuel usage since last compliance determination period;**
- (3) To certify compliance with burning only natural gas or equivalent lower sulfur containing fuel, the Permittee shall maintain records of fuel used.**

**If the material supplier certification is used to demonstrate compliance the following, as a minimum, shall be maintained:**

- (4) Material supplier certifications;**
- (5) The name of the supplier; and**
- (6) A statement from the supplier that certifies the sulfur content of the material used as input to the batch.**

**The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.**

\* \* \*

#### D.1.11 Reporting Requirements

~~A quarterly summary of the information to document compliance with Condition D.1.6 shall be submitted to the address listed in Section C General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.~~

- (b) Part 70 No. T095-5595-00012, issued on November 11, 1998, Condition D.1.3:

*Reason Changed:* Furnace #32 was incorrectly designated as furnace #1. This reference is corrected herein. Also, condition D.1.3 (now as D.1.4) is re-worded for greater clarity. A similar re-wording is made to identical condition D.2.3 without replication herein.

#### D.1.34 Arsenic [40 CFR Part 61, Subpart N]

**Commercial arsenic shall not be used as a raw material in furnace #32. Therefore, the requirements of Pursuant to 40 CFR Parts 61.160, Subpart N (National Emission Standards For Inorganic Arsenic Emissions From Glass Manufacturing Plants) commercial arsenic shall not be used as a raw material in furnace #1. Therefore, the requirements of this rule shall not apply.**

- (c) Part 70 No. T095-5595-00012, issued on November 11, 1998, Condition D.1.7:

*Reason Changed:* Condition D.1.7 (now D.1.8) is revised to reflect the insertion of the requisite maximum temperature established during the performance test conducted in August 2003; to include the date that EPA approved the alternative monitoring procedure (i.e., July 8, 1987); and to clarify that the bridgewall optical temperature be monitored using a continuous temperature monitoring system, as agreed to by EPA.

#### D.1.78 Bridgewall Temperature [40 CFR Part 60 Subpart CC] [326 IAC 3-5]

- (a) In lieu of installing a continuous opacity monitor (COM), the alternate procedure approved by EPA **on July 8, 1987**, and by CP 095-8204 issued on March 10, 1998, of using maximum bridgewall temperature as demonstration of particulate compliance shall be accepted. ~~The present maximum bridgewall temperature of 2,820 degrees F shall be maintained until a new bridgewall temperature is established for amber glass production during the performance test; after which time the new established temperature shall be maintained as a maximum limit at all times that the furnace is in operation.~~ **A continuous monitoring system shall be calibrated, maintained, and operated on the furnace to measure the bridgewall optical temperature. Continuous monitoring shall mean at least one (1) complete cycle (sampling, analyzing and data recording) for each successive fifteen (15) minute measuring period. The output of this system shall be recorded as a three-hour average. A bridgewall optical temperature of 2,859 degrees F, or the temperature established during the most recent performance test, shall be maintained as the maximum temperature during furnace operation.**

**(b) The Permittee shall determine the three-hour average bridgewall optical temperature from the most recent valid stack test during amber glass production that demonstrates compliance with the limits in Condition D.1.12, as approved by IDEM.**

(d) Part 70 No. T095-5595-00012, issued on November 11, 1998, Condition D.2.9:

*Reason Changed:* Condition D.2.9 is removed from the permit. IDEM, OAQ has determined that compliance with the SO<sub>2</sub> emission limit of 0.5 lb/MMBtu at Condition D.2.2 is demonstrated through continued compliance with Conditions D.2.6 (Compliance Determination) and D.2.8 (Record Keeping) for facility No. 2 fuel oil combustion. This is consistent with current IDEM, OAQ permit approvals for similar facilities at other sources.

#### ~~D.2.9 Reporting Requirements~~

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~~A quarterly summary of the information to document compliance with Condition D.2.2 shall be submitted to the address listed in Section C – General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.~~

#### **Enforcement Issue**

There are no enforcement actions pending.

#### **Recommendation**

The staff recommends to the Commissioner that the Part 70 permit be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete Part 70 permit renewal application for the purposes of this review was received on January 29, 2003. Additional information was received on June 24, 2003, August 21, 2006, January 23 and 25, 2007, and March 19, 20 and 26, 2007.

There was no notice of completeness letter mailed to the Permittee.

#### **Emission Calculations**

See Appendix A of this document for detailed emission calculations (two (2) pages).

### County Attainment Status

The source is located in Madison County.

Pollutant	Status
PM2.5	Attainment
PM-10	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

- (a) Madison County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability - Entire Source section.
- (b) Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Madison County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability for the source section.
- (c) Madison County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

### Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	1144.0
PM-10	1138.6
SO <sub>2</sub>	559.5
VOC	51.7
CO	33.0
NO <sub>x</sub>	832.2

HAPs	tons/year
antimony compounds	0.003
arsenic compounds	0.035
cadmium compounds	0.005
chlorine	0.030
chromium compounds	0.327
lead compounds	0.291
manganese compounds	0.005
nickel compounds	0.006
phosphorus	0.048
selenium compounds	0.66
benzene	0.001
formaldehyde	0.049
hexane	1.172
Total	2.632

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM-10, SO<sub>2</sub> and NO<sub>x</sub> is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year. The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is less twenty-five (25) tons per year.

**Actual Emissions**

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data.

Pollutant	Actual Emissions (tons/year)
PM	66
PM-10	66
SO <sub>2</sub>	197
VOC	18
CO	27
NO <sub>x</sub>	291
HAP (Pb)	0.15

\*PM assumed equal to the reported pollutant, PM10.

**Part 70 Permit Conditions**

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- (a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- (b) Monitoring and related record keeping requirements which assure that all reasonable information is provided to evaluate continuous compliance with the applicable requirements.

**Potential to Emit after Issuance**

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/emission unit	Potential to Emit (tons/year)						
	PM	PM-10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	HAPs
furnace 32 (when producing amber glass)	55.0 <sup>(1)</sup>	55.0 <sup>(1)</sup>	193.4 <sup>(2)</sup>	19.45	19.45	443 <sup>(1)</sup>	1.36
furnace 32 (when producing flint and green glass)	55.0 <sup>(1)</sup>	55.0 <sup>(1)</sup>	193.4 <sup>(2)</sup>	19.45	19.45	443 <sup>(1)</sup>	1.36
furnace 6	95.05	89.61	230.8	13.6	13.6	421	1.27
receiving and storage	242.8 <sup>(3)</sup>	242.8 <sup>(3)</sup>	0.00	0.00	0.00	0.00	0.00
raw material mixing	256.3 <sup>(3)</sup>	256.3 <sup>(3)</sup>	0.00	0.00	0.00	0.00	0.00
mineral oil usage for gob transfer	0.00	0.00	0.00	18.71	0.00	0.00	0.00
<b>Total Emissions<sup>(4)</sup></b>	<b>649.2</b>	<b>643.7</b>	<b>424.2</b>	<b>51.7</b>	<b>33.0</b>	<b>863.9</b>	<b>2.63</b>

1. Reflects the lb/hour limits of condition D.1.1, extrapolated to 8,760 hours/year of operation.  
 2. Reflects the lb/hour limit of condition D.1.2, extrapolated to 8,760 hours/year of operation.  
 3. Reflects 326 IAC 6-3-2(e) allowable emission rate (lb/hr), extrapolated to 8760 hours/year operation. PM-10 equals PM.  
 4. Glass production at furnace # 32 is mutually exclusive and total emissions reflect only one glass type.

- (a) This existing stationary source is major for PSD because the emissions of at least one attainment pollutant are greater than two hundred fifty (>250) tons per year, and is not one of the twenty-eight (28) listed source categories.
- (b) This existing stationary source is major for Emission Offset for ozone because the emissions of the nonattainment pollutant, NO<sub>x</sub>, is greater than one hundred (>100) tons per year.
- (c) Fugitive Emissions  
 This type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, however, there is an applicable New Source Performance Standard that was in effect on August 7, 1980, therefore fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

**Federal Rule Applicability**

- (a) The requirements of the New Source Performance Standard (NSPS), 326 IAC 12, (40 CFR Parts 60.290 - 60.296, Subpart CC) are not included in this permit for glass melt furnace #6 because it was constructed prior to the rule applicability date of June 15, 1979, and there are no approvals for modification issued for this facility.

- (b) The glass melt furnace #32, constructed in 1987 and modified in 1998, is subject to the New Source Performance Standard for *Standards of Performance for Glass Manufacturing Plants*, 40 CFR Parts 60.290 - 60.296, Subpart CC, which is incorporated by reference as 326 IAC 12. Pursuant to the NSPS, the facility is subject to the particulate matter emission limit from a glass melting furnace with modified processes for production of container glass with a soda-lime recipe.

The Permittee is not subject to the continuous opacity and COM requirements of Subpart CC. In lieu of installing a continuous opacity monitor (COM), an alternate procedure was approved by EPA on July 8, 1987 to allow use of maximum bridgewall optical temperature as demonstration of particulate compliance. The Permittee shall measure the bridgewall optical temperature continuously (at least one (1) complete cycle (sampling, analyzing and data recording) for each successive fifteen (15) minute measuring period) when the furnace is in operation. A bridgewall optical temperature of 2,859 degrees F, determined during the August 21, 2003 test, or the temperature established during the most recent performance test, shall be maintained as the maximum temperature allowed at all times of furnace operation.

Nonapplicable portions of the NSPS will not be included in the permit. Furnace #32 is subject to the following portions of Subpart CC.

- (1) 40 CFR 60.290.
- (2) 40 CFR 60.291.
- (3) 40 CFR 60.293(a)
- (4) 40 CFR 60.293(b)(1)
- (5) 40 CFR 60.293(d)
- (6) 40 CFR 60.293(f)
- (7) 40 CFR 60.296(a)
- (8) 40 CFR 60.296(c)
- (9) 40 CFR 60.296(d)(1)
- (10) 40 CFR 60.293(d)(2)
- (11) 40 CFR 60.293(d)(3)

The provisions of 40 CFR 60 Subpart A – General Provisions, apply to the facility described in this section except when otherwise specified in 40 CFR 60 Subpart CC.

- (c) The requirements of the National Emission Standard for Inorganic Arsenic Emissions from Glass Manufacturing Plants, 40 CFR Part 61.160, Subpart N are not included in this permit because the source does not use commercial arsenic as a raw material at either furnace #32 or #6. The Permittee shall continue to confirm on the annual compliance certification that commercial arsenic has not been used as a raw material at either furnace.
- (d) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the permit for this area source of hazardous air pollutant emissions, as defined at 40 CFR 63.2.
- (e) The parts washers are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), 40 CFR 63 Subpart T, because the solvent used does not contain any of the following halogenated solvents in concentrations greater than five percent by weight: methylene chloride, 1,1,1-trichloroethane, trichloroethylene, perchloroethylene, carbon tetrachloride, or chloroform.

- (f) The requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are applicable to this source. Such requirements apply to a pollutant-specific emissions unit (PSEU), as defined in 40 CFR 64.1, at a major source that is required to obtain a Part 70 or 71 permit if the PSEU meets the following criteria:
1. the unit is subject to an emission limitation or standard for an applicable regulated air pollutant,
  2. the unit uses a control device as defined in 40 CFR 64.1 to comply with that emission limitation or standard, and
  3. the unit has a potential to emit (PTE) before controls equal to or greater than 100 percent of the amount (tons per year) of the pollutant required for a source to be classified as a Part 70 major source.

This source was issued initial Part 70 permit No. T097-5995-00012 on November 11, 1998.

The PSEUs, as glass melt furnace # 32 and #6, are large units as defined in 40 CFR 64.5. However, neither unit uses a control device to achieve compliance with applicable emission limitations. Therefore CAM is not applicable to either melt furnace.

The PSEUs, as receiving and storage operations and raw material mixing operations, each have an uncontrolled PTE of particulate at greater than 100 percent of applicable Part 70 major source threshold (i.e. 100 tons per year), and each uses a control device to comply with the applicable emission limit established at 326 IAC 6-3-2(e). IDEM, OAQ has determined that pressure differential readings and control device inspections shall satisfy 40 CFR 64 for the mixing operations. Since the receiving/storage operation uses eleven (11) filter socks for which pressure differential readings are impractical, the Permittee requested that IDEM, OAQ approve daily operation and maintenance (O&M) practices and record keeping as complying with 40 CFR 64. Since 40 CFR 64.3 includes O&M practices as acceptable methods of compliance assurance monitoring, IDEM, OAQ, Compliance Branch approved the Permittee's request on January 31, 2007.

### **State Rule Applicability – Entire Source**

#### **326 IAC 1-5-2 (Emergency Reduction Plans)**

The source has submitted an Emergency Reduction Plan (ERP) on February 3, 1999. The ERP has been verified to fulfill the requirements of 326 IAC 1-5-2 (Emergency Reduction Plans).

#### **326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

This existing source, initially constructed prior to the August 7, 1977 rule applicability date, is a major stationary source because it is not one of the 28 listed source categories and at least one attainment regulated pollutant is emitted at a rate of 250 tons per year. This source was issued PSD permit CP 095-8204-00012 on March 10, 1998 to modify furnace #32, and the source shall continue to comply with the applicable emissions limits, testing, compliance, record keeping and reporting requirements, established in PSD permit, all incorporated herein at permit Section D.1.2. No additional modifications to the source have occurred since CP 095-8204.

### 326 IAC 2-3 (Emission Offset)

This existing source is located in Madison County which was redesignated on June 15, 2004 as a basic nonattainment area for the 8 hour ozone standard. Upon this redesignation, the source became a major source because it has a potential to emit of NO<sub>x</sub>, an ozone precursor pollutant, at greater than the nonattainment 326 IAC 2-3 rule applicability threshold of 100 tons per year. Since this is a major source in a nonattainment area, any modification made to the source after June 15, 2004 shall be reviewed pursuant to the requirements of Emission Offset for emissions of both ozone precursor pollutants, VOC and NO<sub>x</sub>. No modifications have occurred at this source since June 15, 2004.

### 326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of the combination of HAP, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT).

Construction permit CP 095-8504 was issued to increase the allowable SO<sub>2</sub> emission rate for the existing furnace. No physical change was made to this facility as a result of this approval, and this was not a reconstruction. Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to this facility.

No other facilities with an uncontrolled PTE of 10 tons per year of a single HAP and 25 tons per year of the combination of HAPS have been constructed or reconstructed at this source since July 27, 1997. Therefore, the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to this source.

### 326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). The source also has potential to emit greater than or equal to 250 tons per year of PM-10; therefore, an emission statement covering the previous calendar year must be submitted by July 1 annually. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

### 326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

**State Rule Applicability – Individual Facilities**  
**State Rule Applicability - Furnace #32, Constructed in 1987 and Modified in 1998**

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

The OAQ issued CP-095-8204-00012 on March 10, 1998 to approve an increase in allowable SO<sub>2</sub> emissions from Furnace #32 from 112 tpy to 193.4 tpy. The approval required that there be no change to the existing allowable furnace emissions of PM/PM<sub>10</sub> and NO<sub>x</sub>, which originated in approval PC(48) 1633, issued on January 19, 1987. Therefore, CP-095-8204-00012 was issued as a PSD synthetic minor permit for furnace emissions of PM/PM<sub>10</sub> and NO<sub>x</sub>, and as a PSD permit with relevant Best Available Control Technology (BACT) limits for furnace emissions of SO<sub>2</sub>. The applicable PSD minor limits and PSD BACT limits are as follows:

- (a) PSD Minor Limit (326 IAC 2-2):  
Pursuant to PC(48) 1633, issued on January 19, 1987, and revised by this Part 70 renewal permit:
- (1) PM/PM<sub>10</sub> emissions from furnace #32 shall be less than 12.56 pounds per hour; and
  - (2) NO<sub>x</sub> emissions from furnace #32 shall be less than 101.14 pounds per hour.

Compliance with these limits shall render the requirements of 326 IAC 2-2, PSD, not applicable to the 1987 modification of furnace #32 for emissions of PM/PM-10 and NO<sub>x</sub>.

- (b) PSD Best Available Control Technology Limit (326 IAC 2-2-3 (PSD)):  
Pursuant to 326 IAC 2-2-3 (PSD) and CP 095-8204-00012 issued March 10, 1998, the Permittee shall comply with the following Best Available Control Technology (BACT) limits for furnace #32:
- (1) The fuel used in furnace #32 shall be limited to natural gas or an alternate fuel with a pounds SO<sub>2</sub>/MMBtu emission rate less than or equal to that of natural gas (0.0006 lbs SO<sub>2</sub>/MMBtu),
  - (2) The sulfur content input to the amber glass batch shall be limited to 0.3% by weight, and
  - (3) The SO<sub>2</sub> emission rate shall not exceed 193.4 tons per year.

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

326 IAC 6-2 does not apply to furnace# 32 because this facility is not utilized for indirect heating.

326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes)

Pursuant to this rule, the allowable particulate emission rate from glass melting furnace #32 shall not exceed 32.7 pounds per hour when operating at a process weight rate of 22.2 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Based on calculations made, the furnace is in compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Furnace #32 is subject to the requirements of 326 IAC 7-1.1 because the potential to emit SO<sub>2</sub> is greater than 25 tons per year. However, there are no applicable SO<sub>2</sub> limitations established under this rule for natural gas or propane combustion.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

This rule does not apply to Furnace #32 because the potential to emit of VOC from this facility is less than 25 tons per year. There are no other 326 IAC 8 rules that apply.

**State Rule Applicability - Furnace #6, Constructed in 1970**

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)

326 IAC 6-2 does not apply to furnace# 6 because this facility is not utilized for indirect heating.

326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes)

Pursuant to this rule, the allowable particulate emission rate from glass melting furnace #6 shall not exceed 25.7 pounds per hour when operating at a process weight rate of 15.5 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

Based on calculations made, the furnace is in compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Furnace #6 is subject to the requirements of this rule because the potential to emit of SO<sub>2</sub> is greater than 25 tons per year. Pursuant to 326 IAC 7-1.1 (SO<sub>2</sub> Emissions Limitations) the SO<sub>2</sub> emissions from Furnace #6, with a maximum heat input capacity of 64.0 MMBtu per hour, shall not exceed five tenths (0.5) pound per MMBtu heat input. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average.

326 IAC 7-2-1 (Sulfur Dioxide Compliance Reporting)

Pursuant to this rule, a quarterly report shall be submitted including the average sulfur content, heat content, the sulfur dioxide emission rate in pounds per million Btu, and the fuel oil consumption. Fuel sampling and analysis data shall be collected pursuant to the procedures specified in 326 IAC 3-7-4 for oil combustion.

326 IAC 8-1-6 (Best Available Control Technology (BACT))

This rule does not apply to Furnace #6 because the furnace was constructed prior to 1980. There are no other 326 IAC 8 rules that apply.

### **State Rule Applicability - Receiving and Storage Operations, Constructed prior to 1970**

#### 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes)

Pursuant to this rule, the allowable particulate emission rate from the receiving and storage operations shall not exceed 55.4 pounds per hour when operating at a process weight rate of 150 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The pressure relief bags shall be in operation at all times that receiving and storage is in operation, in order to comply with this limit.

### **State Rule Applicability - Weighing and Mixing Operations, Constructed Prior to 1970**

#### 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes)

Pursuant to this rule, the allowable particulate emission rate from the weighing and mixing operations shall not exceed 58.5 pounds per hour when operating at a process weight rate of 200 tons per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour}$$

The dust collector shall be in operation at all times the weighing and mixing is in operation, in order to comply with this limit.

### **State Rule Applicability - Delivery Scoop Coating, Cullet Crushing, Mold Swabbing, Hot End Treatment and Vacuuming Operations (Insignificant Activities)**

#### 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

This rule applies to facilities located anywhere in the state that were constructed on or after January 1, 1980, which have potential volatile organic compound (VOC) emissions of 25 tons per year (tpy) or more, and which are not otherwise regulated by another provision of Article 8. The Permittee uses white mineral oil to lubricate delivery scoops used to transfer freshly cut gobs of molten glass to the forming machines. This process commenced in 1970. Therefore, this rule does not apply to this activity.

#### 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes)

Pursuant to this rule, allowable particulate emission rate from the cullet crushing, mold lubrication and hot end surface treatment operations, as insignificant activities, shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

### **State Rule Applicability - Eleven (11) Parts Washing Stations**

#### **326 IAC 8-3-2 (Cold Cleaner Operations)**

The source, which is located in Madison County, is subject to the applicable rule requirements since the eleven (11) parts washers, installed in 1990, are new after January 1, 1980. As such, and pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), for cold cleaning operations constructed after January 1, 1980, the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

The source continues to comply with these requirements for the cold cleaning facilities.

#### **326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)**

The source, which is located in Madison County, is not subject to the applicable rule requirements since the eleven (11) parts washers, installed in 1990, have remote solvent reservoirs.

### **Testing Requirements**

Furnace #32 has emission limits that were established by permit to avoid the requirements of 326 IAC 2-2 (PSD) for NO<sub>x</sub> and PM/PM<sub>10</sub>; and to comply with PSD for emissions of SO<sub>2</sub>. Based on this, and the fact that Furnace #32 is not equipped with emissions control equipment, IDEM has decided that compliance testing of Furnace #32 shall be conducted once per permit term. Prior testing of Furnace 32 was conducted on September 15 and October 14, 1998, and August 21, 2003. During this review the source indicated that Furnace #32 has made only amber glass since January 1, 2003 and there are no current plans to make flint and green glass; thus, it would be impracticable to switch the furnace to a different color glass for the purpose of testing. As such, IDEM has determined that the Permittee shall notify IDEM, OAQ prior to commencing production of flint and green glass in Furnace #32. At such time, the Permittee shall conduct a compliance test of Furnace #32 within 180 days after initiating production of flint and green glass and repeat the test at least every five years from the date of the prior test.

## Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

All compliance requirements from previous approvals were incorporated into this Part 70, except, where applicable, the frequencies for visible emission notations and baghouse pressure drop readings have been changed to once per shift.

The compliance monitoring requirements applicable to this source are as follows:

### Compliance Monitoring - Furnace #32

Furnace #32 has applicable compliance monitoring conditions as specified below:

- (a) In lieu of installing a continuous opacity monitor (COM), the alternate procedure approved by EPA on July 8, 1987, and by CP 095-8204 issued on March 10, 1998, of using maximum bridgewall temperature as demonstration of particulate compliance shall be accepted. A continuous monitoring system shall be calibrated, maintained, and operated on the furnace to measure the bridgewall optical temperature. Continuous monitoring shall mean at least one (1) complete cycle (sampling, analyzing and data recording) for each successive fifteen (15) minute measuring period. The output of this system shall be recorded as a three-hour average. A bridgewall optical temperature of 2,859 degrees F, or the temperature established during the most recent performance test, shall be maintained as the maximum temperature during furnace operation.
- (b) The Permittee shall determine the three-hour average bridgewall optical temperature from the most recent valid stack test during amber glass production that demonstrates compliance with the limits in Condition D.1.12, as approved by IDEM.
- (c) Daily visible emission notations of the furnace stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (d) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (e) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

- (f) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process
- (g) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the furnace must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes), 40 CFR 60, Subpart CC (Standards of Performance for Glass Manufacturing Plants), and 326 IAC 2-7 (Part 70).

#### Compliance Monitoring - Furnace #6

Furnace #6 has applicable compliance monitoring conditions as specified below:

Daily visible emission notations of the furnace stack exhaust shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

These monitoring conditions are necessary because the furnace must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes) and 326 IAC 2-7 (Part 70).

#### Compliance Monitoring - Receiving and Storage Operations

The receiving/storage operations have applicable compliance monitoring conditions as specified below:

- (a) An operation and maintenance (O&M) inspection shall be performed daily of all pressure relief bags controlling the receiving and storage operation. The daily inspection of the pressure relief bags shall, at a minimum, include the following:
  - (1) a check on the condition of the bags;
  - (2) inspection of the connection for the bags;
  - (3) confirmation that the bags are not blinded;
  - (4) physical observation to confirm that air around the bags appears normal; and
  - (5) replacement of all defective bags.

The Permittee shall maintain a record of the results of the daily inspection in accordance with condition D.3.6. An inspection shall also be performed within three months of redirecting vents and every three months thereafter.

- (b) The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (c) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (d) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the receiving and storage operations and related control device must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes), 40 CFR 64 (CAM), and 326 IAC 2-7 (Part 70).

#### Compliance Monitoring - Weighing and Mixing Operations

The weighing and mixing operations have applicable compliance monitoring conditions as specified below:

- (a) The Permittee shall record the pressure drop across the dust collector used in conjunction with the raw material mixing operation, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 2.0 and 8.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (b) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (c) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions unit. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the weighing and mixing operations and related control device must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emissions Limitations for Manufacturing Processes), 40 CFR 64 (CAM), and 326 IAC 2-7 (Part 70).

## **Conclusion**

The operation of this glass container manufacturing source shall be subject to the conditions of this Part 70 Permit No. T095-17520-00012.

## Appendix A: Emission Calculations

**Company Name:** Owens-Brockway Glass Container Inc.  
**Address City IN Zip:** 2481 Brookside Road, Lapel, Indiana 46051  
**Part 70 Renewal No.:** 095-17520-00012  
**Reviewer:** MH / EVP  
**Date:** June 2007

<b>Uncontrolled Potential to Emit (tons/year)</b>						
Emissions Generating Activity						
Pollutant	Glass Melt Furnace 32	Glass Melt Furnace 6	Receiving and Storage	Material Mixing	Mineral Oil Usage for Gob Transfer	<b>TOTAL</b>
PM	35.58	67.45	43.80	58.40	0.00	205.2
PM10	35.58	63.60	43.80	58.40	0.00	201.4
SO2	222.68	163.81	0.00	0.00	0.00	386.5
NOx	278.68	298.72	0.00	0.00	0.00	577.4
VOC	13.18	9.64	0.00	0.00	18.71	41.5
CO	13.18	9.64	0.00	0.00	0.00	22.8
total HAPs	1.23	1.06	0.00	0.00	0.00	2.29
worst case single HAP	0.67 (hexane)	0.50 (hexane)	0.00	0.00	0.00	1.17 (hexane)
Total emissions based on rated capacity at 8,760 hours/year without controls and limitations.						
<b>Controlled/Limited Potential to Emit (tons/year)</b>						
Emissions Generating Activity						
Pollutant	Glass Melt Furnace 32	Glass Melt Furnace 6	Receiving and Storage	Material Mixing	Mineral Oil Usage for Gob Transfer	<b>TOTAL</b>
PM	55.0	67.45	43.80	58.40	0.00	224.7
PM10	55.0	63.60	43.80	58.40	0.00	220.8
SO2	193.4	163.81	0.00	0.00	0.00	357.2
NOx	443.0	298.72	0.00	0.00	0.00	741.7
VOC	13.18	9.64	0.00	0.00	18.71	41.5
CO	13.18	9.64	0.00	0.00	0.00	22.8
total HAPs	1.23	1.06	0.00	0.00	0.00	2.29
worst case single HAP	0.67 (hexane)	0.50 (hexane)	0.00	0.00	0.00	1.17 (hexane)
Total emissions based on rated capacity at 8,760 hours/year, after any enforceable controls and limitations.						

Appendix A: Emission Calculations

Company Name: Owens-Brockway Glass Container Inc.  
 Address City IN Zip: 2481 Brookside Road, Lapel, Indiana 46051  
 Part 70 Renewal No.: 095-17520-00012  
 Reviewer: MH / EVP  
 Date: June 2007

\*\* Process Emissions \*\*

Process:	Rate (tons glass/hr)	Pollutant	Ef (lb/ton produced)	Ebc (ton/yr)	Eac <sup>4</sup> (ton/yr)	Type of control	Control Efficiency (%)
<b>Regenerative glass melting furnace #32</b>	15.04	PM <sup>1</sup>	0.33/0.54	35.58	55.0	none	0%
		PM-10 <sup>1</sup>	0.33/0.54	35.58	55.0		
		SO <sub>2</sub> <sup>1</sup>	1.16/3.38	222.68	193.4		
		NOx <sup>1</sup>	2.69/4.23	278.68	443.0		
		VOC <sup>2</sup>	0.20	13.18	13.18		
		CO <sup>2</sup>	0.20	13.18	13.18		
		Selenium <sup>3</sup>	0.004	0.26	0.26		

1. First factor based on 9/15/1998 & 10/14/1998 stack testing for flint/green glass; and second factor based on 8/21/2003 stack testing for amber glass. Ebc reflects worst cased emission factor for either glass type.
2. Based on SCC# 3-05-014-02, AP-42 Ch. 11.15.
3. Based on FIRE, SCC#3-05-014-02.
4. Based on limits of Condition D.1.1 of the permit for PM/PM10 and NOx; and Condition D.1.2(c) for SO<sub>2</sub>.

HAPs (from EPA's SPECIATE Software for SCC# 3-05-014-02, as % of total PM)										HAPs (AP 42, Table 1.4-3, lb/MMcf gas)			Total
PHOSPHORUS	CHLORINE	CHROMIUM	MANGANESE	NICKEL	ARSENIC	CADMIUM	ANTIMONY	LEAD	BENZENE	FORMALDEHYDE	HEXANE		
0.032%	0.020%	0.218%	0.003%	0.004%	0.023%	0.003%	0.002%	0.194%	0.0021	0.075	1.80		
0.018	0.011	0.120	0.002	0.002	0.013	0.002	0.001	0.107	7.79E-04	2.78E-02	6.68E-01	0.971	
(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	

Allowable Emissions:

The following calculations determine Particulate compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

$$P = \frac{15.04 \text{ tons/hr}}{4.1} \times (15.0416667 \wedge 0.67) = 25.21 \text{ lb/hr (allowable)}$$

with potential:  
 55.0 tons/yr x 2000 lb/ton / 8760 hr/yr = 12.56 lb/hr (will be able to comply)

Process:	Rate (tons glass/hr)	Pollutant	Ef <sup>1</sup> (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency (%)
<b>Regenerative glass melting furnace #6</b>	11.00	PM	1.40	67.45	67.45	none	0%
		PM-10	1.32	63.60	63.60		
		SO <sub>2</sub>	3.40	163.81	163.81		
		NOx	6.20	298.72	298.72		
		VOC	0.20	9.64	9.64		
		CO	0.20	9.64	9.64		
		Selenium <sup>2</sup>	0.004	0.19	0.19		

1. Based on SCC# 3-05-014-02, AP-42 Ch. 11.15.
2. Based on FIRE, SCC#3-05-014-02.

HAPs (from EPA's SPECIATE Software for SCC# 3-05-014-02, as % of total PM)										HAPs (AP 42, Table 1.4-3, lb/MMcf gas)			Total
PHOSPHORUS	CHLORINE	CHROMIUM	MANGANESE	NICKEL	ARSENIC	CADMIUM	ANTIMONY	LEAD	BENZENE	FORMALDEHYDE	HEXANE		
0.032%	0.020%	0.218%	0.003%	0.004%	0.023%	0.003%	0.002%	0.194%	0.0021	0.075	1.80		
0.022	0.013	0.147	0.002	0.003	0.016	0.002	0.001	0.131	5.89E-04	2.10E-02	5.05E-01	0.863	
(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	(ton/yr)	

Allowable Emissions:

The following calculations determine Particulate compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

$$P = \frac{11 \text{ tons/hr}}{4.1} \times (11 \wedge 0.67) = 20.44 \text{ lb/hr (allowable)}$$

with potential:  
 67.45 tons/yr x 2000 lb/ton / 8760 hr/yr = 15.40 lb/hr (will be able to comply)

Process:	Rate (tons material/hr)	Pollutant	Ef <sup>1</sup> (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency (%)
<b>Storage and Receiving</b>	150.00	PM	0.0667	43.80	0.88	baghouse	98%
		PM-10	0.0667	43.80	0.88		
		SO <sub>2</sub>	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		

1. AP-42 5th Edition, Table 11.19.1-1, (SCC 3-05-027-60), Nov. 1995.

Allowable Emissions:

The following calculations determine Particulate compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

$$P = \frac{150.00 \text{ tons/hr}}{55} \times (150.00 \wedge 0.11) - 40 = 55.4 \text{ lb/hr (allowable)} \quad 242.8 \text{ (equivalent tpy, based on 8,760hr/yr operation)}$$

with potential:  
 0.88 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.2 lb/hr (will be able to comply)

Process:	Rate (tons material/hr)	Pollutant	Ef <sup>1</sup> (lb/ton produced)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency (%)
<b>Weighing and Mixing</b>	200.00	PM	0.0667	58.40	1.17	baghouse	98%
		PM-10	0.0667	58.40	1.17		
		SO <sub>2</sub>	0.00	0.00	0.00		
		NOx	0.00	0.00	0.00		
		VOC	0.00	0.00	0.00		

1. AP-42 5th Edition, Table 11.19.1-1, (SCC 3-05-027-60), Nov. 1995.

Allowable Emissions:

The following calculations determine Particulate compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

$$P = \frac{200.00 \text{ tons/hr}}{55} \times (200.00 \wedge 0.11) - 40 = 58.5 \text{ lb/hr (allowable)} \quad 256.3 \text{ (equivalent tpy, based on 8,760hr/yr operation)}$$

with potential:  
 1.17 tons/yr x 2000 lb/ton / 8760 hr/yr = 0.3 lb/hr (will be able to comply)

Process:	Usage Rate (gals material/mn)	Pollutant	Ef <sup>1</sup> (lb/ton used)	Ebc (ton/yr)	Eac (ton/yr)	Type of control	Control Efficiency (%)	Specific Gravity Mineral Oil
<b>Delivery Scoop Coating Usage (Insig. Activity)</b>	425	VOC	2000	18.71	18.71	none	0%	0.88

Notes:  
 Ef = Emission factor  
 Ebc = Potential Emissions before controls = Rate (units/hr) x Ef(lbs/unit) x 8760 hrs/yr / 2000 lbs/hr  
 Eac = Potential Emissions after enforceable controls and/or limitations = (1-efficiency/100) x Ebc  
 1 lb = 2000 tons