



*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: August 10, 2006  
RE: Johns Manville / 177-22008-00006  
FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision – Approval

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 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires 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, **within eighteen (18) calendar days from the mailing of this notice**. 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.

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.

Enclosures  
FNPER-AM.dot 03/23/06



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

---

*Mitchell E. Daniels, Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
(317) 232-8603  
(800) 451-6027  
[www.IN.gov/idem](http://www.IN.gov/idem)

Mr. Phil Miller  
Environmental Manager  
Johns Manville  
814 Richmond Ave.  
Richmond, Indiana 47374

August 10, 2006

Re: 177-22008-00006  
Significant Source Modification to  
Part 70 Permit No.: T177-7720-00006

Dear Mr. Miller:

Johns Manville was issued a Part 70 operating permit on October 4, 2001 for a stationary fiber glass insulation manufacturing plant located at 814 Richmond Ave., Richmond, IN 47374. An application to modify the source was received on November 17, 2005. Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for construction at the source:

- (a) One (1) Mixer; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.
- (b) One (1) batch transfer system; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a baghouse; exhausting indoors to general ventilation. Processed materials from the mixer are transferred to the day bins via the batch delivery/bucket elevator system.
- (c) Two (2) day bins; identified as Day Bin 1 and Day Bin 2; constructed in 2006; each with a maximum storage capacity of 57.5 tons; emissions controlled by baghouses; exhausting to stacks S167 and S168. Product is stored in the day bins before being transferred to the electric melter.
- (d) One (1) Electric Melter; constructed in 2006; a maximum production rate of 20,125 pounds of molten glass per hour; emissions controlled by a baghouse and exhausting to stack S166. The molten glass flows from the melter to the Line 2 and Line 3 fiber forming/collection modules.

Pursuant to 326 IAC 2-7-10.5, the following emission units are approved for modification at the source:

- (e) One (1) Line 2 Forming and Collection Module; installed in 1961 and modified in 2000 and 2006; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding

process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to stack S2. Under 40 CFR Part 60, Subpart PPP, this is considered a spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 2 forming chamber for unbonded product)

- (f) One (1) Line 3 Forming and Collection Module; installed in 1961 and modified in 2000 and 2006; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to stack S3. Under 40 CFR Part 60, Subpart PPP, this is considered a spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 3 forming chamber for unbonded product)
- (g) One (1) Melter Dust Recycle System, installed in 1961 and modified in 2006. Recycles dust captured by the melter baghouse back into the system as raw material. Exhausts to Stack S34.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).
2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit  
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source-s Part 70 Operating Permit to incorporate the required operation conditions.

This significant source modification authorizes construction of the new emission units. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification in accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12. Operation is not approved until the significant permit modification has been issued.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Bob Sidner, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (703) 633-1701 to speak directly to Mr. Sidner. Questions may also be directed to Matt Stuckey at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027, and ask for Matt Stuckey or extension 3-0203, or reach him at e-mail address mstuckey@idem.in.gov.

Sincerely,

Original Signed By:  
Nisha Sizemore, Chief  
Permits Branch  
Office of Air Quality

ERG/BS

Attachments:

cc: File - Wayne County  
U.S. EPA, Region V  
Wayne County Health Department  
Air Compliance Section Inspector - D.J. Knotts  
Compliance Data Section - Karen Nowak  
Administrative and Development - Sara Cloe  
Technical Support and Modeling - Jeffrey Stoakes



Mitchell E. Daniels, Jr.  
Governor

Thomas W. Easterly  
Commissioner

100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
(317) 232-8603  
(800) 451-6027  
www.IN.gov/idem

## PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Johns Manville  
814 Richmond Avenue  
Richmond, Indiana 47374**

(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.

Operation Permit No.: T177-7720-00006	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Quality	Issuance Date: October 4, 2001  Expiration Date: October 4, 2006
First Administrative Amendment 177-15463-00006, issued March 11, 2002 First Significant Permit Modification No. 177-16463-00006, issued November 15, 2002 Experimental Operation No. 177-18566-00006, issued March 18, 2004 Permit Review Request No. 177-19135-00006, issued June 10, 2004	
Significant Source Modification No.: 177-22008-00006	Pages Affected: Whole Permit
Issued by: Original Signed By:  Nisha Sizemore, Chief Permits Branch Office of Air Quality	Issuance Date: August 10, 2006  Expiration Date: October 4, 2006

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). 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)]

---

The Permittee owns and operates a stationary fiber glass insulation manufacturing plant.

Responsible Official:	Plant Manager
Source Address:	814 Richmond Ave., Richmond, Indiana 47374
Mailing Address:	P.O. Box 428, Richmond Indiana 47375-0428
General Source Phone Number:	(765) 973-5385
SIC Code:	3296
County Location:	Wayne
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD; Minor Source, Section 112 of the Clean Air Act 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)]

---

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

- (a) Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3:
- (1) One (1) Rail car Receiving Station; installed in 1967 and exhausting to stack S165. The raw materials received in rail cars are bottom unloaded into a screw conveyor that transfers the material to the storage silos via a bucket elevator and a diverter. The particulate emissions are controlled by a boot lift device that seals off the bottom of the rail car and a baghouse.
  - (2) Eight (8) Raw Material Silos, installed in 1967. Raw materials are loaded into the batch silos and vented to fabric filters to control particulate emissions in the airstream before it is exhausted to emission points S21 through S28.
  - (3) Four (4) day bins, installed in 1961, 1986, and 2002. The raw material from the batch silos is transferred to the day bins via an enclosed conveyor system. Particulate emissions in the airstream are controlled with fabric filters before the airstream is exhausted to emission points S31, S32, S33, and S164.
  - (4) Two (2) day bins; identified as Day Bin 1 and Day Bin 2; constructed in 2006; each with a maximum storage capacity of 57.5 tons; emissions controlled by baghouses; exhausting to stacks S167 and S168. Product from the mixer is transferred to the day bins using an enclosed conveyor system.
  - (5) One (1) Mixer; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.
  - (6) One (1) Batch Transfer System; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a baghouse;

exhausting indoors to general ventilation. Processed materials from the mixer are transferred to the day bins via the batch delivery/bucket elevator system.

- (7) One (1) Weigh Scale; constructed in 1967; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.

(b) Melt Facilities:

- (1) One (1) Line 2 natural gas-fired melt furnace, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;
- (2) One (1) Line 3 natural gas-fired melt furnace, installed in 1961 and to be modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by an electrostatic precipitator before the airstream is exhausted to Stack S5; and
- (3) One (1) Electric Melter; constructed in 2006; a maximum production rate of 20,125 pounds of molten glass per hour; emissions controlled by a baghouse and exhausting to stack S166. The molten glass flows from the melter to the Line 2 and Line 3 fiber forming/collection modules.

(c) Forming Facilities:

- (1) One (1) Line 2 Forming and Collection Module, installed in 1961 and modified in 2006, with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2. Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 2 forming chamber for unbonded product)
- (2) One (1) Line 3 Forming and Collection Module, installed in 1961 and modified in 2000 and 2006, with a maximum glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. The unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions from unbonded product before the airstream is exhausted to Stack S3. Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 3 forming chamber for unbonded product)

(d) Shredding and Packaging Facilities:

- (1) One (1) Line 2 shredding process for unbonded product, installed in 1994. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any

particulate emissions in the airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S85, S86 and S87;

- (2) One (1) Line 2 packaging area for unbonded product, installed in 1994 and modified in 2006. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate emissions in the cyclone airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S85, S86 and S87;
- (3) One (1) Line 3 shredding process for unbonded product, installed in 1993. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by two baghouses before the airstream is exhausted to Stacks S12 and S13.
- (4) One (1) Line 3 packaging area for unbonded product, installed in 1993 and modified in 2006. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate matter emissions in the cyclone airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S12, S13 and S14.

(e) Ancillary Equipment:

- (1) One (1) EP dust recycling system, installed in 1987, modified in 2000, and exhausted to stack S34;
- (2) One (1) cold end housekeeping system, installed in 1988. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to stack S10; and
- (3) One (1) natural gas-fired boiler, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

Maximum capacities and throughputs not listed in the descriptions above have been included in an OAQ confidential file.

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

---

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

- (a) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (b) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.

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

---

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]

---

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)]

---

(a) This permit, T177-7720-00006, 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.

(b) If IDEM, OAQ, 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]

---

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]

---

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, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

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

---

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)]

---

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)]

---

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, 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, 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 a 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) A 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1st of each year to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

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 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 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]**

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. 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]

- (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 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: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967

- (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  
Indianapolis, Indiana 46204-2251

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, 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 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.

**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 in 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 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 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 has issued the modification. [326 IAC 2-7-12(b)(7)]

**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 T177-7720-00006 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 permit, all previous registrations and permits are superseded by this 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  
Indianapolis, Indiana 46204-2251

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 "authorized official" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

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]

- (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 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 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 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 at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ 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)]**

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, 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  
Indianapolis, Indiana 46204-2251

- (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 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, 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, 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]**

---

- (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  
Indianapolis, Indiana 46204-2251
- 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)]**

---

- (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)(D)(i) 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]

(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  
Indianapolis, Indiana 46204-2251

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 in the notices specified in 326 IAC 2-7-20(b), (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 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 [326 IAC 2-7-20(d)]  
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.

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

A modification, construction, or reconstruction is governed by the requirement of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]

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, OA, U.S. EPA, 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  
Indianapolis, Indiana 46204-2251

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)]**

---

- (a) The Permittee shall pay annual fees to IDEM, OAQ 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, 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] [326 IAC 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. 326 IAC 9-1-2 is not federally enforceable.

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.

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  
Indianapolis, Indiana 46204-2251

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 14-10-4, 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]**

- (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  
Indianapolis, Indiana 46204-2251

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 not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source 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]**

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. 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)]**

---

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  
Indianapolis, Indiana 46204-2251

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]**

---

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)]**

---

- (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 have a scale such that the expected normal reading 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 pressure gauge or other 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]**

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:  
Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

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

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, 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 68.215]**

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]**

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit(s) (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 [326 IAC 2-7-5] [326 IAC 2-7-6]**

- (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]**

- (a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 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  
Indianapolis, Indiana 46204-2251

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, 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]

- (a) Records of all required 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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner 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 reasonable possibility that a "project" (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, other than projects at a Clean Unit or at a source with Plant-wide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1 (rr)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq)) 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
- (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]

---

- (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  
Indianapolis, Indiana 46204-2251
- (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 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) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.
- (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(gg)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
  - (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), 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 report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

- (1) The name, address, and telephone number of the major stationary source.
- (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).
- (4) Any other information that the Permittee deems fit to include in this report:

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

- (h) 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. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

### **Stratospheric Ozone Protection**

#### **C.20 Compliance with 40 CFR 82 and 326 IAC 22-1**

---

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 FACILITY OPERATION CONDITIONS

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

#### Raw Material Handling, Storage, and Batching Equipment

- (a) Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3:
- (1) One (1) Rail car Receiving Station; installed in 1967 and exhausting to stack S165. The raw materials received in rail cars are bottom unloaded into a screw conveyor that transfers the material to the storage silos via a bucket elevator and a diverter. The particulate emissions are controlled by a boot lift device that seals off the bottom of the rail car and a baghouse.
  - (2) Eight (8) Raw Material Silos, installed in 1967. Raw materials are loaded into the batch silos and vented to fabric filters to control particulate emissions in the airstream before it is exhausted to emission points S21 through S28.
  - (3) Four (4) day bins, installed in 1961, 1986, and 2002. The raw material from the batch silos is transferred to the day bins via an enclosed conveyor system. Particulate emissions in the airstream are controlled with fabric filters before the airstream is exhausted to emission points S31, S32, S33, and S164.
  - (4) Two (2) day bins; identified as Day Bin 1 and Day Bin 2; constructed in 2006; each with a maximum storage capacity of 57.5 tons; emissions controlled by baghouses; exhausting to stacks S167 and S168. Product from the mixer is transferred to the day bins using an enclosed conveyor system.
  - (5) One (1) Mixer; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.
  - (6) One (1) Batch Transfer System; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a baghouse; exhausting indoors to general ventilation. Processed materials from the mixer are transferred to the day bins via the batch delivery/bucket elevator system.
  - (7) One (1) Weigh Scale; constructed in 1967; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.

(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.1.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), the allowable PM emissions from the following listed equipment:

Railcar Receiving Station  
S21 Raw Material silo  
S22 Raw Material silo  
S23 Raw Material silo  
S24 Raw Material silo  
S25 Raw Material silo  
S26 Raw Material silo  
S27 Raw Material silo

S28 Raw Material silo  
S31 raw material day bin 2N  
S32 raw material day bin 3W  
S33 raw material day bin 3E  
S164 raw material day bin  
Day Bin 1  
Day Bin 2  
Mixer  
Batch Transfer System  
Weigh Scale  
Melter Dust Recycle System

Shall each not exceed 0.03 grain per dry standard cubic foot (dscf).

D.1.2 Particulate Matter Limitations [326 IAC 2-2-3(a)(3)]

- 
- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the raw material handling, storage and batching facilities stated above shall comply with the following limitations:
- (1) The Railcar Receiving Station shall be equipped with a bootlift device and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9;
  - (2) The raw material conveyor system (which operates as part of the railcar receiving station) shall be enclosed and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
  - (3) The Raw Material Silos shall be equipped with fabric filters and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9.
  - (4) Day bins S31, S32, S33 and S164 shall be equipped with fabric filters and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9.
- (b) In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:
- (1) The PM10 emissions from the Day Bin 1 shall not exceed 0.01 pounds per hour.
  - (2) The PM10 emissions from the Day Bin 2 shall not exceed 0.01 pounds per hour.
  - (3) The PM10 emissions from the Mixer shall not exceed 0.005 pounds per hour.
  - (4) The PM10 emissions from the Weigh Scale shall not exceed 0.005 pounds per hour.
  - (5) The PM10 emissions from the Railcar Receiving Station shall not exceed 0.095 pounds per hour.
  - (6) The PM10 emissions from the Raw Material Silos shall not exceed 0.04 pounds per hour, total.

- (7) The PM10 emissions from the Batch Transfer System shall not exceed 0.053 pounds per hour.
- (8) Following startup of the Electric Melter (Section D.2) but before the Line 2 Forming and Collection Module (Section D.3) is back online, the Permittee shall permanently remove the existing mixer, existing bucket elevator, Day Bin 2N, Day Bin 3E, and Day Bin 3W.

#### D.1.3 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 these facilities and their control devices.

### **Compliance Determination Requirements**

#### D.1.4 Particulate Matter (PM) Control

- (a) In order to comply with Conditions D.1.1 (for the rail car unloading station) and D.1.2(a)(1), the boot lift device used to control PM emissions and opacity from the rail car unloading station shall be in operation at all times the associated rail car unloading station is in operation.
- (b) In order to comply with Conditions D.1.1, D.1.2(a)(3) and D.1.2(b), the baghouses used to control PM emissions from the Railcar Receiving Station, Raw Material Silos, Day Bin 1, Day Bin 2, Mixer, Batch Transfer System and Weigh Scale shall be in operation at all times the associated units are in operation.
- (c) In order to comply with Conditions D.1.1 and D.1.2(a)(4), the baghouses used to control PM emissions from day bins S31, S32, S33 and S164 shall be in operation at all times the associated units are in operation.
- (d) In the event that bag failure is observed in a multi-compartment bagfilter, 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.1.5 Visible Emissions Notations

- (a) Visible emission notations of the stack exhaust from the Railcar Receiving Station, Raw Material Silos, Day Bin 1 and Day Bin 2 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the stack exhaust from day bins S31, S32, S33 and S164 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) 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.
- (e) 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.

- (f) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

#### D.1.6 Parametric Monitoring

---

- (a) The Permittee shall record the pressure drop across baghouses used in conjunction with the Railcar Receiving Station, Raw Material Silos, and Day Bins at least once per day when the respective facilities are in operation. When for any one reading, the pressure drop is outside the normal range of 0.5 and 7.0 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.
- (b) The Permittee shall record the pressure drop across baghouses used in conjunction with day bins S31, S32, S33 and S164 at least once per day when the respective facilities are in operation.
- (c) When for any one reading, the pressure drop is outside the normal range of 1.0 and 7.0 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.
- (d) 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.1.7 Broken or Failed Bag Detection

---

- (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 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.1.8 Record Keeping Requirements

---

- (a) To document compliance with Conditions D.1.2 and D.1.5, the Permittee shall maintain once per day records of the visible emission notations required by that condition.
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain once per day records of the pressure drop readings required by that condition.

- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**SECTION D.2**

**FACILITY OPERATION CONDITIONS**

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

(b) Melt Facilities:

- (1) One (1) Line 2 natural gas-fired melt furnace, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;
- (2) One (1) Line 3 natural gas-fired melt furnace, installed in 1961 and to be modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by an electrostatic precipitator before the airstream is exhausted to Stack S5; and
- (3) One (1) Electric Melter; constructed in 2006; a maximum production rate of 17,500 pounds of molten glass per hour; emissions controlled by a baghouse and exhausting to stack S166. The molten glass flows from the melter to the Line 2 and Line 3 fiber forming/collection modules.

(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 Matter (PM) Volatile Organic Compounds (VOC), and Carbon Monoxide (CO) [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14][326 IAC 12(40 CFR 60.293, Subpart CC)]

- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules) and as revised by 177-22008-00006, each furnace shall comply with the following limitations:

Facility	Pollutant Emission Limitations, lb/ton of glass pulled		
	PM/PM10	VOC	CO
Line 2 Melt Furnace	0.23	0.38	0.85
Line 3 Melt Furnace	0.23	0.38	0.85

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensable fractions.

- (b) Pursuant to CP-177-5873-00006, issued April 22, 1999, 326 IAC 2-2-3(a)(3) (PSD Rules) and 326 IAC 6.5-10-11, the particulate matter (PM) emissions from each furnace shall comply with the following limitations:

Facility	PM/PM10 Emission Limitations	
	tons/yr	gr/dscf
Line 2 Melt Furnace	7.8	0.01
Line 3 Melt Furnace		0.01

- (c) Pursuant to 40 CFR 60.292, Subpart CC (Standards of Performance for Glass Manufacturing Plants), the particulate matter from the Line 2 and Line 3 melt furnaces shall not exceed 0.25 grams per kilogram (0.5 pounds per ton) of glass produced. Compliance with the limits in Condition D.2.1(a) will ensure compliance with this limit.
- (d) To ensure compliance with Condition D.2.1(a), the lines 2 and 3 melt furnaces shall only use natural gas.

**D.2.2 Sulfur Dioxide and Nitrogen Oxides [326 IAC 2-2]**

---

Pursuant to CP-177-5873-00006, issued April 22, 1999, each furnace shall comply with the following limitations for NOx and SO2 in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

Facility	Pollutant Emission Limitations, lb/hr	
	NOx	SO <sub>2</sub>
Line 2 Melt Furnace	3.41	0.20
Line 3 Melt Furnace	3.41	0.20

**D.2.3 Operation Standards [326 IAC 2-2-3(a)(3)]**

---

Pursuant to SSM 177-22008-00006, the furnaces shall comply with the following limitations:

- (a) Line 2 Melt Furnace shall not exceed a glass production rate of 7,800 pounds per hour (equivalent to 34,164 tons per twelve consecutive month period);
- (b) Line 3 Melt Furnace shall not exceed a glass production rate of 7,800 pounds per hour (equivalent to 34,164 tons per twelve consecutive month period).

**D.2.4 Particulate Matter (PM/PM10), Volatile Organic Compounds (VOC), Carbon Monoxide (CO) and Production Limitations [326 IAC 2-2]**

---

In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:

- (a) The PM10 emissions from the Electric Melter shall not exceed 0.49 pounds per hour.
- (b) The VOC emissions from the Electric Melter shall not exceed 1.1 pounds per hour.
- (c) The CO emissions from the Electric Melter shall not exceed 0.83 pounds per hour.
- (d) Prior to the operation of the Electric Melter, the Permittee shall permanently shut down the Line 3 Melt Furnace.
- (e) The production rate of the Electric Melter shall not exceed 8,750 pounds of glass per hour (on a 4-hr average basis) until the Line 2 Melt Furnace and Line 3 Melt Furnace have been permanently shut down.
- (f) The production rate of the Electric Melter shall not exceed 17,500 pounds of glass per hour (on a 4-hr average basis).

**D.2.5 Particulate Matter (PM) Emission Limitations [326 IAC 6.5-1]**

---

Pursuant to 326 IAC 6.5-1-2(a), the particulate matter (PM) emissions from the Electric Melter, shall not exceed 0.03 grains per dry standard cubic foot.

**D.2.6 Preventive Maintenance Plan**

---

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

## Compliance Determination Requirements

### D.2.7 Particulate Matter (PM) Control

---

- (a) In order to comply with Condition D.2.1, the electrostatic precipitator for PM control shall be in operation and control emissions from the Line 2 and Line 3 natural gas-fired melt furnaces at all times when either furnace is in operation.
- (b) In order to comply with Conditions D.2.4 and D.2.5, the baghouse for PM control shall be in operation at all times the associated Electric Melter is in operation.
- (c) In the event that bag failure is observed in a multi-compartment bagfilter, 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.

### D.2.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

---

In order to demonstrate compliance with Condition D.2.4, the Permittee shall perform PM/PM10, VOC and CO testing on the Electric Melter no later than 180 days after initial startup. These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

## Compliance Monitoring Requirements

### D.2.9 Electrostatic Precipitator (ESP) Operation Condition

---

- (a) The Permittee shall maintain the field voltages of the ESP at a minimum level of 20 kilovolts or a minimum level determined from a compliant stack test. At least once per shift the Permittee shall monitor and record the primary voltage and amperage of the T-R sets and the voltages and amperages of the three (3) fields. The Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances when the voltage of the T-R set drops five (5) direct current kilovolts below the predetermined baseline or if less than 90% of the total T-R sets are functioning.
- (b) The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (c) In the event that an ESP failure has been observed:
  - (1) All reasonable measures shall be taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits;
  - (2) All possible steps shall be taken to minimize the impact of the excessive emissions on ambient air quality which may include but not limited to curtailment of operation and/or shutdown of the facility; and
  - (3) Failure or partial failure of the control device shall be reported to IDEM, OAQ according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM, OAQ.

### D.2.10 Production Monitoring

---

- (a) The Permittee shall continuously monitor the glass production rate (in pounds per hour) from the Line 3 Melt Furnace, Line 2 Melt Furnace and the Electric Melter when the respective units are in operation. For the purposes of this condition, 'continuously' means no less than once per fifteen minute period.

- (b) Monitoring shall be done with an infrared camera system (or its equivalent) that monitors various physical characteristics of the glass produced which is used to determine the glass production rate (in pounds per hour).
- (c) The Permittee may use another, equivalent system to comply with this condition once such system is approved by IDEM, OAQ.

#### D.2.11 Visible Emissions Notations

---

- (a) Visible emission notations of the stack exhaust from the Electric Melter shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the stack exhaust from the Line 2 Melt Furnace and Line 3 Melt Furnace shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

#### D.2.12 Parametric Monitoring

---

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the Electric Melter, at least once per day when the Melter is in operation.
- (b) The Permittee shall record the pressure drop across the baghouses used in conjunction with the Line 2 Melt Furnace and Line 3 Melt Furnace at least once per day when the respective facilities are in operation.
- (c) When for any one reading, the pressure drop is outside the normal range of 2.0 and 4.0 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.
- (d) 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.2.13 Broken or Failed Bag Detection

---

- (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 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 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

### D.2.14 Record Keeping Requirement

---

- (a) To document compliance with Condition D.2.9, the Permittee shall maintain records of the following:
- (1) Field voltages of the ESP.
  - (2) Primary voltage and amperage of the T-R sets.
  - (3) Voltages and amperages for the three (3) fields.
  - (4) Results from the semi-annual calibration of the instrument used for determining the T-R set voltage.
  - (5) Results from the quarterly inspection of the ESP.
- (b) To document compliance with Condition D.2.11, the Permittee shall maintain once per day records of the visible emission notations required by that condition.
- (c) To document compliance with Condition D.2.12, the Permittee shall maintain once per day records of the pressure drop readings required by that condition.
- (d) From the time of permit issuance until Melt Furnace #2 is permanently shut down, the Permittee shall record the respective shut down and startup date and times for the following units: Line 2 Melt Furnace, Line 3 Melt Furnace, and the Electric Melter.
- (e) To document compliance with Condition D.2.10, the Permittee shall record the glass production rates monitored by that condition.
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### D.2.15 Reporting Requirements

---

A quarterly summary of the information to document compliance with Condition D.2.1(b) and D.2.3 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).

## SECTION D.3 FACILITY OPERATION CONDITIONS

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

#### Manufacturing Lines - Forming, Curing, and Cooling

(c) Forming Facilities:

- (1) One (1) Line 2 Forming and Collection Module, installed in 1961 and modified in 2006, with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2. Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 2 forming chamber for unbonded product)
- (2) One (1) Line 3 Forming and Collection Module, installed in 1961 and modified in 2000 and 2006, with a maximum glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. The unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions from unbonded product before the airstream is exhausted to Stack S3. Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 3 forming chamber for unbonded product)

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

### Emission Limitations and Standards

#### D.3.1 Pollutant Emission Limitations [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14]

- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), and as revised by SSM 177-22008-00006, each Forming and Collection Module shall comply with the following limitations:

Facility	Pollutant Limitations		
	PM/PM10 (lb/hr)	VOC (lbs/hr)	CO (lbs/hr)
Line 2 Forming and Collection	10.28	6.78	21.0
Line 3 Forming and Collection	10.28	6.78	21.0

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensable fractions. The particulate matter emissions established above demonstrate compliance with 40 CFR 60, Subpart PPP (New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants).

- (b) In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:

- (1) The CO emissions from the L2 Forming and Collection Module shall not exceed 15.6 pounds per hour.
- (2) The CO emissions from the L3 Forming and Collection Module shall not exceed 15.6 pounds per hour.

Compliance with these requirements shall limit the CO emissions increase of the modification described in SSM 177-22008-00006 to less than one hundred (100) tons per year.

- (c) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 6.5-10-11, the particulate matter (PM) emissions from each Forming and Collection Module shall comply with the following limitations:

Facility	PM Emission Limitations	
	tons/yr	gr/dscf
Line 2 Forming and Collection	58.3	0.02
Line 3 Forming and Collection	123.6	0.02

- (d) Pursuant to CP-177-5873-00006, issued April 22, 1999, each Forming and Collection Module shall comply with the following limitations for NOx in order to render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

Facility	Pollutant Emission Limitations, lbs/hr NOx
Line 2 Forming and Collection	2.03
Line 3 Forming and Collection	2.03

- (e) The hazardous air pollutant emissions from the Line 2 and Line 3 Forming and Collection Modules shall be limited to less than a total of twenty-five (25) tons per year and less than ten (10) tons per year of any single HAP. This will render 326 IAC 2-4.1 (New Source Toxics Control Rule) and 40 CFR Part 63, Subpart NNN not applicable.

#### D.3.2 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

### Compliance Determination Requirements

#### D.3.3 Particulate Matter (PM) Control

In order to comply with Condition D.3.1, the water spray systems associated with the Line 2 and Line 3 Forming and Collection Modules shall be operated at all times when the respective forming and collection modules are in operation.

#### D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.3.1(a) and D.3.1(b), the Permittee shall perform PM/PM10, VOC and CO testing on one of the Forming and Collection Modules no later than 180 days after initial startup of the Electric Melter. The unit tested shall not have been tested in the last six (6) years. These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

## Compliance Monitoring Requirements

### D.3.5 Visible Emission Notations

---

- (a) Visible emission notations of the stack exhaust from the Line 2 and Line 3 Forming and Collection Modules shall be performed once per day during normal daylight operations when the respective facilities are in operation. 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, 80% of the time the process is in operation, not counting start up or shut down time.
- (c) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible 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 and abnormal 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 and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

## Record Keeping and Reporting Requirements

### D.3.6 Record Keeping Requirement

---

- (a) To document compliance with Condition D.3.5, the Permittee shall maintain once per day records of the visual emission notations required by that condition.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

## New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]

### D.3.7 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 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, for Line 2 Forming and Collection Module and Line 3 Forming and Collection Module except as otherwise specified in 40 CFR Part 60, Subpart PPP.
- (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  
Indianapolis, Indiana 46204-2251

### D.3.8 New Source Performance Standards for Wool Fiberglass Insulation Manufacturing Plants: Requirements [40 CFR Part 60, Subpart PPP]

---

Pursuant to 40 CFR Part 60, Subpart PPP, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart PPP for the Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module as specified as follows:

## Subpart PPP—Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants

**Source:** 50 FR 7699, Feb. 25, 1985, unless otherwise noted.

### § 60.680 Applicability and designation of affected facility

(a) The affected facility to which the provisions of this subpart apply is each rotary spin wool fiberglass insulation manufacturing line.

(b) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after February 7, 1984, is subject to the requirements of this subpart.

### § 60.681 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.

*Glass pull rate* means the mass of molten glass utilized in the manufacture of wool fiberglass insulation at a single manufacturing line in a specified time period.

*Manufacturing line* means the manufacturing equipment comprising the forming section, where molten glass is fiberized and a fiberglass mat is formed; the curing section, where the binder resin in the mat is thermally "set;" and the cooling section, where the mat is cooled.

*Rotary spin* means a process used to produce wool fiberglass insulation by forcing molten glass through numerous small orifices in the side wall of a spinner to form continuous glass fibers that are then broken into discrete lengths by high velocity air flow.

*Wool fiberglass insulation* means a thermal insulation material composed of glass fibers and made from glass produced or melted at the same facility where the manufacturing line is located.

### § 60.682 Standard for particulate matter.

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of 5.5 kg/Mg (11.0 lb/ton) of glass pulled.

### § 60.685 Test methods and procedures.

(a) 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).

(b) The owner or operator shall conduct performance tests while the product with the highest loss on ignition (LOI) expected to be produced by the affected facility is being manufactured.

(c) The owner or operator shall determine compliance with the particulate matter standard in §60.682 as follows:

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

$$E=(C_t Q_{sd})/(P_{avg} K)$$

where:

E = emission rate of particulate matter, kg/Mg (lb/ton).

C<sub>t</sub> = concentration of particulate matter, g/dscm (gr/dscf).

Q<sub>sd</sub> = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

$P_{avg}$  = average glass pull rate, Mg/hr (ton/hr).

$K = 1,000 \text{ g/kg (7,000 gr/lb)}$ .

(2) Method 5E shall be used to determine the particulate matter concentration ( $C_t$ ) and the volumetric flow rate ( $Q_{sd}$ ) of the effluent gas. The sampling time and sample volume shall be at least 120 minutes and 2.55 dscm (90.1 dscf).

(3) The average glass pull rate ( $P_{avg}$ ) for the manufacturing line shall be the arithmetic average of three glass pull rate ( $P_i$ ) determinations taken at intervals of at least 30 minutes during each run.

The individual glass pull rates ( $P_i$ ) shall be computed using the following equation:

$$P_i = K' L_s W_m M [1.0 - (LOI/100)]$$

where:

$P_i$  = glass pull rate at interval "i", Mg/hr (ton/hr).

$L_s$  = line speed, m/min (ft/min).

$W_m$  = trimmed mat width, m (ft).

$M$  = mat gram weight, g/m<sup>2</sup> (lb/ft<sup>2</sup>).

LOI = loss on ignition, weight percent.

$K'$  = conversion factor,  $6 \times 10^{-5}$  (min-Mg)/(hr-g) [ $3 \times 10^{-2}$  (min-ton)/(hr-lb)].

(i) ASTM D2584-68 (Reapproved 1985) or 94 (incorporated by reference—see §60.17), shall be used to determine the LOI for each run.

(ii) Line speed ( $L_s$ ), trimmed mat width ( $W_m$ ), and mat gram weight ( $M$ ) shall be determined for each run from the process information or from direct measurements.

(d) To comply with §60.684(d), the owner or operator shall record measurements as required in §60.684 (a) and (b) using the monitoring devices in §60.683 (a) and (b) during the particulate matter runs.

[54 FR 6680, Feb. 14, 1989, as amended at 65 FR 61778, Oct. 17, 2000]

## SECTION D.4

## FACILITY OPERATION CONDITIONS

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

#### Shredding and Packaging Areas

(d) Shredding and Packaging Facilities:

- (1) One (1) Line 2 shredding process for unbonded product, installed in 1994. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S85, S86 and S87;
- (2) One (1) Line 2 packaging area for unbonded product, installed in 1994 and modified in 2006. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate emissions in the cyclone airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S85, S86 and S87;
- (3) One (1) Line 3 shredding process for unbonded product, installed in 1993. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S12, S13 and S14.
- (4) One (1) Line 3 packaging area for unbonded product, installed in 1993 and modified in 2006. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate matter emissions in the cyclone airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S12, S13 and S14.

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

### Emission Limitations and Standards

#### D.4.1 Particulate Matter Emission Limitations

- (a) Pursuant to CP 177-5873-00006, issued April 22, 1999, 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), and as revised by SSM 177-22008-00006, each shredding and packaging area shall comply with the following limitations:

Facility	Facility Stacks	PM/PM10 Emission Limitations (lb/hr)
Line 2 Shredding and Packaging	S85, S86 and S87	1.86
Line 3 Shredding and Packaging	S12, S13 and S14	3.09

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensible fractions.

- (b) In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:
- (1) The PM10 emissions from the L2 Shredding Process and L2 Packaging Area shall not exceed 0.9 pounds per hour, total.

- (2) The PM10 emissions from the L3 Shredding Process and L3 Packaging Area shall not exceed 0.9 pounds per hour, total.

#### D.4.2 Particulate Matter [336 IAC 6.5-1-2]

---

Pursuant to 326 IAC 6.5-1-2, the allowable PM emission rates for each of the shredding and packaging facilities listed in this section shall not contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

#### D.4.3 Preventive Maintenance Plan

---

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

### Compliance Determination Requirements

#### D.4.4 Particulate Matter (PM) Control

---

- (a) In order to comply with Conditions D.4.1 and D.4.2, the baghouses for PM control shall be in operation at all times the associated shredding and packaging facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment bagfilter, 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

#### D.4.5 Visible Emission Notations

---

- (a) Visible emission notations of the shredding and packaging areas baghouse systems stack exhaust shall be performed once per day 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, 80% of the time the process is in operation, not counting start up or shut down time.
- (c) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible 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 and abnormal 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 and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

#### D.4.6 Parametric Monitoring

---

The Permittee shall record the pressure drop across the baghouses used in conjunction with the shredding and packaging processes, at least once per day when the respective processes are in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 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.4.7 Broken or Failed Bag Detection

---

- (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 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 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

#### D.4.8 Record Keeping Requirement

---

- (a) To document compliance with Condition D.4.5, the Permittee shall maintain records of the once per day visible emission notations required by that condition.
- (b) To document compliance with Condition D.4.6, the Permittee shall maintain records of the once per day pressure drop readings required by that condition.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**SECTION D.5 FACILITY OPERATION CONDITIONS**

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

**Ancillary Equipment**

(e) Ancillary Equipment:

- (1) One (1) Melter Dust Recycle System, installed in 1961 and modified in 1999 and 2006. Recycles dust captured by the melter baghouse back into the system as raw material. Exhausts to Stack S34.
- (2) One (1) cold end housekeeping system, installed in 1988. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted indoors to general ventilation; and
- (3) One (1) natural gas-fired boiler, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

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

**Emission Limitations and Standards**

**D.5.1 Pollutant Emission Limitations [326 IAC 2-2] [326 IAC 6-1-14]**

- (a) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration Rules), the ancillary equipment shall comply with the following particulate matter limitations:
  - (1) the particulate emissions from Melter Dust Recycle System shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9;
  - (2) the cold end housekeeping system shall be equipped with a baghouse system and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
  - (3) the natural gas-fired boiler shall not exceed 0.34 pounds per hour and 0.0137 pounds per million Btu. The boiler shall also be limited to 1.5 tons per year to demonstrate compliance with the requirements of 326 IAC 6-1-14.
- (b) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the ancillary equipment shall comply with the following limitations:

Facility	Pollutant Limitations, lbs/hr		
	PM/PM10	VOC	CO
Melter Dust Recycle System	0.19	0	0
Cold End Housekeeping System	0.51	0	0
Natural Gas-fired Boiler	0.34	0.07	0.875

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensable fractions.

- (c) Pursuant to CP 177-5873-00006, issued April 22, 1999, the ancillary equipment shall comply with the following limitations for NOx and SO2 in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

Facility	Pollutant Limitations, lbs/hr	
	NOx	SO <sub>2</sub>
Melter Dust Recycle System	0	0
Cold End Housekeeping System	0	0
Natural Gas-fired Boiler	3.5	0.015

- (d) Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations for General Sources) the allowable PM emission rates for each of the ancillary equipment facilities listed in this section shall not contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).
- (e) In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006, the PM10 emissions from the Melter Dust Recycle System shall not exceed 0.001 pounds per hour.

#### D.5.2 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

### Compliance Determination Requirements

#### D.5.3 Particulate Matter

- (a) In order to comply with Conditions D.5.1(a), (b) and (d), the baghouses for PM control shall be in operation at all times the respective facilities are in operation.
- (b) In the event that bag failure is observed in a multi-compartment bagfilter, 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.

#### D.5.4 Visible Emissions Notations

- (a) Visible emission notations of the Melter Dust Recycle System stack exhaust shall be performed once per day 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 and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

#### D.5.5 Parametric Monitoring

---

The Permittee shall record the pressure drop across the baghouses used in conjunction with the Melter Dust Recycle System and cold end housekeeping system at least once per day when the process is in operation. When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 and 7.0 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.5.6 Broken or Failed Bag Detection

---

- (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 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 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:**

#### D.5.7 Record Keeping Requirement

---

- (a) To document compliance with Condition D.5.1(a), (b), and (d) and D.5.4, the Permittee shall maintain records of once per day visible emission notations required by that condition.
- (b) To document compliance with Condition D.5.5, the Permittee shall maintain once per day records of the pressure drop readings required by that condition.
- (c) The Permittee shall maintain records of monthly fuel usage to document compliance with the annual PM emission limitation required by Condition D.5.1(a)(3).
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

**COMPLIANCE DATA SECTION**  
**100 North Senate Avenue**  
**Indianapolis, Indiana 46204-2251**

### PART 70 QUARTERLY REPORT

Source Name: Johns Manville International, Inc.  
Source Address: 814 Richmond Avenue, Richmond, Indiana 47374  
Mailing Address: P.O. Box 428, Richmond, Indiana 47375-0428  
Part 70 Permit No.: T 177-7720-00006  
Facility: Lines 2 and 3 Production Processes  
Parameter: Production Rate  
Limits: Production Limits Required by Condition D.2.3

YEAR:

Month	Production Facility	Production this Month, tons	Production Last 12 Months, tons	Production Limit, tons/12 consecutive months
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536

- 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**

Technical Support Document (TSD) for a Part 70  
Significant Source Modification and Significant Permit Modification

**Source Description and Location**

Source Name:	Johns Manville
Source Location:	814 Richmond Ave., Richmond IN 47374
County:	Wayne
SIC Code:	3296
Significant Source Modification No.:	177-22008-00006
Significant Permit Modification No.:	177-22666-00006
Permit Reviewer:	ERG/BS

**Existing Approvals**

The source was issued Part 70 Operating Permit No. T177-7720-00006 on October 4, 2001. The source has since received the following approvals:

- (a) AA 177-12976-00006, issued February 13, 2001;
- (b) AA 177-14315-00006, issued November 30, 2001;
- (c) AA 177-15463-00006, issued March 11, 2002;
- (d) MSM 177-15950-00006, issued September 16, 2002;
- (e) SPM 177-16463-00006, issued November 15, 2002;
- (f) Review Request 117-18566-00006, issued March 18, 2004; and
- (g) Review request 177-19137-00006, issued June 10, 2004.

**County Attainment Status**

The source is located in Wayne County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

- (a) 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 ozone. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions

were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) Wayne 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 a surrogate for PM2.5 emissions.
- (c) Wayne County has been classified as attainment or unclassifiable for all respective pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) Since this source is classified as a glass fiber processing plant, it is considered one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (e) Fugitive Emissions  
 Since this type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are counted toward the determination of PSD and Emission Offset applicability.

**Source Status**

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	Potential to Emit (tons/year)
PM	Greater than 100
PM10	Greater than 100
SO <sub>2</sub>	Less than 100
VOC	Greater than 100
CO	Greater than 100
NO <sub>x</sub>	Greater than 100

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) These emissions are based upon the TSD for T177-7720-00006, issued October 4, 2001.

The table below summarizes the potential to emit HAPs for the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

HAPs	Potential To Emit (tons/year)
Any individual HAP	Less than 10
Combination of HAPs	Less than 25

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the source's individual HAP PTE is less than ten (10) tons per year and the total HAP PTE is less than twenty-five (25) tons per year. Therefore, this source is a minor source under Section 112 of the Clean Air Act (CAA).

**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)
PM2.5	59
PM10	72
SO <sub>2</sub>	21
VOC	46
CO	89
NO <sub>x</sub>	54
HAP	Not reported

### Description of Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Johns Manville on November 17, 2005, relating to an increase in production capacity of unbonded fiberglass Lines 2 and 3 and removal of Line 6. Specifically, Johns Manville will: 1) install a new electric melter, a mixer, two day bins and a batch transfer system; and 2) modify the existing Forming and Collection Modules and the Melter Dust Recycle System. Those activities will have a debottlenecking affect on the production capacity of the other units at this source. The following list identifies the proposed, modified and removed emission units and pollution control equipment.

#### New Emission Units and Pollution Control Equipment

- (a) One (1) Mixer; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.
- (b) One (1) Batch Transfer System; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a baghouse; exhausting indoors to general ventilation. Processed materials from the mixer are transferred to the day bins via the batch delivery/bucket elevator system.
- (c) Two (2) Day Bins; identified as Day Bin 1 and Day Bin 2; constructed in 2006; each with a maximum storage capacity of 57.5 tons and maximum throughput of 4.3 tons per hour; emissions controlled by baghouses; exhausting to stacks S167 and S168. Product is stored in the day bins before being transferred to the electric melter.
- (d) One (1) Electric Melter; constructed in 2006; a maximum production rate of 17,500 pounds of molten glass per hour; emissions controlled by a baghouse and exhausting to stack S166. The molten glass flows from the melter to the Line 2 and Line 3 fiber forming/collection modules.

#### Modified Emission Units and Pollution Control Equipment (from T177-7720-00006, issued October 4, 2001)

- (e) One (1) Line 2 Forming and Collection Module; installed in 1961 and modified in 2000 and 2006; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to stack S2. Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 2 forming chamber for unbonded product)

- (f) One (1) Line 3 Forming and Collection Module; installed in 1961 and modified in 2000 and 2006; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to stack S3. Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 3 forming chamber for unbonded product)
- (g) One (1) Melter Dust Recycle System, installed in 1961 and modified in 1999 and 2006. Recycles dust captured by the melter baghouse back into the system as raw material. Exhausts to Stack S34. (Formerly referred to as the EP recycling system)
- (h) One (1) Line 2 packaging area for unbonded product, installed in 1994 and modified in 2006. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate emissions in the cyclone airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S85, S86 and S87;
- (i) One (1) Line 3 packaging area for unbonded product, installed in 1993 and modified in 2006. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate matter emissions in the cyclone airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S12, S13 and S14.

Note that the higher production capacity of Lines 2 and 3 will result in increased emissions from the debottlenecking of the following emission units: railcar receiving, eight (8) raw material storage silos, weigh scale, Line 2 shredding process, and Line 3 shredding process. However, this modification will not result in a physical or operational change to these units.

Also note that Johns Manville will reconfigure the Line 2 and Line 3 packaging areas to maximize operational flexibility. As part of the reconfiguration, two (2) new stacks will be added, stacks S87 and S14. This activity does not affect the units' potential to emit. However, existing PM/PM10 limitations on the Line 2 and Line 3 packaging areas are established on the existing stacks. As a result, those limitations will be restructured to cover the emissions units and not the stacks to which they exhaust. See the *Permit Level Determination - PSD* section for more information.

**Emission Units and Pollution Control Equipment (from T177-7720-00006, issued October 4, 2001) That Will Be Removed Following Permit Issuance**

- (k) One (1) mixer; constructed in 1961. (Insignificant activity)
- (l) One (1) bucket elevator; constructed in 1961. (Insignificant activity)
- (m) Three (3) day bins; constructed in 1961, 1961, and 1986, respectively; identified as Day Bins 2N, 3E, and 3W; emissions exhausting to stacks S31, S32, and S33.
- (n) One (1) Line 2 natural gas-fired melt furnace; installed in 1961 and modified in 2000; a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;

- (o) One (1) Line 3 natural gas-fired melt furnace, installed in 1961 and modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;

**Removed Emission Units and Pollution Control Equipment (from T177-7720-00006, issued October 4, 2001)**

- (p) One (1) day bin; constructed in 2002; identified as Day Bin 6; emissions exhausting to stack S164.
- (q) One (1) Line 6 electric melter; installed in 1974 and to be modified in 2001 and 2002, with a maximum glass production rate of 4,000 pounds per hour. The molten material flows from the melter to the fiber forming process. The particulate emissions from the melter are controlled by a fabric filter before the airstream is exhausted to Stack S7.
- (r) One (1) Line 6 forming chamber for bonded and unbonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. A binder is added to the bonded product which is transferred to a curing oven and the unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2.
- (s) One (1) Line 6 natural gas-fired curing and cooling process for bonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. The particulate emissions in the airstream are controlled by a high efficiency air filter (HEAF) before the airstream is exhausted to Stack S2.

The source currently consists of two independent manufacturing lines (Line 2 and Line 3) that share ancillary raw material delivery, storage and preparation operations. Each manufacturing line is comprised of a melt furnace, a forming and collection module, and a shredding and packaging system. Following completion of the modification, the manufacturing lines will no longer be independent – they will share an electric melter. In order to maximize productivity during the source's transition, the modification will be completed in stages over a few months. The heart of each manufacturing line is the melting operation as the subsequent operations can not function without it. As a result, the staged modification is dependent and delineated with respect to the replacement and installation of the melting operations. Below is the schedule of the modification:

- 1<sup>st</sup> - The Permittee will modify the Forming and Collection Modules and Packaging Areas to increase production slightly. This production increase is needed to prepare for the lost production during the following steps.
- 2<sup>nd</sup> - The Permittee will shut down manufacturing Line 3 and permanently remove Melt Furnace #3.
- 3<sup>rd</sup> - The Permittee will install the new Electric Melter and restore operation of Line 3.
- 4<sup>th</sup> - The Permittee will shut down manufacturing Line 2 and permanently remove Melt Furnace #2.
- 5<sup>th</sup> - The Permittee will ramp up production of the Electric Melter to full production capacity and restore operation of Line 2.

Note that the removal, addition and debottlenecking of ancillary operations will occur over the course of the entire modification. See Appendix A for a table that presents the units and net emissions involved in each stage of the modification. See the *Permit Level Determination – PSD* section of this document for more information.

All existing requirements for the units that have already been removed as part of this modification have been deleted from the Part 70 permit. See the *Proposed Changes* section of this document.

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Stack Summary for New Units**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
S167	Day Bin	TBD	TBD	TBD	70
S168	Day Bin	TBD	TBD	TBD	70
S166	Electric Melter	TBD	TBD	TBD	TBD

TBD – To be determined

**Emission Calculations**

See Appendix A of this document for detailed emission calculations that were provided by the applicant and reviewed by the OAQ. Note that ‘safety factors’ are sometimes used to determine potential-to-emit (surrogate for projected actual emissions). These factors are used to scale-up the engineering estimates provided to ensure that the potential-to-emit calculations are conservative. Actual emissions are calculated using production and operation information from the most recent two year period.

**Permit Level Determination – Part 70**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	PTE New Emission Units (tons/year)	Net Increase to PTE of Modified Emission Units (tons/year)	Total PTE for New and Modified Units (tons/year)
PM	2.2	98	100.2
PM <sub>10</sub>	2.2	98	100.2
SO <sub>2</sub>	0	9.6	9.6
VOC	4.84	67.5	72.3
CO	3.65	137.4	141
NO <sub>x</sub>	1.66	4.46	6.1
HAPs	0.03	0	0.03

This source modification is subject to 326 IAC 2-7-10.5(f)(4) because it has the potential to emit greater than 25 tons per year of PM/PM10 and VOC and greater than 100 tons per year of CO. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a

significant permit modification issued pursuant to 326 IAC 2-7-12(d) because the modification results in a significant change to existing permit terms and conditions.

**Permit Level Determination – Prevention of Significant Deterioration (PSD)**

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 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

As shown in the following table, the PM, SO<sub>2</sub>, VOC, NO<sub>x</sub> and CO emissions increases of the modification are less than the relevant PSD significance thresholds. However, the potential PM<sub>10</sub> emissions increase of the modification is greater than the PM<sub>10</sub> PSD threshold of 15 tons per year. As a result, a PSD netting analysis for PM<sub>10</sub> has been completed to reduce the net emissions increase to less than 15 tons per year and render the requirements of PSD not applicable.

Process/Emission Unit	Potential to Emit (tons/year) or Emissions Increase (as applicable)					
	PM	PM10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>
Total Emissions Increases of Modification <sup>(a)</sup>	23.9	greater than 15	4.4	34.3	93.7	3.89
Contemporaneous Increases <sup>(b)</sup>	NA	0	NA	NA	NA	NA
Contemporaneous Decreases	NA	(c)	NA	NA	NA	NA
Net Emissions Increase of Modification	23.9	14.1	4.4	34.3	93.7	3.89
Significant Level or Major Source Threshold	25	15	40	40	100	40

Negl. – Negligible; Less than 0.01 tons per year.

See Appendix A for supporting emissions calculations. Note that the source elected to use PTE as a surrogate for projected actual emissions.

(a) As explained in the *Description of Modification* section of this document, the modification will be completed in stages over a few months. The above table presents a PSD netting analysis for the modification as a whole. However, the staged nature of the modification requires a review of the net change in emissions at each stage with respect to PSD. See Appendix A for a comprehensive, staged PSD netting analysis for PM10 that supports the table above. Conditions have been added to the permit to accommodate the staged structure of the modification to ensure that the staged PSD netting analysis accurately represents the modification and that the decreases used for PSD netting are established and permanent.

(b) A review of all modifications completed during the contemporaneous period indicates that there are negligible emissions increases during the 5-year period covering November 16, 2000 to November 16, 2005.

(c) Contemporaneous decreases include the baseline actual emissions from the existing mixer, existing day bins, bucket elevator, Line 2 Furnace, Line 3 Furnace, Line 6 Melter, Line 6 Shredding and Packaging and the Line 6 Forming, Collection, Curing and Cooling process. All of these units will be removed as part of this modification (see the following paragraphs for enforceable conditions that ensure their removal). Any decreases associated with the installation of the baghouse on the railcar unloading operation (via MSM 177-15951-00006) are not included because sufficient emissions information regarding that approval was not provided by the Permittee.

In order to ensure that the requirements of 326 IAC 2-2 do not apply to the modification with respect to PM<sub>10</sub>, the following limits have been added to the Part 70 permit:

In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:

- (1) The PM<sub>10</sub> emissions from the Electric Melter shall not exceed 0.49 pounds per hour.
- (2) The PM<sub>10</sub> emissions from the L2 Forming and Collection Module shall not exceed 10.28 pounds per hour.
- (3) The PM<sub>10</sub> emissions from the L3 Forming and Collection Module shall not exceed 10.28 pounds per hour.
- (4) The PM<sub>10</sub> emissions from the L2 Shredding Process and L2 Packaging Area shall not exceed 0.9 pounds per hour, total.
- (5) The PM<sub>10</sub> emissions from the L3 Shredding Process and L3 Packaging Area shall not exceed 0.9 pounds per hour, total.
- (6) The PM<sub>10</sub> emissions from the Day Bin 1 shall not exceed 0.01 pounds per hour.
- (7) The PM<sub>10</sub> emissions from the Day Bin 2 shall not exceed 0.01 pounds per hour.
- (8) The PM<sub>10</sub> emissions from the Mixer shall not exceed 0.005 pounds per hour.
- (9) The PM<sub>10</sub> emissions from the Weigh Scale shall not exceed 0.005 pounds per hour.
- (10) The PM<sub>10</sub> emissions from the Melter Dust Recycle System shall not exceed 0.001 pounds per hour.
- (11) The PM<sub>10</sub> emissions from the Railcar Receiving Station shall not exceed 0.095 pounds per hour.
- (12) The PM<sub>10</sub> emissions from the Raw Material Silos shall not exceed 0.04 pounds per hour, total.
- (13) The PM<sub>10</sub> emissions from the Batch Transfer System shall not exceed 0.053 pounds per hour.
- (14) Prior to the operation of the Electric Melter, the Permittee shall permanently shut down the Line 3 Melt Furnace.
- (15) The production rate of the Electric Melter shall not exceed 8,750 pounds of glass per hour (on a 4-hr average basis) until the Line 2 Melt Furnace and Line 3 Melt Furnace have been permanently shut down.
- (16) The production rate of the Electric Melter shall not exceed 17,500 pounds of glass per hour (on a 4-hr average basis).
- (17) The production rate of the Line 2 Melt Furnace shall not exceed 7,800 pounds of glass per hour.
- (18) The production rate of the Line 3 Melt Furnace shall not exceed 7,800 pounds of glass per hour.
- (19) Following startup of the Electric Melter (Section D.2) but before the Line 2 Forming and Collection Module (Section D.3) is back online, the Permittee shall permanently remove the existing mixer, existing bucket elevator, Day Bin 2N, Day Bin 3E, and Day Bin 3W.

Compliance with these requirements shall limit the net PM<sub>10</sub> emissions increase of the modification described in SSM 177-22008-00006 to less than fifteen (15) tons per year.

Restrictions on the operation of the Melter Dust Recycle System, Silos, weigh scales, old Mixer, new Mixer, Bucket Elevator, and Day Bins are not required because PM<sub>10</sub> emissions from each of these units are less than 0.01 tpy. Therefore, the emissions contribution from these units can occur at any stage of the modification without affecting the outcome of the staged PSD netting analysis.

Restrictions on the operation of the Railcar Receiving operations and Batch Transfer System are not included because their operation and emissions are proportional to the production of the manufacturing lines.

The Line 2 Forming and Collection Module and Line 2 Shredding and Packaging operations can not operate without Furnace #2 or the new Melter. Therefore, a requirement to shut down these operations is not necessary because the emissions decreases occur when the furnace is shut down and the emissions increases occur when the Melter is brought online. Restrictions on Furnace #2 and the Melter are included above.

The Line 3 Forming and Collection Module and Line 3 Shredding and Packaging operations can not operate without Furnace #3 or the new Melter. Therefore, a requirement to shut down these operations is not necessary because the emissions decreases occur when the furnace is shut down and the emissions increases occur when the Melter is brought online. Restrictions on Furnace #3 and the Melter are included above.

In addition to incorporating new limits to render the requirements of 326 IAC 2-2 not applicable, the structure of the existing PM/PM<sub>10</sub> BACT limitations from T177-7720-000006, issued October 4, 2001 must be revised to accommodate the increase in production capacity associated with this modification.

The existing BACT limitations on the L2 and L3 Forming and Collection Modules included 3.7 pounds of PM/PM<sub>10</sub> per ton (emission) and 7,200 pounds glass per hour (production) limitations equivalent to PM/PM<sub>10</sub> emissions of 58.3 tons per year per line. The restructured limits are 13.32 pounds of PM/PM<sub>10</sub> per hour per line and remain equivalent to 58.3 tons of PM/PM<sub>10</sub> per year per line so there is no change in allowable emissions.

The existing BACT limitations on the L2 and L3 Shredding and Packaging Areas included 0.26, 0.29 and 0.57 pounds of PM/PM<sub>10</sub> per ton (emission) and 7,200 pounds glass per hour per line (production) limitations equivalent to total PM/PM<sub>10</sub> emissions of 21.75 tons per year. The emission limits were established on the stacks to which the units exhaust. As mentioned previously in this document, Johns Manville will reconfigure the L2 and L3 Shredding and Packaging Areas. As a result, the restructured limits are 1.86 and 3.09 pounds of PM/PM<sub>10</sub> per hour and remain equivalent to 21.75 tons of PM/PM<sub>10</sub> per year (total) so there is no change in allowable emissions.

The existing BACT limitations on Melt Furnace #2 and Melt Furnace #3 included 0.25 pounds of PM/PM<sub>10</sub> per ton (emission) and 7,200 pounds glass per hour per unit (production) limitations. These limitations are equivalent to 3.94 tons of PM/PM<sub>10</sub> per year. Before the furnaces are removed, the Permittee will increase the production capacity of the furnaces to 7,800 pounds per hour. In order to accommodate this increase, the emission rate has been reduced to 0.23 pounds PM/PM<sub>10</sub> per ton of glass produced (equivalent to 3.94 tons per year at 7800 pounds per hour).

The VOC emissions increase of the modification is less than 40 tpy. The Electric Melter, L2 Forming and Collection Module and L3 Forming and Collection Module are the only new or modified sources of VOC that are associated with this modification. In order to ensure that the requirements of 326 IAC 2-2 do not apply to the modification with respect to VOC, the following limits have been added to the Part 70 permit:

In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:

- (1) The VOC emissions from the Electric Melter shall not exceed 1.1 pounds per hour.
- (2) The Permittee shall comply with the existing VOC emission limitations, pursuant to CP 177-5873-00006 and 326 IAC 2-2, for the L2 Forming and Collection Module and the L3 Forming and Collection Module.

Compliance with these requirements shall limit the VOC emissions increase of the modification described in SSM 177-22008-00006 to less than forty (40) tons per year.

The CO emissions increase of the modification is less than 100 tpy. The Electric Melter, L2 Forming and Collection Module and L3 Forming and Collection Module are the only new or modified sources of CO that are associated with this modification. In order to ensure that the requirements of 326 IAC 2-2 do not apply to the modification with respect to CO, the following limits have been added to the Part 70 permit:

In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:

- (1) The CO emissions from the Electric Melter shall not exceed 0.83 pounds per hour.
- (2) The CO emissions from the L2 Forming and Collection Module shall not exceed 15.6 pounds per hour.
- (3) The CO emissions from the L3 Forming and Collection Module shall not exceed 15.6 pounds per hour.

Compliance with these requirements shall limit the CO emissions increase of the modification described in SSM 177-22008-00006 to less than one hundred (100) tons per year.

The SO<sub>2</sub> and NO<sub>x</sub> emissions increases of the modification are significantly less than the relevant PSD significance thresholds. Therefore, those emissions are not addressed further with respect to 326 IAC 2-2.

#### **Federal Rule Applicability Determination**

- (a) The requirements of the New Source Performance Standards (NSPS) for Glass Manufacturing Plants (40 CFR Part 60, Subpart CC and 326 IAC 12) are not included in the source modification or permit modification. Pursuant to 40 CFR 60.290(c), the standard does not apply to electric melters. Following this modification, this source will use only electric melters.
- (b) This source is subject to the New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants (40 CFR Part 60, Subpart PPP), which is incorporated by reference in 326 IAC 12.

Pursuant to 40 CFR 60.680, each rotary spin wool fiberglass insulation manufacturing line constructed, reconstructed or modified after February 7, 1984 is an affected facility subject to the requirements of 40 CFR Part 60, Subpart PPP. The specific facilities subject to this rule include the following:

- (1) One (1) Line 2 Forming and Collection Module; constructed in 1961 and modified in 2000 and 2006; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat

input capacity of the combustion section is 20 MMBtu/hr. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to stack S2; (Formerly referred to as the Line 2 forming chamber for unbonded product)

- (2) One (1) Line 3 Forming and Collection Module; constructed in 1961 and modified in 2000 and 2006; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 8,750 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section is 20 MMBtu/hr. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to stack S3; (Formerly referred to as the Line 3 forming chamber for unbonded product)

The Line 2 and Line 3 Forming and Collection Modules are rotary spin wool fiberglass insulation manufacturing lines and have been modified after February 7, 1984.

Note that the monitoring, record keeping and reporting requirements specified in 40 CFR 60.683 through 40 CFR 60.684 apply only if the affected facility uses a wet scrubbing control device or wet electrostatic precipitator control device. The affected facilities at this source do not use either type of control device.

Nonapplicable portions of the NSPS are not included in the permit. The affected facilities are subject to the following sections of 40 CFR Part 60, Subpart PPP:

- (1) 40 CFR 60.680
- (2) 40 CFR 60.681
- (3) 40 CFR 60.682
- (4) 40 CFR 60.685

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12, apply to each affected facility described in 40 CFR 60.680 except when otherwise specified in 40 CFR Part 60, Subpart PPP.

- (c) The requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Wool Fiberglass Manufacturing (40 CFR Part 63, Subpart NNN and 326 IAC 20) are not included in the source modification or permit modification. Pursuant to 40 CFR 63.1380(a), the standard applies to each wool fiberglass manufacturing facility that is located at a major source of HAPs. The HAP emissions from this source are considerably less than 10 tons per year of a single HAP and 25 tons per year of a combination of HAPs. Therefore, the source is not a major source of HAPs.
- (d) This source is not subject to the provisions of 40 CFR Part 64, Compliance Assurance Monitoring (CAM). In order for this rule to apply, a pollutant-specific-emissions-unit at a source that requires a Part 70 or Part 71 permit must meet three criteria for a given pollutant: 1) the unit is subject to an applicable emission limitation or standard for the applicable regulated air pollutant, 2) the unit uses a control device to achieve compliance with any such emission limitation or standard, and 3) the unit has the potential to emit, of the applicable regulated air pollutant, equal or greater than 100 percent of the amount required for a source to be classified as a major source. This source does not contain any units or facilities that have the potential to emit greater than 100 tons per year, before controls.

### State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

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

Prevention of Significant Deterioration applicability is addressed under the *Permit Level Determination - PSD* section of this document.

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

This modification is not subject to the requirements of 326 IAC 2-3 because it is located in Wayne County which is designated as an attainment area for all criteria pollutants and lead.

#### 326 IAC 2-4.1 (Hazardous Air Pollutants)

This modification is not subject to the requirements of 326 IAC 2-4.1 because it does not involve the construction or reconstruction of any major sources of HAPs.

#### 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 Exemptions), 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.

#### 326 IAC 6.5-1 (formerly 326 IAC 6-1) and 326 IAC 6.5-10 (formerly 326 IAC 6-1-14)

Pursuant to T177-7720-000006, issued October 4, 2001, this source was subject to the requirements of 326 IAC 6-1-2 and 326 IAC 6-1-14. On September 1, 2005, 326 IAC 6-1 was repealed and replaced with 326 IAC 6.5-1 and 326 IAC 6.8-1. Specifically, 326 IAC 6-1-2 and 326 IAC 6-1-14 were replaced with 326 IAC 6.5-1-2 and 326 IAC 6.5-10, respectively. As a result, the OAQ is using this source modification and permit modification to update the Part 70 permit for all the affected facilities.

Pursuant to 326 IAC 6.5-1-1(a), this source is subject to the requirements of 326 IAC 6.5-1 because it is located in Wayne County.

Pursuant to 326 IAC 6.5-1-2(a), the particulate matter emissions from the Electric Melter, Mixer, BDBES, Melter Dust Recycle System, Day Bin 1 and Day Bin 2 shall not exceed 0.03 grains per dry standard cubic foot.

Pursuant to 326 IAC 6.5-10-11 (Particulate Matter Limitations – Wayne County), the particulate matter emissions from:

- (a) The 25 MMBtu/hr natural gas-fired boiler shall not exceed 0.0137 lb/MMBtu heat input and 1.5 tons per year.
- (b) The L2 Forming and Collection Module shall not exceed 0.02 gr/dscf and 58.3 ton/yr.
- (c) The L3 Forming and Collection Module shall not exceed 0.02 gr/dscf and 123.6 ton/yr.

#### 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Pursuant to 326 IAC 7-1.1-1, any facility with a potential to emit SO<sub>2</sub> greater than or equal to 25 tons per year or 10 pounds per hour shall comply with the requirements of 326 IAC 7-1.1. None of the new facilities involved in this modification have a potential to emit SO<sub>2</sub> greater than or equal to 25 tons per year or 10 pounds per hour.

### 326 IAC 8-1-6 (Volatile Organic Compounds – BACT)

Pursuant to 326 IAC 8-1-6, any facility constructed after January 1, 1980 that has a potential to emit greater than or equal to 25 tons of VOC per year shall reduce VOC emissions using BACT. None of the new facilities involved in this modification have a potential to emit greater than or equal to 25 tons of VOC per year.

## Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a 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 Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements 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.

The Compliance Determination and Monitoring Requirements applicable to the new units added by this modification are included in the *Proposed Changes* section of this document. Those conditions are necessary to ensure that the control devices operate properly.

## Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T177-7720-00006, issued October 4, 2001 in order to: 1) incorporate the modification described in this document, 2) update and clarify state and federal rule requirements, and 3) update general Part 70 permit language based on global appeal resolutions. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

Upon further review of the existing Part 70 permit, the IDEM, OAQ has also made the following changes:

1. All references to IDEM, OAQ's mailing address have been revised as follows:  
  
Indiana Department of Environmental Management  
Office of Air Quality  
100 North Senate Avenue, ~~P.O. Box 6015~~  
Indianapolis, Indiana ~~46206-6015~~ **46204-2251**
2. IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of Condition B.10 Preventive Maintenance and has amended Condition B.11– Emergency Provisions.
3. For clarification purposes, Condition B.20 - Operational Flexibility has been revised.
4. In accordance with the credible evidence rule (326 IAC 1-1-6) and 326 IAC 2-7-5, all permits must address the use of credible evidence. A condition for Credible Evidence has

been added to Section B of the permit.

5. In order to avoid duplication of requirements which may be included in D sections, Condition C.5– Operation of Equipment has been removed from the permit.
6. IDEM realizes that the specifications of Condition C.13 - Pressure Gauge and Other Instrument Specifications, can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the language in Condition C.13 has been revised.
7. IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan (Condition C.16). The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. Therefore, the condition for “Compliance Response Plan” has been replaced by the condition for “Response to Excursions or Exceedances”. The Section D conditions that refer to this condition have been revised to reflect the new condition title.
8. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. Therefore, a requirement has been added to Conditions D.1.4, D.4.4 and D.5.3 requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.
9. Upon further review, IDEM has determined that once per day visible emission notations and once per day monitoring of the control device is generally sufficient to ensure proper operation of the emission units and control devices. Therefore, the monitoring frequency has been changed from once per shift to once per day in the revised permit.
10. IDEM has determined that it is the Permittee’s responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections has been removed.
11. Conditions D.1.7, D.4.7, and D.5.6 have been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.
12. Condition D.3.1(d) of the original Part 70 permit limited the HAP emissions from the Forming and Collection Modules to render the requirements of 40 CFR Part 63, Subpart NNN not applicable. This limit was necessary because the Modules could produce bonded fiberglass product. Following this modification, the Modules can not produce bonded product and the only source of HAP emissions is the Electric Melter. As

Appendix A indicates, the HAP PTE of the Electric Melter is insignificant. As a result, former Condition D.3.1(d) has been removed from the permit.

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

---

The Permittee owns and operates a stationary fiber glass insulation manufacturing plant.

Responsible Official:	Plant Manager
Source Address:	814 Richmond Ave., Richmond, Indiana 47374
Mailing Address:	P.O. Box 428, Richmond Indiana 47375-0428
General Source Phone Number:	(765) 973-5385
SIC Code:	3296
County Location:	Wayne
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD; <del>Major</del> <b>Minor</b> Source, Section 112 of the Clean Air Act 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)]

---

(a) Raw Material Handling, Storage and Batching Equipment for Lines ~~2, 3, and 6~~ **and 3**:

- (1) ~~One (1) Rail car unloading~~ **Receiving Station; installed in 1967 and exhausting to stack S165.** The raw materials received in rail cars are bottom unloaded into a screw conveyor that transfers the material to the storage silos via a bucket elevator and a diverter. The particulate emissions are controlled by a boot lift device that seals off the bottom of the rail car **and a baghouse.**
- (2) ~~Eight (8) Raw material batch~~ **Silos, installed in 1967.** As raw materials are loaded into the batch silos, air within the silos is displaced to the atmosphere through vents at the top of each silo. These vents are equipped with fabric filters to control particulate emissions in the airstream before it is exhausted to emission points S21 through S28. ~~and~~
- (3) Four (4) day bins, installed in 1961, 1986, and 2002. The raw material from the batch silos is transferred to the day bins via an enclosed conveyor system. Particulate emissions in the airstream are controlled with fabric filters before the airstream is exhausted to emission points S31, S32, S33, and S164.
- (4) **Two (2) day bins; identified as Day Bin 1 and Day Bin 2; constructed in 2006; each with a maximum storage capacity of 57.5 tons; emissions controlled by baghouses; exhausting to stacks S167 and S168. Product from the mixer is transferred to the day bins using an enclosed conveyor system.**
- (5) **One (1) Mixer; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.**
- (6) **One (1) Batch Transfer System; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a baghouse; exhausting indoors to general ventilation. Processed materials from the mixer are transferred to the day bins via the batch delivery/bucket elevator system.**
- (7) **One (1) Weigh Scale; constructed in 1967; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.**

(b) Melt Facilities:

- (1) One (1) Line 2 natural gas-fired melt furnace, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;
- (2) One (1) Line 3 natural gas-fired melt furnace, installed in 1961 and modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by an electrostatic precipitator before the airstream is exhausted to Stack S5; and
- ~~(3) One (1) Line 6 electric melter, installed in 1974 and to be modified in 2001 and 2002, with a maximum glass production rate of 4,000 pounds per hour. The molten material flows from the melter to the fiber forming process. The particulate emissions from the melter are controlled by a fabric filter before the airstream is exhausted to Stack S7.~~
- (3) **One (1) Electric Melter; constructed in 2006; a maximum production rate of 17,500 pounds of molten glass per hour; emissions controlled by a baghouse and exhausting to stack S166. The molten glass flows from the melter to the Line 2 and Line 3 fiber forming/collection modules.**

(c) Forming Facilities:

- (1) One (1) **Line 2 Forming and Collection Module** ~~Line 2 forming chamber for unbonded product~~, installed in 1961 **and modified in 2006**, with a maximum **unbonded** glass production rate of **8,750** ~~7,200~~ pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2; **Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 2 forming chamber for unbonded product)**
- (2) One (1) **Line 3 Forming and Collection Module** ~~Line 3 forming chamber for unbonded product~~, installed in 1961 and modified in 2000 **and 2006**, with a maximum glass production rate of **8,750** ~~7,200~~ pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. The unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions from unbonded product before the airstream is exhausted to Stack S3. **Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 3 forming chamber for unbonded product)**
- ~~(3) One (1) Line 6 forming chamber for bonded and unbonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. Natural~~

~~gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. A binder is added to the bonded product which is transferred to a curing oven and the unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2.~~

~~(d)~~ Curing and Cooling Facilities:

- ~~(1)~~ One (1) Line 6 natural gas-fired curing oven and cooling process for bonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. The particulate emissions in the airstream are controlled by a high efficiency air filter (HEAF) before the airstream is exhausted to Stack S2.

(ed) Shredding and Packaging Facilities:

- (1) One (1) Line 2 shredding process for unbonded product, installed in 1994. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by ~~two (2) baghouses~~ a **baghouse system** before the airstream is exhausted to Stacks S85, ~~and S86 and S87~~;
- (2) One (1) Line 2 packaging area for unbonded product, installed in 1994 **and modified in 2006**. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale **using a bagging system**. The particulate emissions in the cyclone airstream are controlled by ~~two (2) baghouses~~ a **baghouse system** before the airstream is exhausted to Stacks S85, ~~and S86 and S87~~;
- (3) One (1) Line 3 shredding process for unbonded product, installed in 1993. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled ~~two (2) baghouses~~ a **baghouse system** before the airstream is exhausted to Stacks S12, ~~and S13 and S14~~;
- (4) One (1) Line 3 packaging area for unbonded product, installed in 1993 **and modified in 2006**. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale **using a bagging system**. The particulate matter emissions in the cyclone airstream are controlled by ~~two (2) baghouses~~ a **baghouse system** before the airstream is exhausted to Stacks S12, ~~and S13 and S14~~.
- ~~(5)~~ One (1) Line 6 shredding process for unbonded and bonded product, installed in 1974. The shredded fiber is then pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to Stack S11; ~~and~~
- ~~(6)~~ One (1) Line 6 packaging area for unbonded and bonded product, installed in 1974. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone airstream are controlled by a baghouse before being exhausted to Stack S11.

~~The bonded product from Line 6 may also be trimmed and packaged. This operation generates negligible particulate matter emissions that are uncontrolled.~~

(fe) Ancillary Equipment:

...

## **SECTION B GENERAL CONDITIONS**

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

~~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)]**

~~This permit is issued for a fixed term of five (5) years from the original date, 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.~~

### **B.3 Enforceability [326 IAC 2-7-7]**

~~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, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.~~

### **B.4 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.5 Severability [326 IAC 2-7-5(5)]**

~~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)]**

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

### **B.7 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)] [326 IAC 2-7-6(6)]**

~~(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:~~

~~Indiana Department of Environmental Management  
Permits Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~The submittal by the Permittee does require the certification by the responsible official<sup>®</sup> as defined by 326 IAC 2-7-1(34).~~

~~(b) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, 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<sup>®</sup> as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ, copies of records required to be kept by this permit or, for information claimed to be confidential, the Permittee may furnish such records directly to the U. S. EPA along with a claim of confidentiality. [326 IAC 2-7-5(6)(E)]~~

- ~~(c) 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 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]~~

---

- ~~(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for:~~
- ~~(1) Enforcement action;~~
  - ~~(2) Permit termination, revocation and reissuance, or modification; or~~
  - ~~(3) Denial of a permit renewal application.~~
- ~~(b) Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act.~~
- ~~(c) 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.~~
- ~~(d) 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.~~

~~B.9 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 a 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.~~
- ~~(c) A responsible official is defined at 326 IAC 2-7-1(34).~~

~~B.10 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:~~

~~Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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, 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, may require to determine the compliance status of the source.~~

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

~~B.11 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]~~

---

- ~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.~~

~~If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:~~

~~Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~The PMP and the PMP extension notification do not require the certification by the Aresponsible official@ as defined by 326 IAC 2-7-1(34).~~

- ~~(b) The Permittee shall implement the PMPs as necessary to ensure that failure to implement a PMP does not cause or contribute to a violation of any limitation on emissions or potential to emit.~~
- ~~(c) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance~~

~~causes or contributes to any violation. The PMP does not require the certification by the responsible official as defined by 326 IAC 2-7-1(34).~~

- ~~(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept 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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~

~~B.12 Emergency Provisions [326 IAC 2-7-16]~~

- ~~(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, except as provided in 326 IAC 2-7-16.~~

- ~~(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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, 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: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967~~

- ~~(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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(10) be revised in response to an emergency.~~
- ~~(f) Failure to notify IDEM, OAQ, 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) Operations may continue during an emergency only if the following conditions are met:
  - ~~(1) 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.~~
  - ~~(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - ~~(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~
    - ~~(B) Continued operation of the facilities is 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.~~~~~~

~~Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

~~B.13 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 in 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) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits. All previously issued operating permits are superseded by this permit.~~
- ~~(c) 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, 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.~~
- ~~(d) 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.~~
- ~~(e) 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.~~
- ~~(f) 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).~~
- ~~(g) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]~~
- ~~(h) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(7)]~~

~~B.14 Multiple Exceedances [326 IAC 2-7-5(1)(E)]~~

---

~~Any exceedance of a permit limitation or condition contained in this permit, which occurs contemporaneously with an exceedance of an associated surrogate or operating parameter established to detect or assure compliance with that limit or condition, both arising out of the same act or occurrence, shall constitute a single potential violation of this permit.~~

~~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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. Deviations that are required to be reported by an applicable requirement shall~~

~~be reported according to the schedule stated in the applicable requirement and do not need to be included in this report.~~

~~The notification by the Permittee does require the certification by the Responsible official<sup>®</sup> 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 or a rule. It does not include:~~
- ~~(1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or~~
  - ~~(2) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.~~

~~A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.~~

- ~~(c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.~~

~~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]~~

---

- ~~(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 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<sup>®</sup> 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, 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, 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, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(e)]~~

~~B.17 Permit Renewal [326 IAC 2-7-4]~~

---

- ~~(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, 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<sup>®</sup> 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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

~~(b) Timely Submittal of Permit Renewal [326 IAC 2-7-4(a)(1)(D)]~~

~~(1) A timely renewal application is one that is:~~

~~(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and~~

~~(B) 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, on or before the date it is due.~~

~~(2) If IDEM, OAQ, upon receiving a timely and complete 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.~~

~~(c) Right to Operate After Application for Renewal [326 IAC 2-7-3]~~

~~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, 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, any additional information identified as being needed to process the application.~~

~~(d) United States Environmental Protection Agency Authority [326 IAC 2-7-8(e)]~~

~~If IDEM, OAQ, fails to act in a timely way on a Part 70 permit renewal, the U.S. EPA may invoke its authority under Section 505(e) of the Clean Air Act to terminate or revoke and reissue a Part 70 permit.~~

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

~~(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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

~~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)]~~

- ~~(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)(D)(i) 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]~~

- ~~(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 emissions allowable under 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.~~

~~Such records shall consist of all information required to be submitted to IDEM, OAQ, in the notices specified in 326 IAC 2-7-20(b), (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 increases and decreases in emissions 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 [326 IAC 2-7-20(d)]  
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.~~

~~B.21 — Source Modification Requirement [326 IAC 2-7-10.5]~~

---

~~A modification, construction, or reconstruction is governed by 326 IAC 2 and 326 IAC 2-7-10.5.~~

~~B.22 — Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2]~~

---

~~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, 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) — Have access to and copy any records that must be kept under the conditions of this permit;~~
- ~~(c) — Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;~~
- ~~(d) — Sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and~~
- ~~(e) — 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, P.O. Box 6015~~

Indianapolis, Indiana 46206-6015

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)]~~

---

- ~~(a) The Permittee shall pay annual fees to IDEM, OAQ, 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, 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 317-233-0425 (ask for OAQ, Technical Support and Modeling Section), to determine the appropriate permit fee.~~

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

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

**C.1 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.2 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.3 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. 326 IAC 9-1-2 is not federally enforceable.

**C.4 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.5 Operation of Equipment [326 IAC 2-7-6(6)]**

Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment is in operation.

**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 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(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, P.O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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 14-10-4, 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) 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 that the inspector be accredited, pursuant to the provisions of 40 CFR 61, Subpart M, is federally enforceable.~~

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

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

- ~~(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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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 not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source 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]**

---

~~The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. 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)]**

---

~~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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

~~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 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]**

- 
- ~~(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.~~
- ~~(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.~~

~~C.12 — Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]~~

~~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.13 — Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]~~

- ~~(a) — Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (± 2%) of full scale reading.~~
- ~~(b) — Whenever a condition in this permit requires the measurement of a temperature, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (± 2%) of full scale reading.~~
- ~~(c) — The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.~~

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

~~C.14 — Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]~~

~~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 in December 1996.~~
- ~~(b) — If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.~~
- ~~(c) — Upon direct notification by IDEM, OAQ, 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.15 — Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68.215]~~

~~If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall submit:~~

- ~~(a) — A compliance schedule for meeting the requirements of 40 CFR 68; or~~
- ~~(b) — As a part of the annual compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP);~~

~~All documents submitted pursuant to this condition shall include the certification by the responsible official as defined by 326 IAC 2-7-1(34).~~

~~C.16 — Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]~~

- ~~(a) — The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole of information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance~~

~~monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:~~

- ~~(1) This condition;~~
  - ~~(2) The Compliance Determination Requirements in Section D of this permit;~~
  - ~~(3) The Compliance Monitoring Requirements in Section D of this permit;~~
  - ~~(4) The Record Keeping and Reporting Requirements in Section C (General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and~~
  - ~~(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP-s shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
    - ~~(A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and~~
    - ~~(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.~~~~
- ~~(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps may constitute a violation of the permit.~~
- ~~(c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:~~
- ~~(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.~~
  - ~~(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied.~~
  - ~~(3) An automatic measurement was taken when the process was not operating.~~
  - ~~(4) The process has already returned or is returning to operating within Anormal@ parameters and no response steps are required.~~
- ~~(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.~~
- ~~(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.~~

- (f) ~~At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.~~

~~C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]~~

- (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 documents submitted pursuant to this condition do not 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.18 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(e)] [326 IAC 2-6]~~

- (a) ~~The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that must be received by July 1 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual emission statement shall meet the following requirements:~~
- (1) ~~Indicate estimated actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);~~
- (2) ~~Indicate estimated actual emissions of other regulated pollutants (as defined by 326 IAC 2-7-1) from the source, for purposes of Part 70 fee assessment.~~
- (b) ~~The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission statement must be submitted to:~~

~~Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Quality  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~

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

- (c) ~~The annual 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, on or before the date it is due.~~

~~C.19 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]~~

- (a) ~~Records of all required data, reports and support information 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 kept 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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner 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.~~

~~G.20 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]~~

---

- (a) ~~The source 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<sup>®</sup> 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, P. O. Box 6015  
Indianapolis, Indiana 46206-6015~~
- (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, 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<sup>®</sup> as defined by 326 IAC 2-7-1(34).~~
- (e) ~~The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.~~

**Stratospheric Ozone Protection**

~~G.21 Compliance with 40 CFR 82 and 326 IAC 22-1~~

---

~~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 B GENERAL CONDITIONS**

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

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)]**

- (a) This permit, T117-7720-00014, 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.
- (b) If IDEM, OAQ, 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]**

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]**

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, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

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

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)]**

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)]**

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ, 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 not 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, 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 a 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) **A 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. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1st of each year to:**

**Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251**

**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 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 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]**

---

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, 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.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

The PMP and the PMP extension notification do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ, upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or contributes to any violation. 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]**

---

- (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 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: 317-233-5674 (ask for Compliance Section)  
Facsimile Number: 317-233-5967**

- (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  
Indianapolis, Indiana 46204-2251**

**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, 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 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.**

- (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 in 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 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 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 has issued the modification. [326 IAC 2-7-12(b)(7)]

**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 T177-7720-00006 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 permit, all previous registrations and permits are superseded by this 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  
Indianapolis, Indiana 46204-2251

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 "authorized official" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (c) Emergencies shall be included in the Quarterly Deviation and Compliance Monitoring Report.

**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]**

---

- (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 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 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 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 at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ 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)]**

---

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, 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  
Indianapolis, Indiana 46204-2251

- (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 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, 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, 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]**

---

- (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  
Indianapolis, Indiana 46204-2251**

**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)]**

---

- (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)(D)(i) 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]**

---

- (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  
Indianapolis, Indiana 46204-2251**

**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 in the notices specified in 326 IAC 2-7-20(b), (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 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 [326 IAC 2-7-20(d)]  
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.**

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

---

**A modification, construction, or reconstruction is governed by the requirement of 326 IAC 2 and 326 IAC 2-7-10.5.**

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

---

**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, OA, U.S. EPA, 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  
Indianapolis, Indiana 46204-2251**

**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)]**

---

- (a) The Permittee shall pay annual fees to IDEM, OAQ 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, 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] [326 IAC 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. 326 IAC 9-1-2 is not federally enforceable.

**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.

**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  
Indianapolis, Indiana 46204-2251

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 14-10-4, 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]

---

- (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  
Indianapolis, Indiana 46204-2251

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 not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the source 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]

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements. 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)]

---

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  
Indianapolis, Indiana 46204-2251

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]**

---

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)]**

---

- (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 have a scale such that the expected normal reading 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 pressure gauge or other 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]**

---

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

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:  
Indiana Department of Environmental Management  
Compliance Branch, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251  
  
within ninety (90) days after the date of issuance of this permit.  
  
The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
- (f) Upon direct notification by IDEM, OAQ, 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 68.215]**

---

**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]**

---

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit(s) (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 [326 IAC 2-7-5] [326 IAC 2-7-6]**

---

- (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]**

---

- (a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2006 and every three (3) years thereafter, the Permittee shall submit by July 1 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  
Indianapolis, Indiana 46204-2251

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, 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]**

---

- (a) Records of all required 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 makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner 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 reasonable possibility that a “project” (as defined in 326 IAC 2-2-1 (qq)) at an existing emissions unit, other than projects at a Clean Unit or at a source with Plant-wide Applicability Limitation (PAL), which is not part of a “major

modification” (as defined in 326 IAC 2-2-1(ee)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1 (rr)), the Permittee shall comply with following:

- (1) Before beginning actual construction of the “project” (as defined in 326 IAC 2-2-1(qq)) 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
    - (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]**

---

- (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  
Indianapolis, Indiana 46204-2251
- (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 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) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years.
- (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(gg)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ :
  - (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), 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 report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
  - (1) The name, address, and telephone number of the major stationary source.
  - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C - General Record Keeping Requirements.
  - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3).
  - (4) Any other information that the Permittee deems fit to include in this report:

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management  
Air Compliance Section, Office of Air Quality  
100 North Senate Avenue  
Indianapolis, Indiana 46204-2251

- (h) 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. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

## **Stratospheric Ozone Protection**

### **C.20 Compliance with 40 CFR 82 and 326 IAC 22-1**

---

**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 FACILITY OPERATION CONDITIONS

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

#### Raw Material Handling, Storage, and Batching Equipment

- (a) Raw Material Handling, Storage and Batching Equipment for Lines 2, 3, and 6 and 3:
- (1) One (1) ~~Raw car unloading~~ **Receiving Station; installed in 1967 and exhausting to stack S165.** The raw materials received in rail cars are bottom unloaded into a screw conveyor that transfers the material to the storage silos via a bucket elevator and a diverter. The particulate emissions are controlled by a boot lift device that seals off the bottom of the rail car **and a baghouse;**
  - (2) Eight (8) ~~Raw material batch~~ **Silos, installed in 1967. As Raw materials are loaded into the batch silos, air within the silos is displaced to the atmosphere through vents at the top of each silo. These vents are equipped with and vented to fabric filters to control particulate emissions in the airstream before it is exhausted to emission points S21 through S28; and**
  - (3) Four (4) day bins, installed in 1961, 1986, and 2002. The raw material from the batch silos is transferred to the day bins via an enclosed conveyor system. Particulate emissions in the airstream are controlled with fabric filters before the airstream is exhausted to emission points S31, S32, S33, and S164.
  - (4) **Two (2) day bins; identified as Day Bin 1 and Day Bin 2; constructed in 2006; each with a maximum storage capacity of 57.5 tons; emissions controlled by baghouses; exhausting to stacks S167 and S168. Product from the mixer is transferred to the day bins using an enclosed conveyor system.**
  - (5) **One (1) Mixer; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.**
  - (6) **One (1) Batch Transfer System; constructed in 2006; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a baghouse; exhausting indoors to general ventilation. Processed materials from the mixer are transferred to the day bins via the batch delivery/bucket elevator system.**
  - (7) **One (1) Weigh Scale; constructed in 1967; a maximum capacity of 88,148 tons of raw materials per year; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.**

(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.1.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a) (~~Particulate Emission Limitations for General Sources~~), the allowable PM emissions rate from the following listed equipment:

~~Railcar unloading station~~ **Receiving Station**  
S21 ~~Raw material storage~~ silo  
S22 ~~Raw material storage~~ silo  
S23 ~~Raw material storage~~ silo

~~S24 Raw Material storage silo~~  
~~S25 Raw Material storage silo~~  
~~S26 Raw Material storage silo~~  
~~S27 Raw Material storage silo~~  
~~S28 Raw Material storage silo~~  
**S31 raw material day bin 2N**  
**S32 raw material day bin 3W**  
**S33 raw material day bin 3E**  
**S164 raw material day bin**  
**Day Bin 1**  
**Day Bin 2**  
**Mixer**  
**Batch Transfer System**  
**Weigh Scale**

Shall each not exceed 0.03 grain per dry standard cubic foot (dscf).

D.1.2 Particulate Matter Limitations [326 IAC 2-2-3(a)(3)]

- 
- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the raw material handling, storage and batching facilities stated above shall comply with the following limitations:
- (a1) The ~~Railcar unloading~~ **Receiving sStation** shall be equipped with a bootlift device and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9;
  - (b2) The raw material conveyor system (**which operates as part of the railcar receiving station**) shall be enclosed and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
  - (c3) The ~~Raw Material batch sSilos and day bins~~ shall be equipped with fabric filters and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9.
  - (4) **Day bins S31, S32, S33 and S164 shall be equipped with fabric filters and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9.**
- (b) In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:
- (1) **The PM10 emissions from the Day Bin 1 shall not exceed 0.01 pounds per hour.**
  - (2) **The PM10 emissions from the Day Bin 2 shall not exceed 0.01 pounds per hour.**
  - (3) **The PM10 emissions from the Mixer shall not exceed 0.005 pounds per hour.**
  - (4) **The PM10 emissions from the Weigh Scale shall not exceed 0.005 pounds per hour.**

- (5) **The PM10 emissions from the Railcar Receiving Station shall not exceed 0.095 pounds per hour.**
- (6) **The PM10 emissions from the Raw Material Silos shall not exceed 0.04 pounds per hour, total.**
- (7) **The PM10 emissions from the Batch Transfer System shall not exceed 0.053 pounds per hour.**
- (8) **Following startup of the Electric Melter (Section D.2) but before the Line 2 Forming and Collection Module (Section D.3) is back online, the Permittee shall permanently remove the existing mixer, existing bucket elevator, Day Bin 2N, Day Bin 3E, and Day Bin 3W.**

D.1.3 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~~ **these facilities** and ~~any~~ **their** control devices.

**Compliance Determination Requirements**

D.1.4 Particulate Matter (PM) Control

- (a) In order to comply with Conditions D.1.1 (for the rail car unloading station) and D.1.2(a)(1), the ~~baghouse~~ **boot lift device** used to control PM emissions and opacity from the rail car unloading station shall be in operation at all times ~~when~~ the **associated** rail car unloading station is in operation.
- (b) In order to comply with Conditions D.1.1, D.1.2(a)(3) and D.1.2(b), the ~~baghouses~~ **used to control PM emissions from the Railcar Receiving Station, Raw Material Silos, Day Bin 1, Day Bin 2, Mixer, Batch Transfer System and Weigh Scale shall be in operation at all times the associated units are in operation.**
- (c) In order to comply with Conditions D.1.1 and D.1.2(a)(4), the ~~baghouses~~ **used to control PM emissions from day bins S31, S32, S33 and S164 shall be in operation at all times the associated units are in operation.**
- (d) In the event that bag failure is observed in a multi-compartment bagfilter, 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.1.5 Visible Emissions Notations

- (a) Visible emission notations of the ~~stack exhaust from the Railcar unloading Receiving Station, Raw Material batch Silos, Day Bin 1 and Day Bin 2 and day bins' stack exhaust~~ **stack exhaust from the Railcar unloading Receiving Station, Raw Material batch Silos, Day Bin 1 and Day Bin 2** shall be performed once per shift ~~day~~ **day** during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) **Visible emission notations of the stack exhaust from day bins S31, S32, S33 and S164 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.**

...

- (e f) **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances.** The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan – Failure to Take Response Steps **Response to Excursions and Exceedances**, shall be considered a violation of **deviation from** this permit.

#### D.1.6 Parametric Monitoring

---

- (a) The Permittee shall record the ~~total static~~ pressure drop across baghouses used in conjunction with the ~~rail car unloading station~~ **Railcar Receiving Station, Raw Material Silos, and Day Bins** at least once per ~~shift~~ **day** when the ~~unloading station is~~ **respective facilities are** in operation. ~~When for any one reading, the pressure drop across baghouse equipped with the rail car unloading station is outside the normal range of 2.0 and 4.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports. 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 – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.~~
- (b) **The Permittee shall record the pressure drop across baghouses used in conjunction with day bins S31, S32, S33 and S164 at least once per day when the respective facilities are in operation.**
- (c) **When for any one reading, the pressure drop is outside the normal range of 1.0 and 7.0 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.**
- (d) The instrument used for determining the pressure shall comply with Section C - ~~Pressure Gauge and Other~~ 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.1.7 Baghouse Inspections~~

---

~~An inspection shall be performed within the last month of each calendar quarter of the baghouses controlling the exhausts from the rail car unloading station.~~

#### D.1.87 Broken or Failed Bag Detection

---

In the event that bag failure has been observed:

- (a) ~~For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B – Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C – Compliance Response Plan – Preparation, Implementation, Records, and Reports, shall be considered a violation of this permit.~~
- (b) ~~For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have 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).~~

- (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 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.1.98 Record Keeping Requirements**

---

- (a) To document compliance with Conditions D.1.2 and D.1.5, the Permittee shall maintain **once per day** records of ~~the~~ visible emission notations **required by that condition.** ~~of the mentioned stack exhaust once per shift.~~
- (b) To document compliance with Condition D.1.6, the Permittee shall maintain once per ~~shift~~ **day** records of the inlet and outlet differential static pressure **drop readings required by that condition.** ~~during normal operation for the baghouse equipped with rail car unloading station.~~
- ~~(c) To document compliance with Condition D.1.7, the Permittee shall maintain records of the results of the inspections required under Condition D.1.7.~~
- (dc) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

**SECTION D.2 FACILITY OPERATION CONDITIONS**

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

**Melt Furnaces**

(b) Melt Facilities:

- (1) One (1) Line 2 natural gas-fired melt furnace, installed in 1961 and modified in 2000, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by the existing electrostatic precipitator before the airstream is exhausted to Stack S5;
- (2) One (1) Line 3 natural gas-fired melt furnace, installed in 1961 and to be modified in 2001, with a maximum glass production rate of 7,200 pounds per hour. The maximum heat input capacity of the melt furnace has been included in an OAQ confidential file. The molten material flows from the furnace to the fiber forming process. The particulate emissions in the airstream are controlled by an electrostatic precipitator before the airstream is exhausted to Stack S5; and
- ~~(3) One (1) Line 6 electric melter, installed in 1974 and to be modified in 2001 and 2002, with a maximum glass production rate of 4,000 pounds per hour. The molten material flows from the melter to the fiber forming process. The particulate emissions from the melter are controlled by a fabric filter before the airstream is exhausted to Stack S7.~~
- (3) One (1) Electric Melter; constructed in 2006; a maximum production rate of 17,500 pounds of molten glass per hour; emissions controlled by a baghouse and exhausting to stack S166. The molten glass flows from the melter to the Line 2 and Line 3 fiber forming/collection modules.**

(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 Matter (PM) Volatile Organic Compounds (VOC), and Carbon Monoxide (CO) [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14][326 IAC 12(40 CFR 60.293, Subpart CC)]

- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules) **and as revised by 177-22008-00006**, each furnace shall comply with the following limitations:

Facility	Pollutant Emission Limitations, lb/ton of glass pulled		
	PM/PM10	VOC	CO
Line 2 Melt Furnace	<del>0.25</del> 0.23	0.38	0.85
Line 3 Melt Furnace	<del>0.25</del> 0.23	0.38	0.85
<del>Line 6 Melter</del>	<del>0.45</del>	<del>0.38</del>	<del>0.85</del>

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensable fractions.

- (b) Pursuant to CP-177-5873-00006, issued April 22, 1999, 326 IAC 2-2-3(a)(3) (PSD Rules) and 326 IAC ~~6-1-14~~ **6.5-10-11**, the particulate matter (PM) emissions from each furnace shall comply with the following limitations:

Facility	PM/PM10 Emission Limitations	
	tons/yr	gr/dscf
Line 2 Melt Furnace	7.8	0.01
Line 3 Melt Furnace		0.01
Line 6 Melter	3.9	0.02

- (c) Pursuant to 40 CFR 60.292, Subpart CC (Standards of Performance for Glass Manufacturing Plants), the particulate matter from the Line 2 and Line 3 melt furnaces shall not exceed 0.25 grams per kilogram (0.5 pounds per ton) of glass produced. Compliance with the limits in Condition D.2.1(a) will ensure compliance with this limit.
- (d) To ensure compliance with Condition D.2.1(a), the lines 2 and 3 melt furnaces shall only use natural gas.

**D.2.2 Sulfur Dioxide and Nitrogen Oxides [326 IAC 2-2]**

Pursuant to CP-177-5873-00006, issued April 22, 1999, each furnace shall comply with the following limitations for NO<sub>x</sub> and SO<sub>2</sub> in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable:

Facility	Pollutant Emission Limitations, lb/hr	
	NO <sub>x</sub>	SO <sub>2</sub>
Line 2 Melt Furnace	3.41	0.20
Line 3 Melt Furnace	3.41	0.20
Line 6 Melter	0.08	0.14

**D.2.3 Operation Standards [326 IAC 2-2-3(a)(3)]**

Pursuant to ~~CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3)~~ **SSM 177-22008-00006**, the furnaces shall comply with the following limitations:

- (a) Line 2 Melt Furnace shall not exceed a glass production rate of ~~7,200~~ **7,800** pounds per hour (equivalent to ~~31,536~~ **34,164** tons per ~~year~~ **twelve consecutive month period**);
- (b) Line 3 Melt Furnace shall not exceed a glass production rate of ~~7,200~~ **7,800** pounds per hour (equivalent to ~~31,536~~ **34,164** tons per ~~year~~ **twelve consecutive month period**); and.
- ~~(c) Line 6 Melter shall not exceed a glass production rate of 4,000 pounds per hour (equivalent to 17,520 tons per year).~~

**D.2.4 Particulate Matter (PM10), Volatile Organic Compounds (VOC), Carbon Monoxide (CO) and Production Limitations [326 IAC 2-2]**

In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to **SSM 177-22008-00006**:

- (a) The PM10 emissions from the Electric Melter shall not exceed 0.49 pounds per hour.
- (b) The VOC emissions from the Electric Melter shall not exceed 1.1 pounds per hour.
- (c) The CO emissions from the Electric Melter shall not exceed 0.83 pounds per hour.

- (d) Prior to the operation of the Electric Melter, the Permittee shall permanently shut down the Line 3 Melt Furnace.
- (e) The production rate of the Electric Melter shall not exceed 8,750 pounds of glass per hour (on a 4-hr average basis) until the Line 2 Melt Furnace and Line 3 Melt Furnace have been permanently shut down.
- (f) The production rate of the Electric Melter shall not exceed 17,500 pounds of glass per hour (on a 4-hr average basis).

**D.2.5 Particulate Matter (PM) Emission Limitations [326 IAC 6.5-1]**

Pursuant to 326 IAC 6.5-1-2(a), the particulate matter (PM) emissions from the Electric Melter, shall not exceed 0.03 grains per dry standard cubic foot.

**D.2.46 Preventive Maintenance Plan**

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this facility~~ **these facilities** and ~~its~~ **their** control devices.

**Compliance Determination Requirements**

**D.2.57 Particulate Matter (PM) Control**

- (a) In order to comply with **Condition D.2.1**, the electrostatic precipitator for PM control shall be in operation and control emissions from the Line 2 and Line 3 natural gas-fired melt furnaces at all times when either furnace is in operation.
- ~~(b) In order to comply with D.2.1, the fabric filter for PM control shall be in operation at all times when the line 6 electric melter is in operation.~~
- (b) In order to comply with **Conditions D.2.4 and D.2.5**, the baghouse for PM control shall be in operation at all times the associated Electric Melter is in operation.
- (c) In the event that bag failure is observed in a multi-compartment bagfilter, 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.

**D.2.68 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [~~326 IAC 12 (40 CFR 60.296, Subpart CC)~~]**

~~Pursuant to CP 177-5873-00006, issued April 22, 1999 and 40 CFR 60.296, Subpart CC, the following compliance stack tests shall be performed for the following facilities within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up:~~

Stack	Process	PM/PM10	NOx
S5	Line 2	0.25 lb/ton 0.01 gr/dscf	3.41 lbs/hr
S5	Line 3	0.25 lb/ton 0.01 gr/dscf	3.41 lbs/hr
S7	Line 6	0.45 lb/ton 0.020 gr/dscf	No Testing Required

~~PM/PM10 means that the PM limit and the PM10 limit are the same. PM shall be measured in accordance with 40 CFR 60, Appendix A, Method 5 or other methods as approved by the Commissioner. PM10 shall be measured in accordance with 40 CFR 51, Appendix M, Method 201 A and 202, or other methods as approved by the Commissioner. For the Lines 2 and 3 furnaces the emission rate shall be determined as specified in 40 CFR 60.296(d).~~

~~The MMBtu per hour ratings of each combustion unit to be tested (Lines 2 and 3 Melt Furnaces and Lines 2, 3, and 6 Manufacturing Processes) shall be included in the test protocol.~~

**In order to demonstrate compliance with Condition D.2.4, the Permittee shall perform PM/PM10, VOC and CO testing on the Electric Melter no later than 180 days after initial startup. These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.**

## Compliance Monitoring Requirements

### D.2.79 Electrostatic Precipitator (ESP) Operation Condition

- (a) The Permittee shall maintain the field voltages of the ESP at a minimum level of 20 kilovolts or a minimum level determined from a compliant stack test. At least once per shift the Permittee shall monitor and record the primary voltage and amperage of the T-R sets and the voltages and amperages of the three (3) fields. ~~The Compliance Response Plan for the ESP shall contain troubleshooting contingency and response steps for the ESP~~ **The Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances** when the voltage of the T-R set drops five (5) direct current kilovolts below the predetermined baseline or if less than 90% of the total T-R sets are functioning.
- (b) The instrument used for determining the T-R set voltage shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.
- (c) ~~An inspection of the ESP shall be performed each calendar quarter. A record shall be kept of the results of the inspection and the number of ESP part(s) replaced.~~
- (d c) In the event that an ESP failure has been observed:
- (1) All reasonable measures shall be taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits;
  - (2) All possible steps shall be taken to minimize the impact of the excessive emissions on ambient air quality which may include but not limited to curtailment of operation and/or shutdown of the facility; and
  - (3) Failure or partial failure of the control device shall be reported to IDEM, OAQ according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM, OAQ.

### D.2.8 Parametric Monitoring

~~The Permittee shall record the total static pressure drop across the fabric filters used in conjunction with the processes, at least once per shift when the processes are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the fabric filter shall be maintained within the range of 3.0 and 6.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

~~The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and other 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.2.9 Fabric Filter Inspections

~~An inspection shall be performed each calendar quarter of all fabric filters controlling the furnaces when venting to the atmosphere. A fabric filters inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective filters shall be replaced.~~

#### D.2.10 Broken or Failed Filter Detection

~~In the event that filter failure has been observed:~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~
- ~~(b) For single compartment fabric filters, failed units and the associated process will be shut down immediately until the failed units have 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.2.11 Visible Emission Notations

- ~~(a) Visible emission notations of the ESP and the fabric filter stack exhaust shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. 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, 80% of the time the process is in operation, not counting start up or shut down time.~~
- ~~(c) In the case of batch or discontinuous operation, readings shall be taken during that part of the operation specified in the facility's specific condition prescribing visible 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 and abnormal visible emissions for that specific process.~~
- ~~(e) The Compliance Response Plan for this facility shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~

#### D.2.10 Production Monitoring

- ~~(a) The Permittee shall continuously monitor the glass production rate (in pounds per hour) from the Line 3 Melt Furnace, Line 2 Melt Furnace and the Electric Melter~~

when the respective units are in operation. For the purposes of this condition, 'continuously' means no less than once per fifteen minute period.

- (b) Monitoring shall be done with an infrared camera system (or its equivalent) that monitors various physical characteristics of the glass produced which is used to determine the glass production rate (in pounds per hour).
- (c) The Permittee may use another, equivalent system to comply with this condition once such system is approved by IDEM, OAQ.

#### **D.2.11 Visible Emissions Notations**

---

- (a) Visible emission notations of the stack exhaust from the Electric Melter shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) Visible emission notations of the stack exhaust from the Line 2 Melt Furnace and Line 3 Melt Furnace shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (c) 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.
- (d) 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.
- (e) 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.
- (f) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

#### **D.2.12 Parametric Monitoring**

---

- (a) The Permittee shall record the pressure drop across the baghouse used in conjunction with the Electric Melter, at least once per day when the Melter is in operation.
- (b) The Permittee shall record the pressure drop across the baghouses used in conjunction with the Line 2 Melt Furnace and Line 3 Melt Furnace at least once per day when the respective facilities are in operation.
- (c) When for any one reading, the pressure drop is outside the normal range of 2.0 and 4.0 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.
- (d) 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.2.13 Broken or Failed Bag Detection**

- (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 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 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

### D.2.12 14 Record Keeping Requirement

- (a) ~~To document compliance with Condition D.2.11, the Permittee shall maintain records of visible emission notations of the ESP and fabric filter stack exhaust once per shift.~~
- (b) ~~To document compliance with Condition D.2.8, the Permittee shall maintain the following:~~
- (1) ~~Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:~~
- (A) ~~Inlet and outlet differential static pressure; and~~
- (B) ~~Cleaning cycle operation.~~
- (2) ~~Documentation of the dates vents are redirected.~~
- (c) To document compliance with **Condition D.2.7 D.2.9**, the Permittee shall maintain records of the following:
- (1) Field voltages of the ESP.
- (2) Primary voltage and amperage of the T-R sets.
- (3) Voltages and amperages for the three (3) fields.
- (4) Results from the semi-annual calibration of the instrument used for determining the T-R set voltage.
- (5) Results from the quarterly inspection of the ESP.
- (d) ~~To document compliance with D.2.9, the Permittee shall maintain records of the results of the inspections required under Condition D.2.9.~~
- (e) ~~To document compliance with D.2.1(b) and D.2.3, the Permittee shall maintain records of the monthly production rate for each line.~~
- (b) To document compliance with **Condition D.2.11**, the Permittee shall maintain once per day records of the visible emission notations required by that condition.

- (c) **To document compliance with Condition D.2.12, the Permittee shall maintain once per day records of the pressure drop readings required by that condition.**
- (d) **From the time of permit issuance until Melt Furnace #2 is permanently shut down, the Permittee shall record the respective shut down and startup date and times for the following units: Line 2 Melt Furnace, Line 3 Melt Furnace, and the Electric Melter.**
- (e) **To document compliance with Condition D.2.10, the Permittee shall record the glass production rates monitored by that condition.**
- (f) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.2.1315 Reporting Requirements**

---

A quarterly summary of the information to document compliance with Condition D.2.1(b) and D.2.3 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).

## SECTION D.3 FACILITY OPERATION CONDITIONS

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

#### Manufacturing Lines - Forming, Curing, and Cooling

(c) Forming Facilities:

- (1) One (1) **Line 2 Forming and Collection Module** ~~Line 2 forming chamber for unbonded product,~~ installed in 1961 **and modified in 2006**, with a maximum **unbonded** glass production rate of **8,750** ~~7,200~~ pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured and transferred to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2. **Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 2 forming chamber for unbonded product)**
- (2) One (1) **Line 3 Forming and Collection Module** ~~Line 3 forming chamber for unbonded product,~~ installed in 1961 and modified in 2000 **and 2006**, with a maximum glass production rate of **8,750** ~~7,200~~ pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. The unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions from unbonded product before the airstream is exhausted to Stack S3. **Under 40 CFR Part 60, Subpart PPP, this is considered a rotary spin wool fiberglass insulation manufacturing line. (Formerly referred to as the Line 3 forming chamber for unbonded product)**
- ~~(3) One (1) Line 6 forming chamber for bonded and unbonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. Natural gas is utilized in the combustion section of the forming chamber. The maximum heat input capacity of the combustion section has been included in an OAQ confidential file. As fibers are formed, they are carried in the airstream towards a moving collection chain where they are captured. A binder is added to the bonded product which is transferred to a curing oven and the unbonded product is transferred directly to the shredding process. A water spray is applied to the airstream to control particulate matter emissions before the airstream is exhausted to Stack S2.~~

(d) Curing and Cooling Facilities:

- ~~(1) One (1) Line 6 natural gas fired curing oven and cooling process for bonded product, installed in 1974, with a maximum glass production rate of 4,000 pounds per hour. The particulate emissions in the airstream are controlled by a high efficiency air filter (HEAF) before the airstream is exhausted to Stack S2.~~

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

### Emission Limitations and Standards

#### D.3.1 Pollutant Emission Limitations [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14]

- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, ~~and 326 IAC 2-2-3(a)(3)~~ (Prevention of Significant Deterioration (PSD) Rules), **and as revised by SSM 177-**

**22008-00006**, each **Forming and Collection Module** manufacturing line shall comply with the following limitations:

(1) ~~Unbonded Product Limitations~~

Facility	Pollutant Limitations		
	PM/PM10 (lb/hr) (lb/ton glass pulled)	VOC (lbs/hr)	CO (lbs/hr)
Line 2 Forming and Collection Process	<del>10.28</del> 3.70	6.78	21.0
Line 3 Forming and Collection Process	<del>10.28</del> 3.70	6.78	21.0
Line 6 Forming Process	3.70	<del>3.77</del>	<del>25.3</del>

(2) ~~Bonded Product Limitations~~

Facility	Pollutant Limitations		
	PM/PM10 (lb/ton glass pulled)	VOC (lbs/hr)	CO (lbs/hr)
Line 6 Cooling Process	0.29	0.40	0.39
Line 6 Forming Process	7.84	8.66	25.3
Line 6 Curing Process	1.99	1.50	1.22

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensable fractions. The particulate matter emissions established above demonstrate compliance with 40 CFR 60, Subpart PPP (New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants).

(b) **In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:**

- (1) **The CO emissions from the L2 Forming and Collection Module shall not exceed 15.6 pounds per hour.**
- (2) **The CO emissions from the L3 Forming and Collection Module shall not exceed 15.6 pounds per hour.**

**Compliance with these requirements shall limit the CO emissions increase of the modification described in SSM 177-22008-00006 to less than one hundred (100) tons per year.**

(bc) Pursuant to ~~CP-177-5873-00006~~, issued April 22, 1999, and **326 IAC 6.5-10-11** ~~326 IAC 6-4-14~~, the particulate matter (PM) emissions from each **Forming and Collection Module** manufacturing line shall comply with the following limitations:

Facility	PM Emission Limitations	
	tons/yr	gr/dscf
Line 2 Forming and Collection Process	58.3	0.02
Line 3 Forming and Collection Process	123.6	0.02
Line 3 Curing Process	27.4	0.02
Line 6 Forming Process	45.4	0.02
Line 6 Curing Process	6.2	0.02

- (ed) Pursuant to CP-177-5873-00006, issued April 22, 1999, each **Forming and Collection Module** manufacturing line shall comply with the following limitations for NO<sub>x</sub> and SO<sub>2</sub> in order to render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

Facility	Pollutant Emission Limitations, lbs/hr	
	NO <sub>x</sub>	SO <sub>2</sub>
Line 2 Forming and Collection Process	2.03	--
Line 3 Forming and Collection Process	2.03	--
Line 6 Cooling Process	0.25	--
Line 6 Forming Process	2.18	--
Line 6 Curing Process	0.84	--

- (d) The hazardous air pollutant emissions from manufacturing lines 2, 3, and 6 shall be limited to less than a total of twenty-five (25) tons per year and less than ten (10) tons per year of any single HAP. This will render 326 IAC 2-4.1 (New Source Toxics Control Rule) and 40 CFR 63, Subpart NNN not applicable.

...

D.3.2 Operation Standards

- (a) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the line 2 Forming Process shall not exceed a glass production rate of unbonded product of 7,200 pounds per hour;
- (b) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the line 3 Forming Process shall not exceed a glass production rate of unbonded product of 7,200 pounds per hour; and
- (c) Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the line 6 Forming, Curing and Cooling Process shall not exceed a glass production rate of 4,000 pounds per hour.
- (d) The production of product from each line shall be limited as follows to demonstrate compliance with the annual PM emission limitations required by Operation Condition D.3.1(b):

Facility	Combined Bonded and Unbonded Glass Production Limitation, tons/yr
Line 2 Forming Process	31,536
Line 3 Forming Process	31,536
Line 6 Forming Process	17,520

- (e) ~~The production of bonded product from Line 6 shall be limited to 6,240 tons of glass per year, rolled on a monthly basis, to demonstrate compliance with the PM, VOC, and HAP emission limitations required by Operation Condition D.3.1(a) and (d).~~

**D.3.32 Preventive Maintenance Plan**

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for **these facilities** ~~this facility~~ and **their** ~~its~~ control devices.

**Compliance Determination Requirements**

**D.3.43 Control Device Operating Conditions Particulate Matter (PM) Control**

- (a) ~~In order to comply with Condition D.3.1, the high efficiency air filters (HEAF) associated with the Line 6 curing and cooling process shall be operated at all times when its associated process is in operation.~~
- (b) ~~In order to comply with Condition D.3.1, the water spray systems associated with the manufacturing lines shall be operated at all times when the respective forming and collection modules forming sections are in operation.~~

~~D.3.5 Testing Requirements (326 IAC 2-7-69(1), (6)) [326 IAC 2-1.1-11]~~

~~Pursuant to CP 177 5873 00006, issued April 22, 1999, the following compliance stack tests shall be performed within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up. Line 6 shall be performed for both bonded and unbonded products:~~

Stack	Process	PM/PM101	NOx2	VOC	CO	HAP3
S2	Line 2 Forming- Unbonded	3.70 lb/ton 0.02 gr/dscf	2.03 lbs/hr	6.78 lb/hr	21.0 lb/hr	
S2	Line 6 Forming- Unbonded	3.70 lb/ton 0.02 gr/dscf	2.18 lbs/hr	3.77 lb/hr	25.3 lb/hr	
S2	Line 6 Forming/Curing/ Cooling - Bonded	10.1 lb/ton 0.02 gr/dscf	3.27 lbs/hr	10.6 lb/hr	26.9 lb/hr	2.28 lb/hr single HAP; 5.71 lb/hr combine d HAP
S3	Line 3 Forming- Unbonded	3.70 lb/ton 0.02 gr/dscf	2.03 lbs/hr	6.78 lb/hr	21.0 lb/hr	

~~PM/PM10 means that the PM limit and the PM10 limit are the same. PM shall be measured in accordance with 40 CFR 60, Appendix A, Method 5 or other methods as approved by the Commissioner. PM10 shall be measured in accordance with 40 CFR 51, Appendix M, Methods 201A and 202, or other methods as approved by the Commissioner.~~

~~The MMBtu per hour ratings of each combustion unit to be tested (Lines 2 and 3 Melting Furnaces and Lines 2, 3, and 6 Manufacturing Processes) shall be included in the test protocol.~~

~~HAP Compliance Tests shall consist of formaldehyde and phenol. The compliance tests shall be performed during the production of bonded product for line 6. Single HAP emissions from line 6 shall not exceed a total of 10 tons per year for a single HAP and 25 tons per year for combined HAPs to demonstrate compliance with Operation Condition No. D.3.1(d).~~

**D.3.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]**

In order to demonstrate compliance with Condition D.3.1(a) and D.3.1(b), the Permittee shall perform PM/PM10, VOC and CO testing on one of the Forming and Collection Modules

**no later than 180 days after initial startup of the Electric Melter. The unit tested shall not have been tested in the last six (6) years. These tests shall be repeated once every five (5) years from the date of valid compliance demonstration utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.**

## Compliance Monitoring Requirements

### D.3.65 Visible Emission Notations

---

- (a) Visible emission notations of ~~the stack stacks S2 and S3~~ exhaust **from the Line 2 and Line 3 Forming and Collection Modules** shall be performed once per shift day during normal daylight operations **when the respective facilities are in operation when exhausting to the atmosphere.** A trained employee shall record whether emissions are normal or abnormal.
- ...
- (e) **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances.** ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps~~ **Response to Excursions and Exceedances**, shall be considered a violation of **deviation from** this permit.

### ~~D.3.7 High Efficiency Air Filter (HEAF) Operating Condition~~

---

- (a) ~~The Permittee shall monitor and record the total static pressure drop across the HEAF, at least once per shift. The pressure drop across the HEAF shall be maintained within a pressure drop range of 1.0 and 7.0 inches of water. The pressure drop range may be adjusted to incorporate the pressure drop determined by a compliant stack test. If the water pressure falls outside of the determined range, corrective action shall be taken in accordance with the Permittee's Preventive Maintenance Plan. The company shall document the cause of the out-of-range reading and take immediate action to correct any problem. Failure or partial failure of the control device shall be reported to IDEM, OAQ according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM, OAQ.~~
- (b) ~~The instrument used for determining the pressure shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.~~
- (c) ~~An inspection of the HEAF shall be performed each calendar quarter. Defective media shall be replaced. A record shall be kept of the results of the inspection and the media replaced.~~
- (d) ~~In the event that a media failure has been observed and emissions temporarily exceed the standards:~~
- (1) ~~All reasonable measures shall be taken to correct, as expeditiously as practicable, the conditions causing the emissions to exceed the allowable limits;~~
  - (2) ~~All possible steps shall be taken to minimize the impact of the excessive emissions on ambient air quality which may include but not limited to curtailment of operation and/or shutdown of the facility; and~~
  - (3) ~~Failure or partial failure of the control device shall be reported to IDEM, OAQ according to the procedure specified for malfunctions in 326 IAC 1-6-2, in which case the provisions of 326 IAC 1-6-5 may apply at the discretion of IDEM, OAQ.~~

## Record Keeping and Reporting Requirements

### D.3.86 Record Keeping Requirement

---

- (a) To document compliance with Condition ~~D.3.6~~ **D.3.5**, the Permittee shall maintain **once per day** records of **the** visual emission notations **required by that condition** of ~~manufacturing lines stack exhaust once per shift.~~
- (b) ~~To document compliance with Condition D.3.7, the Permittee shall maintain records of the following:~~
- (1) ~~Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:~~
- (A) ~~Inlet and outlet differential static pressure; and~~
- (B) ~~Cleaning cycle operation.~~
- (2) ~~Documentation of the dates vents are redirected.~~
- (3) ~~Results from the semi-annual calibration of the instrument used for determining the pressure of the HEAF.~~
- (4) ~~Results from the quarterly inspection of the HEAF.~~
- (c) ~~To document compliance with Conditions D.3.1 and D.3.2, the Permittee shall maintain records of the monthly production rate from each line.~~
- (db) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### ~~D.3.9 Reporting Requirements~~

---

~~A quarterly summary of the information to document compliance with Conditions D.3.1 and D.3.2 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 2-7-5(1)]

### D.3.7 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 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1-1, for Line 2 Forming and Collection Module and Line 3 Forming and Collection Module except as otherwise specified in 40 CFR Part 60, Subpart PPP.
- (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  
Indianapolis, Indiana 46204-2251

### D.3.8 New Source Performance Standards for Wool Fiberglass Insulation Manufacturing Plants: Requirements [40 CFR Part 60, Subpart PPP]

---

Pursuant to 40 CFR Part 60, Subpart PPP, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart PPP for the Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module as specified as follows:

**§ 60.680 Applicability and designation of affected facility**

(a) The affected facility to which the provisions of this subpart apply is each rotary spin wool fiberglass insulation manufacturing line.

(b) The owner or operator of any facility under paragraph (a) of this section that commences construction, modification, or reconstruction after February 7, 1984, is subject to the requirements of this subpart.

**§ 60.681 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.

*Glass pull rate* means the mass of molten glass utilized in the manufacture of wool fiberglass insulation at a single manufacturing line in a specified time period.

*Manufacturing line* means the manufacturing equipment comprising the forming section, where molten glass is fiberized and a fiberglass mat is formed; the curing section, where the binder resin in the mat is thermally "set;" and the cooling section, where the mat is cooled.

*Rotary spin* means a process used to produce wool fiberglass insulation by forcing molten glass through numerous small orifices in the side wall of a spinner to form continuous glass fibers that are then broken into discrete lengths by high velocity air flow.

*Wool fiberglass insulation* means a thermal insulation material composed of glass fibers and made from glass produced or melted at the same facility where the manufacturing line is located.

**§ 60.682 Standard for particulate matter.**

On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of 5.5 kg/Mg (11.0 lb/ton) of glass pulled.

**§ 60.685 Test methods and procedures.**

(a) 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).

(b) The owner or operator shall conduct performance tests while the product with the highest loss on ignition (LOI) expected to be produced by the affected facility is being manufactured.

(c) The owner or operator shall determine compliance with the particulate matter standard in §60.682 as follows:

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

$$E=(C_t Q_{sd})/(P_{avg} K)$$

where:

E = emission rate of particulate matter, kg/Mg (lb/ton).

C<sub>t</sub> = concentration of particulate matter, g/dscm (gr/dscf).

Q<sub>sd</sub> = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

P<sub>avg</sub> = average glass pull rate, Mg/hr (ton/hr).

**K = 1,000 g/kg (7,000 gr/lb).**

**(2) Method 5E shall be used to determine the particulate matter concentration ( $C_i$ ) and the volumetric flow rate ( $Q_{sd}$ ) of the effluent gas. The sampling time and sample volume shall be at least 120 minutes and 2.55 dscm (90.1 dscf).**

**(3) The average glass pull rate ( $P_{avg}$ ) for the manufacturing line shall be the arithmetic average of three glass pull rate ( $P_i$ ) determinations taken at intervals of at least 30 minutes during each run.**

**The individual glass pull rates ( $P_i$ ) shall be computed using the following equation:**

$$P_i = K' L_s W_m M [1.0 - (LOI/100)]$$

**where:**

**$P_i$ =glass pull rate at interval "i", Mg/hr (ton/hr).**

**$L_s$ =line speed, m/min (ft/min).**

**$W_m$ =trimmed mat width, m (ft).**

**$M$ =mat gram weight, g/m<sup>2</sup> (lb/ft<sup>2</sup>).**

**LOI=loss on ignition, weight percent.**

**$K'$ =conversion factor,  $6 \times 10^{-5}$  (min-Mg)/ (hr-g) [ $3 \times 10^{-2}$  (min-ton)/(hr-lb)].**

**(i) ASTM D2584-68 (Reapproved 1985) or 94 (incorporated by reference—see §60.17), shall be used to determine the LOI for each run.**

**(ii) Line speed ( $L_s$ ), trimmed mat width ( $W_m$ ), and mat gram weight ( $M$ ) shall be determined for each run from the process information or from direct measurements.**

**(d) To comply with §60.684(d), the owner or operator shall record measurements as required in §60.684 (a) and (b) using the monitoring devices in §60.683 (a) and (b) during the particulate matter runs.**

**[54 FR 6680, Feb. 14, 1989, as amended at 65 FR 61778, Oct. 17, 2000]**

## SECTION D.4

## FACILITY OPERATION CONDITIONS

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

#### Shredding and Packaging Areas

(ed) Shredding and Packaging Facilities:

- (1) One (1) Line 2 shredding process for unbonded product, installed in 1994. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by ~~two (2) baghouses~~ **a baghouse system** before the airstream is exhausted to Stacks S85, ~~and S86 and S87~~;
- (2) One (1) Line 2 packaging area for unbonded product, installed in 1994 **and modified in 2006**. The airstream is separated from the unbonded shredded product via a cyclone. Fiberglass collected in the cyclones is deposited in the packaging hopper and subsequently packaged for sale **using a bagging system**. The particulate emissions in the cyclone airstream are controlled by ~~two (2) baghouses~~ **a baghouse system** before the airstream is exhausted to Stacks S85, ~~and S86 and S87~~;
- (3) One (1) Line 3 shredding process for unbonded product, installed in 1993. The shredded fiber is pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by ~~two (2) baghouses~~ **a baghouse system** before the airstream is exhausted to Stacks S12, ~~and S13 and S14~~;
- (4) One (1) Line 3 packaging area for unbonded product, installed in 1993 **and modified in 2006**. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale **using a bagging system**. The particulate matter emissions in the cyclone airstream are controlled by ~~two (2) baghouses~~ **a baghouse system** before the airstream is exhausted to Stacks S12, ~~and S13 and S14~~.
- ~~(5) One (1) Line 6 shredding process for unbonded and bonded product, installed in 1974. The shredded fiber is then pneumatically transferred to the packaging area. During the shredding process an anti-static agent and oil are applied to the product and any particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted to Stack S11; and~~
- ~~(6) One (1) Line 6 packaging area for unbonded and bonded product, installed in 1974. The airstream is separated from the unbonded shredded product via a cyclone. Fiber glass collected in the cyclone is deposited in the packaging hopper and subsequently packaged for sale. The particulate emissions in the cyclone airstream are controlled by a baghouse before being exhausted to Stack S11. The bonded product from Line 6 may also be trimmed and packaged. This operation generates negligible particulate matter emissions that are uncontrolled.~~

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

## Emission Limitations and Standards

### D.4.1 Particulate Matter Emission Limitations

- (a) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), **and as revised by SSM 177-22008-00006**, each shredding and packaging area shall comply with the following limitations:

Facility	Facility Stacks	PM/PM10 Emission Limitations, lb/ton glass pulled (lb/hr)
Line 2 Shredding and Packaging	S85, <del>S86</del> and S87	<del>0.26</del> <b>1.86</b>
Line 2 Shredding and Packaging	S86	0.26
Line 3 Shredding and Packaging	S12, <del>S13</del> and S14	<del>0.29</del> <b>3.09</b>
Line 3 Shredding and Packaging	S13	0.57
Line 6 Shredding and Packaging	S14	0.65

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensible fractions.

- (b) **In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006:**
- (1) **The PM10 emissions from the L2 Shredding Process and L2 Packaging Area shall not exceed 0.9 pounds per hour, total.**
  - (2) **The PM10 emissions from the L3 Shredding Process and L3 Packaging Area shall not exceed 0.9 pounds per hour, total.**

### D.4.2 Particulate Matter [336 IAC 6.5-1-2]

Pursuant to 326 IAC ~~6.5-1-2~~ 6-1-2(a) (Particulate Emission Limitations for General Sources), the allowable PM emission rates for each of the shredding and packaging facilities listed in this section shall not contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).

### D.4.3 Operation Standards

~~Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3), the shredding and packaging processes shall comply with the following limitations:~~

- ~~(a) Line 2 Shredding and Packaging Process shall not exceed a glass production rate of 7,200 pounds per hour (equivalent to 31,536 tons per year); and~~
- ~~(b) Line 3 Shredding and Packaging Process shall not exceed a glass production rate of 7,200 pounds per hour (equivalent to 31,536 tons per year); and~~
- ~~(c) Line 6 Shredding and Packaging Process shall not exceed a glass production rate of 4,000 pounds per hour (equivalent to 17,520 tons per year).~~

### D.4.43 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for **these facilities** ~~this facility~~ and **its** ~~their~~ control devices.

## Compliance Determination Requirements

### D.4.54 Particulate Matter (PM) Control

- (a) In order to comply with Conditions D.4.1 and D.4.2, the baghouses for PM control shall be in operation at all times the associated shredding and packaging facilities are in operation.
- (b) **In the event that bag failure is observed in a multi-compartment bagfilter, 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.**

### D.4.6 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Pursuant to CP 177-5873-00006, issued April 2, 1999, the following compliance stack tests shall be performed within 60 days after achieving maximum production rate, but not later than 180 days after initial start-up:

Stack	Process	PM/PM101 (lb/ton glass pulled)
S11	Line 6	0.65 lb/ton
S12	Line 3	0.29 lb/ton
S13	Line 3	0.57 lb/ton
S85	Line 2	0.26 lb/ton
S86	Line 2	0.26 lb/ton

~~PM/PM10 means that the PM limit and the PM10 limit are the same. PM shall be measured in accordance with 40 CFR 60, Appendix A, Method 5 or other methods as approved by the Commissioner. PM10 shall be measured in accordance with 40 CFR 51, Appendix M, Methods 201A and 202, or other methods as approved by the Commissioner.~~

## Compliance Monitoring Requirements

### D.4.75 Visible Emission Notations

- (a) Visible emission notations of the shredding and packaging areas baghouse systems stack exhaust shall be performed once per ~~shift~~ **day** during normal daylight operations ~~when exhausting to the atmosphere~~. A trained employee shall record whether emissions are normal or abnormal.
- ...
- (e) **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances.** ~~The Compliance Response Plan for this facility shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan—Failure to Take Response Steps~~ **Response to Excursions and Exceedances**, shall be considered a violation of ~~deviation from~~ **deviation from** this permit.

### D.4.86 Parametric Monitoring

~~The Permittee shall record the total static pressure drop across the baghouses used in conjunction with the processes shredding and packaging processes, at least once per shift day when the respective processes is are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this~~

~~unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~  
**When for any one reading, the pressure drop across a baghouse is outside the normal range of 1.0 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 - ~~Pressure Gauge 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.4.9 Baghouse Inspections~~

---

~~An inspection shall be performed each calendar quarter of all bags controlling the shredding and packaging areas when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

#### ~~D.4.107 Broken or Failed Bag Detection~~

---

~~In the event that bag failure has been observed:~~

- ~~(a) For multi compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~
- ~~(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have 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).~~
- (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 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 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

### D.4.118 Record Keeping Requirement

---

- (a) To document compliance with Condition D.4.75, the Permittee shall maintain records of **the once per day** visible emission notations **required by that condition** of the shredding and packaging area baghouses stack exhaust once per shift.
- (b) To document compliance with Condition D.4.86, the Permittee shall maintain ~~the following:~~ **records of the once per day pressure drop readings required by that condition.**
  - (1) ~~Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:~~
    - (A) ~~Inlet and outlet differential static pressure; and~~
    - (B) ~~Cleaning cycle operation.~~
  - (2) ~~Documentation of the dates vents are redirected.~~
- (c) ~~To document compliance with Condition D.4.9, the Permittee shall maintain records of the results of the inspections required under Condition D.4.9 and the dates the vents are redirected.~~
- (d) ~~To document compliance with Conditions D.4.1 and D.4.3, the Permittee shall maintain records of the monthly production rates from each line.~~
- (ec) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

### D.4.12 Reporting Requirements

---

~~A quarterly summary of the information to document compliance with Condition D.4.3 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).~~

**SECTION D.5 FACILITY OPERATION CONDITIONS**

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

**Ancillary Equipment**

(fe) Ancillary Equipment:

- (1) ~~One (1) EP dust recycling system, installed in 1987, modified in 2000, and exhausted to stack S34;~~ **One (1) Melter Dust Recycle System, installed in 1961 and modified in 1999 and 2006. Recycles dust captured by the melter baghouse back into the system as raw material. Exhausts to Stack S34.**
- (2) One (1) cold end housekeeping system, installed in 1988. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted ~~to stack S10 indoors to general ventilation;~~ and
- (3) One (1) natural gas-fired boiler, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

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

**Emission Limitations and Standards**

**D.5.1 Pollutant Emission Limitations [326 IAC 2-2-3(a)(3)] [326 IAC 6-1-14]**

- (a) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration Rules), the ancillary equipment shall comply with the following particulate matter limitations:
  - (1) the particulate emissions from ~~stack S34 from the EP recycling system~~ **Melter Dust Recycle System** shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9;
  - (2) the cold end housekeeping system shall be equipped with a baghouse system and shall not exceed an average of three percent (3%) opacity in any 24 consecutive readings recorded in 15 second intervals in accordance with the applicable requirements of 40 CFR 60, Appendix A, Method 9; and
  - (3) the natural gas-fired boiler shall not exceed 0.34 pounds per hour and 0.0137 pounds per million Btu. The boiler shall also be limited to 1.5 tons per year to demonstrate compliance with the requirements of 326 IAC 6-1-14.
- (b) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the ancillary equipment shall comply with the following limitations:

Facility	Pollutant Limitations, lbs/hr		
	PM/PM10	VOC	CO
EP Dust Recycling System	0.19	0	0
<b>Melter Dust Recycle System</b>			
Cold End Housekeeping System	0.51	0	0
Natural Gas-fired Boiler	0.34	0.07	0.875

PM/PM10 means that the PM limit and the PM10 limit are the same and shall be measured as the sum of the filterable and condensable fractions.

- (c) Pursuant to CP 177-5873-00006, issued April 22, 1999, the ancillary equipment shall comply with the following limitations for NOx and SO2 in order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable:

Facility	Pollutant Limitations, lbs/hr	
	NOx	SO2
<del>EP Dust Recycling System</del> <b>Melter Dust Recycle System</b>	0	0
Cold End Housekeeping System	0	0
Natural Gas-fired Boiler	3.5	0.015

- (d) Pursuant to 326 IAC 6-1-2(a) (Particulate Emission Limitations for General Sources) the allowable PM emission rates for each of the ancillary equipment facilities listed in this section shall not contain particulate matter in excess of 0.03 grain per dry standard cubic foot (dscf).
- (e) **In order to render the requirements of 326 IAC 2-2 not applicable to the modification completed pursuant to SSM 177-22008-00006, the PM10 emissions from the Melter Dust Recycle System shall not exceed 0.001 pounds per hour.**

D.5.2 Preventive Maintenance Plan

A preventive maintenance plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this facility and its~~ **these facilities and their** control devices.

D.5.3 Particulate Matter

- (a) In order to comply with **Conditions** D.5.1(a), (b) and (d), the baghouses for PM control shall be in operation at all times the ~~cold end housekeeping system is~~ **respective facilities are** in operation.
- (b) **In the event that bag failure is observed in a multi-compartment bagfilter, 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.**

D.5.4 Visible Emissions Notations

- (a) Visible emission notations of the ~~dust recycling fan, and cold end housekeeping system~~ **Melter Dust Recycle System** stack exhaust shall be performed once per ~~shift~~ **day** during normal daylight operations ~~when exhausting to the atmosphere.~~ A trained employee shall record whether emissions are normal or abnormal.
- ...
- (e) **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C – Response to Excursions and Exceedances.** ~~The Compliance Response Plan for this facility shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.~~ Failure to take response steps in accordance with Section C - ~~Compliance Monitoring Plan—Failure to Take Response Steps~~ **Response to Excursions and Exceedances**, shall be considered a ~~violation of~~ **deviation from** this permit.

D.5.5 Parametric Monitoring

The Permittee shall record the ~~total static~~ pressure drop across the baghouses used in conjunction with the ~~processes~~ **Melter Dust Recycle System and cold end housekeeping**

~~system, at least once per shift day when the processes is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouse shall be maintained within the range of 1.0 and 7.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~ **When for any one reading the pressure drop across a baghouse is outside the normal range of 1.0 and 7.0 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 - ~~Pressure Gauge 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.5.6 Baghouse Inspections~~

---

~~An inspection shall be performed each calendar quarter of all bags controlling the cold end housekeeping system when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.~~

#### ~~D.5.76 Broken or Failed Bag Detection~~

---

~~In the event that bag failure has been observed:~~

- ~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B - Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.~~
- ~~(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have 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).~~
- (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 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 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:**

##### **D.5.87 Record Keeping Requirement**

---

- (a) To document compliance with Condition D.5.1(a), (b), and (d) and D.5.4, the Permittee shall maintain records of **once per day** visible emission notations **required by that condition.** ~~of the dust recycling fan and cold end housekeeping system stack exhaust once per shift.~~
- (b) To document compliance with Condition D.5.5, the Permittee shall maintain **once per day records of the pressure drop readings required by that condition.** ~~the following:~~
  - (1) ~~Once per shift records of the following operational parameters during normal operation when venting to the atmosphere:~~
    - (A) ~~Inlet and outlet differential static pressure; and~~
    - (B) ~~Cleaning cycle operation.~~
  - (2) ~~Documentation of the dates vents are redirected.~~
- (c) ~~To document compliance with Condition D.5.6, the Permittee shall maintain records of the results of the inspections required under Condition D.5.6 and the dates the vents are redirected.~~
- (dc) The Permittee shall maintain records of monthly fuel usage to document compliance with the annual PM emission limitation required by ~~Operation~~ Condition D.5.1(a)(3).; ~~and~~
- (ed) All records shall be maintained in accordance with Section C - General Record Keeping Requirements of this permit.

## INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

**COMPLIANCE DATA SECTION**  
**100 North Senate Avenue**  
**P.O. Box 6015**  
**Indianapolis, Indiana 46206-6015**

### PART 70 QUARTERLY REPORT

Source Name: Johns Manville International, Inc.  
 Source Address: 814 Richmond Avenue, Richmond, Indiana 47374  
 Mailing Address: P.O. Box 428, Richmond, Indiana 47375-0428  
 Part 70 Permit No.: T 177-7720-00006  
 Facility: Lines 2 ~~and~~, 3, ~~and~~ 6 Production Processes  
 Parameter: Production Rate  
 Limits: Production Limits Required by ~~Operation Conditions D.2.3, D.3.2, and D.4.3.~~

YEAR:

Month	Production Facility	Production this Month, tons	Production Last 12 Months, tons	Production Limit, tons/12 consecutive months
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	<del>Line 6 Bonded and Unbonded</del>			<del>47,520</del>
	Line 6 Bonded <sup>1</sup>			6,240
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	<del>Line 6 Bonded and Unbonded</del>			<del>47,520</del>
	Line 6 Bonded <sup>1</sup>			6,240
	Line 2 Unbonded			31,536
	Line 3 Unbonded			31,536
	<del>Line 6 Bonded and Unbonded</del>			<del>47,520</del>
	Line 6 Bonded <sup>1</sup>			6,240

<sup>1</sup> ~~The production of bonded product from Line 6 shall be limited to 6,240 tons per 12 consecutive months.~~

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.

### **Conclusion and Recommendation**

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No 177-22008-00006 and Significant Permit Modification 177-22666-00006. The staff recommends to the Commissioner that these Part 70 Source and Permit Modifications be approved.



**Appendix A: Emission Calculations  
VOC Emissions Summary**

**Company Name:** Johns Manville  
**Address City IN Zip:** 814 Richmond Ave., Richmond IN 47374  
**Permit #:** 177-22008-00006  
**Reviewer:** ERG/BS  
**Date:** 15-Jun-06

Source/Stack Description	Baseline Actual VOC Emissions		VOC Potential to Emit		Comment
	(lb/hr)	(tpy)	(lb/hr)	(tpy)	
Line 2 Furnace	0.00	0.012	NA	NA	Removed
Line 2 Collection Module	5.14	19.33	7.71	33.75	Increased Throughput
Line 3 Furnace	0.00	0.012	NA	NA	Removed
Line 3 Collection Module	5.26	18.68	7.71	33.75	Increased Throughput
Line 6 Furnace	0.14	0.23	NA	NA	Removed
Line 6 Collection Module	0.42	0.23	NA	NA	Removed
Electric Melter	NA	NA	1.10	4.84	New unit
<b>Emissions Increase (tpy)</b>				<b>34.3</b>	
<b>Net Emissions Increase (tpy)</b>				<b>33.8</b>	

Note that because the VOC emissions increase of the modification (34.3 tpy) is less than the respective PSD significance threshold (40 tpy), PSD netting is not required. The net emissions increase of the modification is provided only for completeness. The Emissions Increase is the sum of the PTE of the new units and the difference between the PTE and baseline actual emissions of the modified units. The Net Emissions Increase is the Emissions Increase less the baseline actual emissions of the removed units.

Appendix A: Emission Calculations  
SO2 Emissions Summary

Company Name: Johns Manville  
Address City IN Zip: 814 Richmond Ave., Richmond IN 47374  
Permit #: 177-22008-00006  
Reviewer: ERG/BS  
Date: 15-Jun-06

Source/Stack Description	Baseline Actual SO2 Emissions		SO2 Potential to Emit		Comment
	(lb/hr)	(tpy)	(lb/hr)	(tpy)	
Line 2 Furnace	0.06	0.24	NA	NA	Removed
Line 2 Collection Module	0.71	2.68	1.10	4.82	Increased Throughput
Line 3 Furnace	0.06	0.25	NA	NA	Removed
Line 3 Collection Module	0.73	2.59	1.10	4.82	Increased Throughput
Line 6 Furnace	0.38	0.6	NA	NA	Removed
Line 6 Collection Module	0.15	0.2	NA	NA	Removed
Electric Melter	NA	NA	0.00	0.00	New unit
<b>Emissions Increase (tpy)</b>					
<b>Net Emissions Increase (tpy)</b>					<b>4.4</b>
					<b>3.0</b>

Note that because the SO2 emissions increase of the modification (4.4 tpy) is less than the respective PSD significance threshold (40 tpy), PSD netting is not required. The net emissions increase of the modification is provided only for completeness. The Emissions Increase is the sum of the PTE of the new units and the difference between the PTE and baseline actual emissions of the modified units. The Net Emissions Increase is the Emissions Increase less the baseline actual emissions of the removed units.

**Appendix A: Emission Calculations  
NOx Emissions Summary**

**Company Name:** Johns Manville  
**Address City IN Zip:** 814 Richmond Ave., Richmond IN 47374  
**Permit #:** 177-22008-00006  
**Reviewer:** ERG/BS  
**Date:** 15-Jun-06

Source/Stack Description	Baseline Actual NOx Emissions		NOx Potential to Emit (lb/hr)	NOx Potential to Emit (tpy)	Comment
	(lb/hr)	(tpy)			
Line 2 Furnace	3.22	14.09	NA	NA	Removed
Line 2 Collection Module	0.30	1.13	0.51	2.23	Increased Throughput
Line 3 Furnace	3.29	14.42	NA	NA	Removed
Line 3 Collection Module	0.31	1.10	0.51	2.23	Increased Throughput
Line 6 Furnace	0.02	0.0	NA	NA	Removed
Line 6 Collection Module	0.11	0.2	NA	NA	Removed
Electric Melter	NA	NA	0.38	1.66	New Unit
<b>Emissions Increase (tpy)</b>				<b>3.89</b>	
<b>Net Emissions Increase (tpy)</b>				<b>-24.8</b>	

Note that because the NOx emissions increase of the modification (3.89 tpy) is less than the respective PSD significance threshold (40 tpy), PSD netting is not required. The net emissions increase of the modification is provided only for completeness. The Emissions Increase is the sum of the PTE of the new units and the difference between the PTE and baseline actual emissions of the modified units. The Net Emissions Increase is the Emissions Increase less the baseline actual emissions of the removed units.

**Appendix A: Emission Calculations  
CO Emissions Summary**

**Company Name:** Johns Manville  
**Address City IN Zip:** 814 Richmond Ave., Richmond IN 47374  
**Permit #:** 177-22008-00006  
**Reviewer:** ERG/BS  
**Date:** 15-Jun-06

Source/Stack Description	Baseline Actual		CO Potential to Emit		Comment
	(lb/hr)	(tpy)	(lb/hr)	(tpy)	
Line 2 Furnace	0.03	0.14	NA	NA	Removed
Line 2 Collection Module	6.38	23.98	15.68	68.68	Increased Throughput
Line 3 Furnace	0.03	0.14	NA	NA	Removed
Line 3 Collection Module	6.53	23.17	15.68	68.68	Increased Throughput
Line 6 Furnace	0.70	1.2	NA	NA	Removed
Line 6 Collection Module	1.71	2.8	NA	NA	Removed
Electric Melter	NA	NA	0.83	3.65	New unit
<b>Emissions Increase (tpy)</b>				<b>93.7</b>	
<b>Net Emissions Increase (tpy)</b>				<b>89.5</b>	

Note that because the CO emissions increase of the modification (93.7 tpy) is less than the respective PSD significance threshold (100 tpy), PSD netting is not required. The net emissions increase of the modification is provided only for completeness. The Emissions Increase is the sum of the PTE of the new units and the difference between the PTE and baseline actual emissions of the modified units. The Net Emissions Increase is the Emissions Increase less the baseline actual emissions of the removed units.

**Blowing Wool Furnace**

**Source:** Line 2 Furnace

**Control Device:** Control is a dry electrostatic precipitator  
 Shared with Line 3 Furnace

**Description:** Removed as part of modification

Emission Factors	Actuals	Units	Potentials	
PM10 :	1.094E-04	lb./lb of glass	NA	Results from 1/25/01 testing at the Richmond plant
VOC :	4.400E-07	lb./lb of glass	NA	Results from 3/5/03 testing at the Waterville plant
NOx :	5.164E-04	lb./lb of glass	NA	Results from 1/25/01 testing at the Richmond plant
CO :	5.000E-06	lb./lb of glass	NA	Results from 3/5/03 testing at the Waterville plant
SO2 :	8.875E-06	lb./lb of glass	NA	Results from 12/6/1994 testing at the Defiance plant

**EMISSION ESTIMATES**

<b>Line 2 AVG. Actual Hours of Operation :</b>	8,760	hr/yr.	Furnaces run continuously
<b>Line 2 Actual Line Pull-Rate Average :</b>	6,228	lbs. glass/hr	Average for October 1, 2003 to September 30, 2005
<b>Permitted Hours</b>	8,760.0		
<b>PTE in Hours :</b>	8,760.0	hr/yr.	Max Potential
<b>PTE Line Pull-Rate:</b>	0.0	lbs. glass/hr	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	0.68	2.98	0.25 lb/ton	7.80	0.00	0.00	-2.98
VOC :	0.00	0.01	0.38 lb/ton		0.00	0.00	-0.01
NOx :	3.22	14.09	6.82	29.87	0.00	0.00	-14.09
CO :	0.03	0.14	0.85 lb/ton		0.00	0.00	-0.14
SO2 :	0.06	0.24	0.40	-	0.00	0.00	-0.24

**Blowing Wool Furnace**

**Source:** Line 3 Furnace

**Control Device:** Control is a dry electrostatic precipitator  
 Shared with Line 2 Furnace

**Description:** Removed as part of modification

Emission Factors	Actuals	Units	Potentials	
PM10 :	1.094E-04	lb./lb of glass	NA	Results from 1/25/01 testing at the Richmond plant
VOC :	4.400E-07	lb./lb of glass	NA	Results from 3/5/03 testing at the Waterville plant
NOx :	5.164E-04	lb./lb of glass	NA	Results from 1/25/01 testing at the Richmond plant
CO :	5.000E-06	lb./lb of glass	NA	Results from 3/5/03 testing at the Waterville plant
SO2 :	8.875E-06	lb./lb of glass	NA	Results from 12/6/1994 testing at the Defiance plant

**EMISSION ESTIMATES**

Line 3 AVG. Actual Hours of Operation :	8,760	hr/yr.	Furnace run continuously
Line 3 Actual Line Pull-Rate Average :	6,375	lbs. glass/hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0		
PTE in Hours :	8,760.0	hr/yr.	Max Potential
PTE Line Pull-Rate:	0.0	lbs. glass/hr	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	0.70	3.06	0.25 lb/ton	7.80	0.00	0.00	-3.06
VOC :	0.00	0.01	0.38 lb/ton	-	0.00	0.00	-0.01
NOx :	3.29	14.42	6.82	29.87	0.00	0.00	-14.42
CO :	0.03	0.14	0.85 lb/ton	-	0.00	0.00	-0.14
SO2 :	0.06	0.25	0.40	-	0.00	0.00	-0.25

Line 6 Electric Melter

Source: Line 6 Electric Melter

Control Device: Baghouse

Description: Removed as part of modification

Emission Factors	Actuals	Units	Potentials	
PM10 :	9.440E-05	lb./lb of glass	NA	Results from 8/29/02 testing at the Winder plant
VOC :	1.052E-04	lb./lb of glass	NA	Results from 11/25/02 testing at the Winder plant
NOx :	1.810E-05	lb./lb of glass	NA	Results from 9/18/02 testing at the Winder plant
CO :	5.383E-04	lb./lb of glass	NA	Results from 9/18/02 testing at the Winder plant
SO2 :	2.900E-04	lb./lb of glass	NA	Results from 9/18/02 testing at the Winder plant

EMISSION ESTIMATES

AVG. Actual Hours of Operation :	3,295.0	hr/yr.	Average for March 1, 2003 to February 28, 2005
Actual Line Pull-Rate Average :	1,304.0	lbs. glass/hr	Average for March 1, 2003 to February 28, 2005
Permitted Hours	8,760.0		
PTE in Hours :	0.0	hr/yr.	Max Potential
PTE Line Pull-Rate:	0.0	lbs. glass/hr	Rated Capacity
Assumed fusion loss	10%		Max Potential
PTE Line Feed-Rate:	0.0	lbs. glass/hr	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	0.12	0.20	-	-	0.00	0.00	-0.20
VOC :	0.14	0.23	-	-	0.00	0.00	-0.23
NOx :	0.02	0.04	-	-	0.00	0.00	-0.04
CO :	0.70	1.16	-	-	0.00	0.00	-1.16
SO2 :	0.38	0.62	-	-	0.00	0.00	-0.62

Cold Top Electric Melter

Source: New Electric Melter

Control Device: Baghouse

Description: Will be added as part of the modification

Factors:

	PM10	VOC	NOx	CO	SO2	HF
Safety Factor	10%	20%	100%	100%	100%	100%
Control Efficiency	99%	0%	0%	0%	0%	0%

	Actuals	Emission Factors	Potentials	
PM10 :	NA	lb./lb of glass	2.832E-05	Based on August/ November 2002 test results from a similar unit in Wertheim Germany
VOC :	NA	lb./lb of glass	6.312E-05	
NOx :	NA	lb./lb of glass	2.172E-05	
CO :	NA	lb./lb of glass	4.765E-05	
SO2 :	NA	lb./lb of glass	9.163E-07	
Fluoride:	NA	lb./lb of glass	3.665E-07	

EMISSION ESTIMATES

AVG. Actual Hours of Operation :	0.0	hr/yr.
Actual Line Pull-Rate Average :	0.0	lbs. glass/hr
Permitted Hours	8,760.0	
PTE in Hours :	8,760.0	hr/yr. Max Potential
PTE Line Pull-Rate	17,500.0	lbs. glass/hr Rated Capacity
Assumed fusion loss	15%	
PTE Line Feed-Rate	20,125.0	lbs. glass/hr

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	-	-	-	-	0.50	2.17	2.17
VOC :	-	-	-	-	1.10	4.84	4.84
NOx :	-	-	-	-	0.38	1.66	1.66
CO :	-	-	-	-	0.83	3.65	3.65
SO2 :	-	-	-	-	0.02	0.07	0.07
HF :	-	-	-	-	0.01	0.03	0.03

Line 2 Climate ProCollection Module

Source: Line 2 Climate Pro Collection Module

Control Device: Fog box / wet spray collection system.

Description: Fiberizers and water spray collection system are physically modified as part of the modification

Factors:

	PM10	VOC	NOx	CO	SO2
Safety Factor	20%	20%	20%	75%	10%
Assumed Current Control Efficiency	45%	10%	0%	0%	0%
Estimated Potential Control Efficiency	66%	20%	0%	0%	0%

	Actuals	Emission Factors	Potentials	
PM10 :	1.585E-03	lb./lb of glass	1.175E-03	Based on April 2002 Test results
VOC :	8.256E-04	lb./lb of glass	8.806E-04	
NOx :	4.845E-05	lb./lb of glass	5.814E-05	
CO :	1.024E-03	lb./lb of glass	1.792E-03	
SO2 :	1.143E-04	lb./lb of glass	1.257E-04	

EMISSION ESTIMATES

AVG. Actual Hours of Operation :	7,519.0	hr/yr.	Average for October 1, 2003 to September 30, 2005
Actual Line Pull-Rate Average :	6,228.0	lbs. glass/hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0		
PTE in Hours :	8,760.0	hr/yr.	Max Potential
PTE Line Pull-Rate:	8,750.0	lbs. glass/hr	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	9.87	37.10	-	58.30	10.29	45.05	7.95
VOC :	5.14	19.33	6.78	29.70	7.71	33.75	14.42
NOx :	0.30	1.13	2.03	8.89	0.51	2.23	1.09
CO :	6.38	23.98	21.00	91.98	15.68	68.68	44.70
SO2 :	0.71	2.68	-	-	1.10	4.82	2.14

Line 3 Climate ProCollection Module

Source: Line 3 Climate Pro Collection Module

Control Device: Fog box / wet spray collection system.

Description: Fiberizers and water spray collection system are physically modified as part of the modification

Factors:	PM10	VOC	NOx	CO	SO2
Safety Factor	20%	20%	20%	75%	10%
Assumed Current Control Efficiency	45%	10%	0%	0%	0%
Estimated Potential Control Efficiency	66%	20%	0%	0%	0%

	Actuals	Emission Factors	Potentials	
PM10 :	1.585E-03	lb./lb of glass	1.175E-03	Based on May 2001 Test results
VOC :	8.256E-04	lb./lb of glass	8.806E-04	
NOx :	4.845E-05	lb./lb of glass	5.814E-05	
CO :	1.024E-03	lb./lb of glass	1.792E-03	
SO2 :	1.143E-04	lb./lb of glass	1.257E-04	

EMISSION ESTIMATES

AVG. Actual Hours of Operation :	7,100.0	hr/yr.	Average for October 1, 2003 to September 30, 2005
Actual Line Pull-Rate Average :	6,375.0	lbs. glass/hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0		
PTE in Hours :	8,760.0	hr/yr.	Max Potential
PTE Line Pull-Rate:	8,750.0	lbs. glass/hr	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	10.10	35.86	-	123.60	10.29	45.05	9.19
VOC :	5.26	18.68	6.78	29.70	7.71	33.75	15.07
NOx :	0.31	1.10	2.03	8.89	0.51	2.23	1.13
CO :	6.53	23.17	21.00	91.98	15.68	68.68	45.50
SO2 :	0.73	2.59	-	-	1.10	4.82	2.23

Line 6 Blowing Wool Collection Module

Source: Line 6 Blowing Wool Collection Module

Control Device: Fog box

Description: Removed as part of modification

Factors:	PM10	VOC	NOx	CO	SO2
Safety Factor	20%	20%	20%	20%	10%
Assumed Current Control Efficiency	0%	0%	0%	0%	0%
Estimated Potential Control Efficiency	0%	0%	0%	0%	0%

	Actuals	Emission Factors	Potentials	
PM10 :	1.658E-03	lb./lb of glass	1.990E-03	Richmond IN, LN 6 Collection (11-12-04 Test)
VOC :	3.183E-04	lb./lb of glass	3.820E-04	Richmond IN, LN 6 Collection (11-12-04 Test)
NOx :	8.250E-05	lb./lb of glass	9.900E-05	Richmond IN, LN 6 Collection (11-12-04 Test)
CO :	1.310E-03	lb./lb of glass	1.572E-03	Richmond IN, LN 6 Collection (11-12-04 Test)
SO2 :	1.143E-04	lb./lb of glass	1.257E-04	Richmond IN, Line 3 Horizontal Duct

EMISSION ESTIMATES

AVG. Actual Hours of Operation :	3,259.0	hr/yr.	Average for October 1, 2003 to September 30, 2005
Actual Line Pull-Rate Average :	1,304.0	lbs. glass/hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0		
PTE in Hours :	0.0	hr/yr.	Max Potential
PTE Line Pull-Rate:	0.0	lbs. glass/hr	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	2.16	3.52	-	123.60	0.00	0.00	-3.52
VOC :	0.42	0.68	6.78	29.70	0.00	0.00	-0.68
NOx :	0.11	0.18	2.03	8.89	0.00	0.00	-0.18
CO :	1.71	2.78	21.00	91.98	0.00	0.00	-2.78
SO2 :	0.15	0.24	-	-	0.00	0.00	-0.24

**Line 2 Shredding and Packaging**

**Source:** Line 2 Shredding and Packaging  
**Control Device:** Two baghouses in parallel  
**Description:** Debottlenecked and modified as a result of modification

**Factors:**

PM10	
Safety Factor	20%
Control Efficiency	99%

	Actuals	Emission Factors	Potentials
PM10 :	8.602E-05	lb./lb. of glass	1.032E-04

Based on grain loading

**EMISSION ESTIMATES**

<b>Line 2 Actual Hours of Operation :</b>	7,519.0	hr/yr.	Average for October 1, 2003 to September 30, 2005
<b>Glass Pull :</b>	6,228.00	lbs./hr	Average for October 1, 2003 to September 30, 2005
<b>Permitted Hours</b>	8,760.0		
<b>PTE in Hours :</b>	8,760.0	hr/yr.	Max Potential
<b>PTE Line Pull-Rate:</b>	8,750.0	lbs./hr	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/ton)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	0.54	2.01	0.26	-	0.90	3.96	1.94

**Line 3 Shredding and Packaging**

**Source:** Line 3 Shredding and Packaging

**Control Device:** Two baghouses in parallel

**Description:** Debottlenecked and modified as a result of modification

**Factors:**

PM10	
Safety Factor	20%
Control Efficiency	99%

	Actuals	Emission Factors	Potentials	
PM10 :	8.602E-05	lb/lb of glass	1.032E-04	Based on grain loading

**EMISSION ESTIMATES - based on airflows**

<b>Line 2 Actual Hours of Operation :</b>	7,100.0	hr/yr.	Average for October 1, 2003 to September 30, 2005
<b>Glass Pull :</b>	6,375.00	lbs./hr	Average for October 1, 2003 to September 30, 2005
<b>Permitted Hours</b>	8,760.0		
<b>PTE in Hours :</b>	8,760.0	hr/yr.	Max Potential
<b>PTE Line Pull-Rate:</b>	8,750.0	ACFM	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/ton)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	0.55	1.95	0.26	-	0.90	3.96	2.01

**Line 3 Shredding and Packaging**

**Source:** Line 6 Shredding and Packaging

**Control Device:** Two baghouses in parallel

**Description:** Removed as a result of modification

**Factors:**

PM10	
Safety Factor	20%
Control Efficiency	99%

	Actuals	Emission Factors	Potentials
PM10 :	8.602E-05	lb/lb of glass	1.032E-04

Based on grain loading

**EMISSION ESTIMATES - based on airflows**

<b>Line 6 Actual Hours of Operation :</b>	3,259.0	hr/yr.	Average for October 1, 2003 to September 30, 2005
<b>Glass Pull :</b>	1,304.00	lbs./hr	Average for October 1, 2003 to September 30, 2005
<b>Permitted Hours</b>	8,760.0		
<b>PTE in Hours :</b>	8,760.0	hr/yr.	Max Potential
<b>PTE Line Pull-Rate:</b>	8,750.0	ACFM	Rated Capacity

Pollutant	Actual (lb/hr)	Actual (tpy)	Permit (lb/ton)	Permit (tpy)	Potential (lb/hr)	Potential (tpy)	Net Increase (tpy)
PM10 :	0.11	0.18	-	-	0.00	0.00	-0.18

**Raw Material Batch Silos**

Source: Eight (8) Raw material Batch Silos  
 Description: Debottlenecked as a result of modification

**ACTUAL EMISSIONS**

Component	Batch Mass (lb)	Fraction	Density (lb/ft <sup>3</sup> )	Current Fill Rate (lb/hr)	Emission Hours Actual
sand	1224	0.212352533	90	100000	222.1
syenite	912	0.158223456	84	100000	165.4
Internal cullet	800	0.138792505	90	100000	145.1
borax	738	0.128036086	65	100000	133.9
bd lime	331	0.057425399	55	100000	60.0
soda ash	642	0.111380985	55	100000	116.5
Borosilicate cullet	223	0.038688411	80	100000	40.5
Plate Cullet	894	0.155100625	76	100000	162.2

Batch size 5764

**Production**

Actual 13,907 lb/hr 7519 hr/yr 104,566,733 lb/yr

**Bucket Loaded Volume (ft<sup>3</sup>/yr)**

Actual	
sand	246722
syenite	196963
Internal cullet	161256
borax	205974
soda ash	211759
Borosilicate cullet	50569
Plate Cullet	213400

**Pneumatic Loaded Volume (ft<sup>3</sup>)**

bd lime 1856025

Outlet Grain Loading: 0.02 gr/scf

**Emissions**

	Actual		
	(lb/yr)	(lb/hr)	(tpy)
sand	0.70	0.0032	0.00035
syenite	0.56	0.0034	0.00028
Internal cullet	0.46	0.0032	0.00023
borax	0.59	0.0044	0.00029
bd lime	5.30	0.0883	0.00265
soda ash	0.61	0.0052	0.00030
Borosilicate cullet	0.14	0.0036	0.00007
Plate Cullet	0.61	0.0038	0.00030
total	0.11498		0.00449

**POTENTIAL EMISSIONS**

Material	Run Times * (min/day)	Air Flow (acfm)	Grain Loading (gr/dscf)	Potential (lb/yr)	Potential (ton/yr)
Silo 1 Sand	81.9	325	0.02	27.8	0.014
Silo 7 Soda Ash	72.5	325	0.02	24.6	0.012
Silo 5 Borax	85.9	325	0.02	29.1	0.015
Silo 3 N Syenite	85.2	325	0.02	28.9	0.014
Silo 8 Plate glass Ct	134.9	1140	0.02	160.4	0.080
Silo 2 Borosilicate C	12.7	325	0.02	4.3	0.002
Silo 4 Internal Cullet	51.1	325	0.02	17.3	0.009
Silo 6 BD Lime (truck)	48.3	1140	0.02	57.5	0.029
<b>total</b>				<b>0.175</b>	

\*Run times are based on the maximum capacity of the production lines.

**Batch Day Bins  
 Actual - Potential To Emit**

**Source:** Day bins 2N, 3W, 3E and 6  
**Control Device:** Dust Collectors  
**Description:** Removed as part of modification

	<b>PM10</b>
<b>Control Efficiency</b>	<b>99%</b>

**EMISSION ESTIMATES**

<b>Grain Loading:</b>	0.01	gr/scf	Average for October 1, 2003 to September 30, 2005
<b>Actual Volumetric Displacement :</b>	1,307,084	ACFY	Average for October 1, 2003 to September 30, 2005
<b>Permitted Hours</b>	8,760.0		
<b>Grain Loading:</b>	0.00	hr/yr.	Max Potential
<b>PTE Volumetric Displacement :</b>	0.00	ACFY	Rated Capacity

Pollutant	Actual (lb/yr)	Actual (tpy)	Permit (lb/hr)	Permit (tpy)	Potential (lb/yr)	Potential (tpy)	Net Increase (tpy)
<b>PM10 :</b>	<b>1.87</b>	<b>0.0009</b>		-	<b>0.00</b>	<b>0.0000</b>	<b>-0.0009</b>

**Batch Day Bins**

**Source:** Day bins #1 & #2  
**Control Device:** Dust Collectors  
**Description:** New days bins added to accommodate modification

**EMISSION ESTIMATES**

<b>Grain Loading:</b>	0.01	gr/scf
<b>Actual Volumetric Displacement :</b>	0	ACFY
<b>Permitted Hours</b>	8,760.0	
<b>Grain Loading:</b>	0.02	gr/scf
<b>PTE Volumetric Displacement :</b>	81,900,000	ACFY
		Max Potential
		Rated Capacity (total)

Pollutant	Actual (lb/yr)	Actual (tpy)	Permit (lb/yr)	Permit (tpy)	Potential (lb/yr)	Potential (tpy)	Net Increase (tpy)
PM10 :	0.00	0.0000	-	-	0.03	0.1170	0.1170

**Melter Dust Recycle System**

**Source:** Melter Dust Recycle System  
**Description:** Was the ESP dust recycle hopper - will now serve the new melter and will recycle dust from the melter dust collectors back in as a batch material

Component	Batch Mass (lb)	Fraction	Density (lb/ft <sup>3</sup> )
Melter Recycle Dust	40	0.005964808	25

Batch size 6706  
 Batch information from J. Shock Sept 1, 2004 Preliminary PEP Batch House Capacity Increase

**Production**

<b>Actual</b>	13,907 lb/hr	7519 hr/yr
<b>Potential</b>	17,500 lb/hr	8760 hr/yr

<u>Actual Production</u>	<u>Potential Production</u>
--------------------------	-----------------------------

104,566,733	153,300,000
-------------	-------------

**Gravity Loaded Volume (ft<sup>3</sup>/yr)**

	Actual	Potential
Melter Recycle Dust	24949	36576

**Outlet Grain Loading:** 0.01 gr/scf

**Emissions**

	Actual		Potential		Net Increase	
	(lb/yr)	(tpy)	(lb/yr)	(tpy)	(lb/yr)	(tpy)
Melter Recycle Dust	0.04	0.00002	0.05	0.00003	0.02	0.00001

**Emissions (lb/hr)**

Melter Recycle Dust	0.0008	0.0010
<b>Total (lb/hr)</b>	<b>0.0008</b>	<b>0.0010</b>
<b>Total (tpy)</b>	<b>0.0000</b>	<b>0.0000</b>

**Weigh Scale**

Source: Weigh Scale  
 Control Device: Sock Filter  
 Description: Debottlenecked as a result of modification

Component	Batch Mass (lb)	Fraction	Density (lb/ft3)
sand	1224	0.182523114	100
Carbocite	2	0.00029824	45
syenite	912	0.135997614	90
Internal cullet	800	0.119296153	90
borax	738	0.110050701	67
bd lime	331	0.049358783	50
soda ash	642	0.095735163	85
Borosilicate cullet	223	0.033253803	100
Plate Cullet	894	0.133313451	85
Fluorspar	100	0.014912019	110
Bottle Cullet	800	0.119296153	95
HERM Dust	40	0.005964808	20

Batch size 6708  
 Batch information from J. Shock Sept 1, 2004 Preliminary PEP Batch House Capacity Increase

**Production**

<b>Actual</b>	13,907 lb/hr	7519 hr/yr
<b>Potential</b>	17,500 lb/hr	8760 hr/yr

**Actual Production**

**Potential Production**

104,566,733

153,300,000

**Gravity Loaded Volume (ft3/yr)**

	Actual	Potential
sand	190858	279808
Carbocite	0	1016
syenite	158009	231649
Internal cullet	138605	203201
borax	171756	251803
bd lime	103226	151334
soda ash	154011	225788
Borosilicate Cullet	34772	50978
Plate Cullet	164002	240435
Fluorspar	0	20782
Bottle Cullet	0	192506
HERM dust	31186	45720

Outlet Grain Loading: 0.01 gr/scf

**Emissions**

	Actual (lb/yr)		Potential (lb/yr)		Net Increase (tpy)	
sand	0.27	0.00014	0.40	0.00020	0.13	0.00006
Carbocite	0.00	0.00000	0.00	0.00000	0.00	0.00000
syenite	0.23	0.00011	0.33	0.00017	0.11	0.00005
Internal cullet	0.20	0.00010	0.29	0.00015	0.09	0.00005
borax	0.25	0.00012	0.36	0.00018	0.11	0.00006
bd lime	0.15	0.00007	0.22	0.00011	0.07	0.00003
soda ash	0.22	0.00011	0.32	0.00016	0.10	0.00005
Borosilicate Cullet	0.05	0.00002	0.07	0.00004	0.02	0.00001
Plate Cullet	0.23	0.00012	0.34	0.00017	0.11	0.00005
Fluorspar	0.00	0.00000	0.03	0.00001	0.03	0.00001
Bottle Cullet	0.00	0.00000	0.28	0.00014	0.28	0.00014
HERM dust	0.04	0.00002	0.07	0.00003	0.02	0.00001

**Emissions (lb/hr)**

	Actual	Potential
sand	0.0002	0.0003
Carbocite	0.0000	0.0006
syenite	0.0002	0.0003
Internal cullet	0.0002	0.0003
borax	0.0003	0.0004
bd lime	0.0004	0.0005
soda ash	0.0003	0.0004
Borosilicate Cullet	0.0002	0.0003
Plate Cullet	0.0002	0.0003
Fluorspar	0.0000	0.0002
Bottle Cullet	0.0000	0.0003
HERM dust	0.0010	0.0013
<b>Total (lb/hr)</b>	<b>0.0031</b>	<b>0.0049</b>
<b>Total (tpy)</b>	<b>0.0008</b>	<b>0.0014</b>

**Mixer**

**Source:** Mixer  
**Control Device:** Sock Filter  
**Description:** New mixer to handle increased capacity - replaces old mixer

Component	Batch Mass (lb)	Fraction	Density (lb/ft3)
sand	1224	0.211	100
Carbocite	2	0.000	45
syenite	912	0.157	90
Internal cullet	800	0.138	90
borax	738	0.127	67
bd lime	331	0.057	50
soda ash	642	0.111	65
Borosilicate cullet	223	0.038	100
Plate Cullet	894	0.154	85
HERM Dust	40	0.007	20

Batch size 5806  
 Batch information from J. Shock Sept 1, 2004 Preliminary PEP Batch House Capacity Increase

**Production**

<b>Actual</b>	13,907 lb/hr	7519 hr/yr
<b>Potential</b>	17,500 lb/hr	8760 hr/yr

<u>Actual Production</u>	<u>Potential Production</u>
104,566,733	153,300,000

	Gravity Loaded Volume (ft3)	
	Actual	Potential
sand	220444	323182
Carbocite	0	1173
syenite	182503	267558
Internal cullet	160090	234700
borax	198380	290835
bd lime	119227	174793
soda ash	177885	260788
Borosilicate Cullet	40163	58880
Plate Cullet	189424	277705
HERM dust	36020	52807

**Outlet Grain Loading:** 0.01 gr/scf

**Emissions**

	Actual			Potential		
	(lb/yr)	(lb/hr)	(tpy)	(lb/yr)	(lb/hr)	(tpy)
sand	0.31	0.0002	0.00016	0.46	0.0003	0.00023
Carbocite	0.00	0.0000	0.00000	0.00	0.0006	0.00000
syenite	0.26	0.0002	0.00013	0.38	0.0003	0.00019
Internal cullet	0.23	0.0002	0.00011	0.34	0.0003	0.00017
borax	0.28	0.0003	0.00014	0.42	0.0004	0.00021
bd lime	0.17	0.0004	0.00009	0.25	0.0005	0.00012
soda ash	0.25	0.0003	0.00013	0.37	0.0004	0.00019
Borosilicate Cullet	0.06	0.0002	0.00003	0.08	0.0003	0.00004
Plate Cullet	0.27	0.0002	0.00014	0.40	0.0003	0.00020
HERM dust	0.05	0.0010	0.00003	0.08	0.0013	0.00004
<b>total</b>		<b>0.0031</b>	<b>0.0009</b>		<b>0.0044</b>	<b>0.0014</b>

**Railcar Receiving**

**Source:** Railcar Receiving  
**Control Device:** Baghouse and boot lift device  
**Description:** Raw materials off-loaded from railcar

**Production**

<b>Actual</b>	13,907 lb/hr	7519 hr/yr
<b>Potential</b>	17,500 lb/hr	8760 hr/yr

**Actual Production**

104,566,733

**Potential Production**

153,300,000

**ACTUAL EMISSIONS (BASED ON HISTORIC THROUGHPUT AND AIR FLOW RATE)**

Run Time (min/day)	Air Flow (acfm)	Grain Loading	Actual (lb/yr)	Actual (t/yr)
390.6	1400	0.02	570.3	0.29

**POTENTIAL EMISSIONS (BASED ON RUN HOURS AND AIR FLOW RATE)**

Run Time * (min/day)	Air Flow (acfm)	Grain Loading	Potential (lb/yr)	Potential (ton/yr)
572.7	1400	0.02	836.1	0.42

\*Run time is based on the maximum capacity of the production lines.

Source: Bucket Elevator System (Removed)  
 Batch Transfer System (New)  
 Control Device: Baghouse  
 Description: New batch transfer system to handle increased capacity - replaces old bucket elevator

**ACTUAL EMISSIONS - Removed Bucket Elevator**

Component	Batch Mass (lb)	Fraction	Density (lb/ft3)
sand	1224	0.210889042	90
syenite	912	0.157133012	84
Internal cullet	800	0.137835975	90
borax	738	0.127153687	65
bd lime	331	0.057029635	55
soda ash	642	0.11061337	55
Borosilicate cullet	223	0.038421778	80
Plate Cullet	894	0.154031702	76
Melter Recycle Dust	40	0.006891799	25

Batch size 5804  
 Batch information from J. Shock Sept 1, 2004 Preliminary PEP Batch House Capacity Increase

**Production**

Actual 13,907 lb/hr 7519 hr/yr

**Actual Production**

104,566,733

**Gravity Loaded Volume (ft3)**

	Actual
sand	245022
syenite	195606
Internal cullet	160145
borax	204555
bd lime	108426
soda ash	210300
Borosilicate Cullet	50220
Plate Cullet	211929
Melter Recycle Dust	28826

Outlet Grain Loading: 0.02 gr/scf

	Actual Emissions		
	(lb/yr)	(lb/hr)	(tpy)
sand	0.70	0.0004	0.00035
syenite	0.56	0.0005	0.00028
Internal cullet	0.46	0.0004	0.00023
borax	0.58	0.0006	0.00029
bd lime	0.31	0.0007	0.00015
soda ash	0.60	0.0007	0.00030
Borosilicate Cullet	0.14	0.0005	0.00007
Plate Cullet	0.61	0.0005	0.00030
Melter Recycle Dust	0.08	0.0016	0.00004
<b>total actual emissions</b>			<b>0.0020</b>

**POTENTIAL EMISSIONS - New Batch Transfer System**

Unit	Run Time * (min/day)	Air Flow (acfm)	Grain Loading (gr/dscf)	Potential Emissions (lb/yr)	Potential Emissions (ton/yr)
Batch Transfer	1380.8	325	0.02	468	0.234

\*Run time is based on the maximum capacity of the production lines.