INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 4, 2011

RE: Johns Manville / 177-29154-00006

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of 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.dot12/03/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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November 4, 2011

Mr. Dan Stevens
814 Richmond Avenue
Richmond, IN 47374

Re: 177-29154-00006
Significant Source Modification to:
Part 70 Permit Renewal No.: T177-22598-00006

Dear Mr. Stevens:

Johns Manville, Inc. was issued Part 70 Operating Permit Renewal T177-22598-00006 on December 20, 2007, for a stationary fiberglass insulation manufacturing plant. A letter requesting changes to this permit was received on April 9, 2010. Pursuant to 326 IAC 2-7-10.5, the modification related to an increased use of post-consumer (recycled) glass material in the electric melter has been approved.

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 requires the Best Available Control Technology (BACT) under 326 IAC 8-1-6. 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.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, and ask for Jenny Acker or extension 3-9327, or dial (317) 233-9327.

Sincerely,

Chrystal A. Wagner, Section Chief
Permits Branch
Office of Air Quality

Attachments
Draft Significant Source Modification No. 177-29154-00006
Technical Support Document (TSD)

JLA

cc: File - Wayne County
Wayne County Health Department
Compliance and Enforcement

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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

SIGNIFICANT SOURCE MODIFICATION to a Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Johns Manville, Inc.
814 Richmond Ave.
Richmond, Indiana 47374

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

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

Significant Source Modification No.: 177-29154-00006	
Issued by: Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 4, 2011

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.4 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 a fiberglass insulation manufacturing plant.

Source Address:	814 Richmond Ave, Richmond, Indiana 47374
General Source Phone Number:	(765) 973-5243
SIC Code:	3296
County Location:	Wayne
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules 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; with a maximum capacity of 40.5 tons per hour, 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 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. The silo capacities are as follows: Silo #1 - 152 tons, Silo #2 - 23 tons, Silo #3 - 134 tons, Silo #4 - 51.8, Silo #5 - 106.7, Silo #6 - 54.6, Silo #7 - 101.3, and Silo #8 - 149.9.

(3) 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 (BH167 and BH168); exhausting to stacks S167 and S168. Product from the mixer is transferred to the day bins using an enclosed conveyor system.

(4) One (1) Mixer; constructed in 2006; a maximum capacity of 20,182.5 pounds of raw materials per hour; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.

(5) One (1) Batch Transfer System; constructed in 2006; a maximum capacity of 20,182.5 pounds of raw materials per hour; 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.

(6) One (1) Weigh Scale; constructed in 1967; a maximum capacity of 20,182.5 pounds of raw materials per hour; 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) Electric Melter; constructed in 2006; a maximum production rate of 20,182.5 pounds of molten glass per hour; emissions controlled by a dust collector 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 2000 and 2006; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 9,450 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 facility is considered a 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; consisting of a rotary spinner and collection conveyor; with a maximum unbonded glass production rate of 8,100 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 facility is considered a 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, with a maximum capacity of 9,450 pounds per hour. 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 rotary condenser. Fiberglass collected in the rotary condenser is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate emissions in the rotary condenser airstream are controlled by a baghouse system before the airstream is exhausted to Stacks

S85, S86 and S87. The total maximum capacity of Line 2 and Line 3 packaging areas is 27,540 pounds per hour;

(3) One (1) Line 3 shredding process for unbonded product, installed in 1993, with a maximum capacity of 8,100 pounds per hour. 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; and

(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 rotary condenser. Fiber glass collected in the rotary condenser is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate matter emissions in the rotary condenser airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S12, S13 and S14. The total maximum capacity of Line 2 and Line 3 packaging areas is 27,540 pounds per hour.

(e) One (1) natural gas-fired boiler, identified as B-2, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

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) One (1) melter dust recycling system, installed in 1961 and modified in 1999 and 2006, and exhausted to stack S34 [326 IAC 2-2] [326 IAC 6.5-10-11].

(b) One (1) cold end housekeeping system, installed in 1988, with a total production capacity of 17,550 pounds per hour. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted indoors to general ventilation [326 IAC 2-2] [326 IAC 6.5-10-11].

(c) Two (2) degreasing operations, constructed in 2006, that do not exceed 145 gallons per 12 months and are not subject to 326 IAC 20-6 [326 IAC 8-3-2][326 IAC 8-3-5].

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, T177-22598-00006, 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 of this permit.

(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] [IC 13-17-12]

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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent 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 no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(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 is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 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)(8)]

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

(a) All terms and conditions of permits established prior to T177-22598-00006 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 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 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.16 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.18 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 or notice shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.19 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.

(e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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) 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.22 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ 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.24 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 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 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.

C.3 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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 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.6 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

C.7 Performance Testing [326 IAC 3-6]

(a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 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 by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.10 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 be no less than twenty percent (20%) of full scale.

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

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

C.11 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 on.

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

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.13 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(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; and/or

(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 record the reasonable response steps taken.

C.14 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.15 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]

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official” as defined by 326 IAC 2-7-1(34).

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner 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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) 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) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) 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) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) 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

(2) 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.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

(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 except that 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. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

(e) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any “project” (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(f) The report for project at an existing emissions unit shall be submitted no later than 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 (d)(1) and (2) 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) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.18 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 applicable standards for recycling and emissions reduction.

SECTION D.1 FACILITY OPERATION CONDITIONS

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

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

(1) One (1) Railcar Receiving station; with a maximum capacity of 40.5 tons per hour, 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 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. The silo capacities are as follows: Silo #1 - 152 tons, Silo #2 - 23 tons, Silo #3 - 134 tons, Silo #4 - 51.8, Silo #5 - 106.7, Silo #6 - 54.6, Silo #7 - 101.3, and Silo #8 - 149.9.

(3) 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 (BH167 and BH168); exhausting to stacks S167 and S168. Product from the mixer is transferred to the day bins using an enclosed conveyor system.

(4) One (1) Mixer; constructed in 2006; a maximum capacity of 20,182.5 pounds of raw materials per hour; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.

(5) One (1) Batch Transfer System; constructed in 2006; a maximum capacity of 20,182.5 pounds of raw materials per hour; 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.

(6) One (1) Weigh Scale; constructed in 1967; a maximum capacity of 20,182.5 pounds of raw materials per hour; 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
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 PSD Limitations [326 IAC 2-2-3]

Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3 (Best Available Control Technology (BACT)), the raw material handling, storage and batching facilities stated above shall comply with the following limitations:

(a) The Railcar Receiving Station shall be equipped with a bootlift device or similar 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. Johns Manville, Inc. has opted to equip the Railcar Receiving Station with a baghouse. The IDEM, OAQ considers the baghouse a similar device.

(b) 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.

(c) 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.

D.1.3 Prevention of Significant Deterioration (PSD) Minor Modification Limitations [326 IAC 2-2]

Pursuant to SSM 177-29154-00006, and 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the cullet increase modification (SSM 177-29154-00006), the Permittee shall comply with the following.

(a) The PM10 emissions from the Day Bin 1 shall be less than 0.005 pounds per ton of material throughput.

(b) The PM10 emissions from the Day Bin 2 shall be less than 0.005 pounds per ton of material throughput.

(c) The PM10 emissions from the Mixer shall be less than 0.005 pounds per ton of material throughput.

(d) The PM10 emissions from the Weigh Scale shall be less than 0.005 pounds per ton of material throughput.

(e) The PM10 emissions from the Railcar Receiving Station shall be less than 0.005 pounds per ton of material throughput.

(f) The PM10 emissions from the Raw Material Silos shall be less than 0.005 pounds per ton of material throughput.

(g) The PM10 emissions from the Batch Transfer System shall be less than 0.005 pounds per ton of material throughput.

(h) The material input to the Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3 system shall be less than 176,798,700 pounds per twelve (12) consecutive month period, total, with compliance determined at the end of each month.

Compliance with these limits and the limits in Condition D.2.1, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the cullet increase modification (SSM 177-29154-00006).

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and the associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.5 Particulate Matter (PM) Control

(a) In order to comply with Conditions D.1.1 (for the rail car unloading station), D.1.2(a)(1),and D.1.3(e) the baghouse used to control PM and PM10 emissions and opacity from the rail car unloading station shall be in operation and control emissions 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(c), and D.1.3(f), the baghouses used to control PM and PM10 emissions and opacity shall be in operation and control emissions at all times the Raw Material Silos are in operation.

(c) In order to comply with Conditions D.1.1 and D.1.3, the baghouses used to control PM and PM10 emissions from Day Bin 1, Day Bin 2, Mixer, Batch Transfer System and Weigh Scale shall be in operation and control emissions at all times the associated units are in operation.

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

D.1.6 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. 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation

with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

(a) The Permittee shall record the pressure drop across the 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.

(b) When for any one reading, the pressure drop across the 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. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

D.1.8 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. 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 Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.9 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.2 and D.1.6, the Permittee shall maintain records of daily visible emission notations required by Condition D.1.6. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.1.7, the Permittee shall maintain weekly records of the pressure drop during normal operations. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.1.3(h), the Permittee shall maintain records of the material input to the Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3. This input can be measured as the input to the electric melter.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) One (1) Electric Melter; constructed in 2006; a maximum production rate of 20,182.5 pounds of molten glass per hour; emissions controlled by dust collector 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 Prevention of Significant Deterioration (PSD) Minor Modification Limit [326 IAC 2-2]

Pursuant to SSM 177-29154-00006, and 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the cullet increase modification (SSM 177-29154-00006), the Permittee shall comply with the following.

The PM10 emissions from the Electric Melter shall not exceed 0.32 pounds per hour.

Compliance with this limit and the limits in Condition D.1.3, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the cullet increase modification (SSM 177-29154-00006).

D.2.2 Best Available Control Technology (BACT) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the following BACT (Best Available Control Technology), the Electric Melter shall comply with the following limit:

(a) The VOC emissions from the Electric Melter shall not exceed 7.51 pounds per hour.

D.2.3 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.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the electric melter and its dust collector. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.2.5 Particulate Matter (PM) Control

(a) In order to comply with Conditions D.2.1 and D.2.3, the dust collector for PM and PM10 control shall be in operation at all times the associated Electric Melter is 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.2.6 Testing Requirements [326 IAC 2-7-6(1),(6)]

In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM/PM10, VOC and CO testing on the Electric Melter no later than 180 days after initial startup utilizing methods approved by the commissioner. These tests shall be repeated once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.2.7 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) [40 CFR 64]

(a) Visible emission notations of the stack exhaust from the Electric Melter 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) 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Electric Melter.

D.2.8 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

The Permittee shall record the pressure drop across the dust collector used in conjunction with the Electric Melter, at least once per day when the process is in operation. When for any one reading, the pressure drop across the dust collector 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. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Electric Melter.

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

D.2.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.7, the Permittee shall maintain once per day records of the visible emission notations of the Electric Melter stack S166 exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.2.8, the Permittee shall maintain once per day records of the pressure drop during normal operation when venting to the atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

(c) Forming Facilities:

(1) 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 9,450 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)

(2) 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 8,100 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)

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

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

D.3.1 PSD BACT Limitations [326 IAC 2-2(a)(3)]

Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Best Available Control Technology (BACT)), as restructured by SSM 177-22008-00006 (issued August 10, 2006), and as restructured by SSM 177-29154-00006, each Forming and Collection Module shall comply with the following limitations:

Facility	Pollutant Emission Limitations		
	PM/PM10 (lbs/hr)	VOC (lbs/hr)	CO (lbs/hr)
Line 2 Forming and Collection	13.32	6.78	21.0
Line 3 Forming and Collection	13.32	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.

D.3.2 Prevention of Significant Deterioration (PSD) Minor Limitations [326 IAC 2-2]

(a) Pursuant to SSM 177-22008-00006 (issued August 10, 2006), and 326 IAC 2-2 (PSD), and as revised by SSM 177-29154-00006, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter modification (177-22008-00006), the Permittee shall comply with the following.

(1) The PM10 emissions from the L2 Forming and Collection Module shall not exceed 11.34 pounds per hour, each.

(2) The PM10 emissions from the L3 Forming and Collection Module shall not exceed 10.40 pounds per hour, each.

Compliance with these limits and the limits in Conditions D.4.1, and D.5.2, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the electric melter modification (SSM 177-22008-00006).

(b) Pursuant to CP177-5873-00006 (issued April 22, 1999) and revised by T177-22598-00006 (issued December 20, 2007) and SSM 177-29154-00006, 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	0.46
Line 3 Forming and Collection	0.40

Compliance with these limits shall limit the NOx emissions increase of the modification described in CP 177-5873-00006, issued April 22, 1999 to less than forty (40) tons per year.

D.3.3 Particulate Limitations Except Lake County [326 IAC 6.5-10-11]

Pursuant to 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.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.3.5 Control Device Operating Conditions

In order to demonstrate compliance with Condition D.3.1 and D.3.2(a), the water spray systems associated with the Line 2 and Line 3 Forming and Collection Modules shall be operated at all times when the forming sections are in operation.

D.3.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall perform PM/PM10, VOC and CO testing on one of the Forming and Collection Modules within one hundred and eighty (180) days after initial startup of the Electric Melter startup utilizing methods approved by the commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.3.7 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) [40 CFR 64]

(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. 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module.

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

D.3.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of the stack exhaust from the Line 2 and Line 3 Forming and Collection Modules. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.4 FACILITY CONDITIONS

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

(d) Shredding and Packaging Facilities:

(1) One (1) Line 2 shredding process for unbonded product, installed in 1994, with a maximum capacity of 9,450 pounds per hour. 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 rotary condenser. Fiberglass collected in the rotary condenser is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate emissions in the rotary condenser airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S85, S86 and S87. The total maximum capacity of Line 2 and Line 3 packaging areas is 27,540 pounds per hour;

(3) One (1) Line 3 shredding process for unbonded product, installed in 1993, with a maximum capacity of 8,100 pounds per hour. 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 rotary condenser. Fiber glass collected in the rotary condenser is deposited in the packaging hopper and subsequently packaged for sale using a bagging system. The particulate matter emissions in the rotary condenser airstream are controlled by a baghouse system before the airstream is exhausted to Stacks S12, S13 and S14. The total maximum capacity of Line 2 and Line 3 packaging areas is 27,540 pounds per hour.

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

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

D.4.1 PSD Minor Modification Limitations [326 IAC 2-2]

Pursuant to SSM 177-22008-00006 (issued August 10, 2006), and 326 IAC 2-2 (PSD), and as revised by SSM 177-29154-00006, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter modification (177-22008-00006), the Permittee shall comply with the following.

(a) The PM10 emissions from the L2 Shredding Process and L2 Packaging Area shall not exceed 0.43 pounds per hour, total.

(b) The PM10 emissions from the L3 Shredding Process and L3 Packaging Area shall not exceed 0.37 pounds per hour, total.

Compliance with these limits and the limits in Conditions D.3.2, and D.5.2, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the electric melter modification (SSM 177-22008-00006).

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 [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and the associated control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.4.4 Particulate Matter

In order to comply with Conditions D.4.1 and D.4.2 the baghouses for PM control shall be in operation and control emissions at all times the associated shredding and packaging facilities are in operation.

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.4.1, the Permittee shall perform PM/PM10, testing on one of the Shredding and Packaging within one hundred and eighty (180) days after initial startup of the Electric Melter utilizing methods approved by the commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.4.6 Visible Emissions Notations and Compliance Assurance Monitoring (CAM) [40 CFR 64]

(a) Visible emission notations of the shredding and packaging area 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, 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. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. An abnormal reading is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Line 2 shredding process and packaging area and the Line 3 shredding process and packaging area.

D.4.7 Parametric Monitoring and Compliance Assurance Monitoring (CAM) [40 CFR 64]

The Permittee shall record the pressure drop across the baghouses used in conjunction with the shredding and packaging process, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouses are 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. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced at least once every six (6) months or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Line 2 shredding process and packaging area and the Line 3 shredding process and packaging area.

D.4.8 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. 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.4.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.6, the Permittee shall maintain records of daily visible emission notations of the stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document the compliance status with Condition D.4.7, the Permittee shall maintain daily records of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.5 FACILITY OPERATION CONDITIONS

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

(e) One (1) natural gas-fired boiler, identified as B-2, installed in 1961, with a rated capacity of 25 MMBtu per hour. The airstream from the boiler is exhausted to stack S4.

Insignificant Activities

(a) One (1) melter dust recycling system, installed in 1961 and modified in 1999 and 2006, and exhausted to stack S34 [326 IAC 2-2] [326 IAC 6.5-10-11].

(b) One (1) cold end housekeeping system, installed in 1988, with a total production capacity of 17,550 pounds per hour. The particulate emissions in the airstream are controlled by a baghouse before the airstream is exhausted indoors to general ventilation [326 IAC 2-2] [326 IAC 6.5-10-11].

(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.5.1 PSD Modification Limitations [326 IAC 2-2-3]

(a) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3 (BACT), the ancillary equipment shall comply with the following particulate matter limitations:

(1) The particulate emissions from stack S34 from the melter dust recycling 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

(b) Pursuant to CP 177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3 (BACT), the ancillary equipment shall comply with the following limitations:

Facility	Limitation PM/PM10 (lbs/hr)
Melter Dust Recycling System	0.19
Cold End Housekeeping System	0.51

D.5.2 PSD Minor Modification Limitations [326 IAC 2-2]

Pursuant to SSM 177-22008-00006 (issued August 10, 2006), and 326 IAC 2-2 (PSD), and as revised by SSM 177-29154-00006, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter project (SSM 177-22008-00006), the PM10 emissions from the Melter Dust Recycle System shall not exceed 0.001 pound per ton of Melter Dust collected.

Compliance with this limit and the limits in Conditions D.3.2, and D.4.1, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the electric melter modification (SSM 177-22008-00006).

D.5.3 Particulate Emission Limitations [326 IAC 6.5]

(a) Pursuant to 326 IAC 6.5-1-2(a) (Particulate emission limitations; fuel combustion steam generators, asphalt concrete plant, grain elevators, foundries, mineral aggregate operations; modification by commissioner) 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).

(b) Pursuant to 326 IAC 6.5-10-11, the natural gas-fired boiler shall not exceed 1.5 tons of PM per year and 0.0137 pounds of PM per million Btu.

D.5.4 Sulfur Dioxide Emission Limitations [326 IAC 7-4-4]

Pursuant to 326 IAC 7-4-4, (Wayne County Sulfur Dioxide Emission Limitations) the allowable sulfur dioxide emission rate for the natural gas-fired boiler shall not exceed 1.6 pounds per MMBtu/hr.

D.5.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for the ancillary equipment and the cold end housekeeping system baghouse. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.5.6 Particulate Matter

In order to comply with Conditions D.5.1(a), (b), and D.5.3, the baghouse for PM control shall be in operation and control emissions at all times the cold end housekeeping system is in operation.

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

D.5.7 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 have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. 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.

SECTION D.6 FACILITY OPERATION CONDITIONS

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

(j) Two (2) degreasing operations, constructed in 2006, that do not exceed 145 gallons per 12 months and are not subject to 326 IAC 20-6 [326 IAC 8-3-2][326 IAC 8-3-5].

(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.6.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]

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

(a) Equip the cleaner with a cover;

(b) Equip the cleaner with a facility for draining cleaned parts;

(c) Close the degreaser cover whenever parts are not being handled in the cleaner;

(d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;

(e) Provide a permanent, conspicuous label summarizing the operation requirements;

(f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

(a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), for cold cleaner degreaser operations without remote solvent reservoirs constructed after July 1, 1990, the Permittee shall ensure that the following control equipment requirements are met:

(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:

(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F));

(B) The solvent is agitated; or

(C) The solvent is heated.

(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), then the drainage facility must be internal such that articles are enclosed under

the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).

(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.

(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38^{O}C) (one hundred degrees Fahrenheit (100^{O}F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9^{O}C) (one hundred twenty degrees Fahrenheit (120^{O}F)):

(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

(B) A water cover when solvent is used is insoluble in, and heavier than, water.

(C) Other systems of demonstrated equivalent control such as a refrigerated chiller of carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

(b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility construction of which commenced after July 1, 1990, shall ensure that the following operating requirements are met:

(1) Close the cover whenever articles are not being handled in the degreaser.

(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.

(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(c) Forming Facilities:

(1) 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 9,450 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)

(2) 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 8,100 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)

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

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

E.1.1 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 New Source Performance Standards for Wool Fiberglass Insulation Manufacturing Plants: Requirements [326 IAC 12] [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 (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 12, for the Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module as follows:

(a) 40 CFR 60.680
(b) 40 CFR 60.681
(c) 40 CFR 60.682
(d) 40 CFR 60.685 (a), (b), and (c)

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Johns Manville, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
Part 70 Permit No.: T177-22598-00006

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

Please check what document is being certified:

□ Annual Compliance Certification Letter

□ Test Result (specify)

□ Report (specify)

□ Notification (specify)

□ Affidavit (specify)

□ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-64 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Johns Manville, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
Part 70 Permit No.: T177-22598-00006

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Johns Manville, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
Part 70 Permit No.: T177-22598-00006

□ Natural Gas Only □ Alternate Fuel burned From:_____ To:_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Johns Manville, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
Part 70 Permit No.: T093-24556-00002
Facility: Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3)
Parameter: Material input
Limit: 176,798,700 pounds per twelve (12) consecutive month period.

FACILITY: _____ QUARTER: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ No deviation occurred in this quarter.

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Johns Manville, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
Part 70 Permit No.: T177-22598-00006

Months: _____ to Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Indiana Department of Environmental Management
Office of Air Quality

Attachment A

Title 40: Protection of Environment

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES

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 1b/ton) of glass pulled.

§ 60.683 Monitoring of operations.

(a) An owner or operator subject to the provisions of this subpart who uses a wet scrubbing control device to comply with the mass emission standard shall install, calibrate, maintain, and operate monitoring devices that measure the gas pressure drop across each scrubber and the scrubbing liquid flow rate to each scrubber. The pressure drop monitor is to be certified by its manufacturer to be accurate within ±250 pascals (±1 inch water gauge) over its operating range, and the flow rate monitor is to be certified by its manufacturer to be accurate within ±5 percent over its operating range.

(b) An owner or operator subject to the provisions of this subpart who uses a wet electrostatic precipitator control device to comply with the mass emission standard shall install, calibrate, maintain, and operate monitoring devices that measure the primary and secondary current (amperes) and voltage in each electrical field and the inlet water flow rate. In addition, the owner or operator shall determine the total residue (total solids) content of the water entering the control device once per day using Method 209A, "Total Residue Dried at 103–105 °C," in *Standard Methods for the Examination of Water and Wastewater,* 15th Edition, 1980 (incorporated by reference—see §60.17). Total residue shall be reported as percent by weight. All monitoring devices required under this paragraph are to be certified by their manufacturers to be accurate within ±5 percent over their operating range.

(c) All monitoring devices required under this section are to be recalibrated quarterly in accordance with procedures under §60.13(b).

§ 60.684 Recordkeeping and reporting requirements.

(a) At 30-minute intervals during each 2-hour test run of each performance test of a wet scrubber control device and at least once every 4 hours thereafter, the owner or operator shall record the measurements required by §60.683(a).

(b) At 30-minute intervals during each 2-hour test run of each performance test of a wet electrostatic precipitator control device and at least once every 4 hours thereafter, the owner or operator shall record the measurements required by §60.683(b), except that the concentration of total residue in the water shall be recorded once during each performance test and once per day thereafter.

(c) Records of the measurements required in paragraphs (a) and (b) of this section must be retained for at least 2 years.

(d) Each owner or operator shall submit written semiannual reports of exceedances of control device operating parameters required to be monitored by paragraphs (a) and (b) of this section and written documentation of, and a report of corrective maintenance required as a result of, quarterly calibrations of the monitoring devices required in §60.683(c). For the purpose of these reports, exceedances are defined as any monitoring data that are less than 70 percent of the lowest value or greater than 130 percent of the highest value of each operating parameter recorded during the most recent performance test.

(e) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section, provided that they comply with the requirements established by the State.

§ 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:

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

where:

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

C_t= concentration of particulate matter, g/dscm (gr/dscf).

Q_{sd}= volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

P_{avg}= 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_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^2 (lb/ft^2).

LOI=loss on ignition, weight percent.

K′=conversion factor, 6×10^{-5}(min-Mg)/(hr-g) [3×10^{-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]

Indiana Department of Environmental Management
Office of Air Quality

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

Source Description and Location

Source Name:	Johns Manville, Inc.
Source Location:	814 Richmond Ave., Richmond, IN 47374
County:	Wayne
SIC Code:	3296
Operation Permit No.:	T177-22598-00006
Operation Permit Issuance Date:	December 20, 2007
Significant Source Modification No.:	177-29154-00006
Significant Permit Modification No.:	177-28547-00006
Permit Reviewer:	Jenny Acker

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 177-22598-00006 on December 20, 2007.

County Attainment Status

The source is located in Wayne County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx 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 NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Wayne County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Wayne County has been classified as attainment or unclassifiable in Indiana for SO_2, CO, PM_{10}, NO_2, and Pb (Lead). Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

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, 326 IAC 2-3, or 326 IAC 2-7. Therefore, fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit 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	**Emissions** (ton/yr)
PM	1,284
PM_{10}	1,285
$PM_{2.5}$ [(1)]	1,285
SO_2	9.77
VOC	89.8
CO	150
NO_X	16.9
GHG	< 25,000
HAPs	
Total HAPs	< 25.0
Single Greatest HAP (Hydrogen Fluoride)	0.23

(1) PM2.5 was not accounted for previously. Therefore, PM2.5 = PM10.

(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) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

(c) These emissions, except for GHG emissions, are based upon the Technical Support Document (TSD) to Part 70 Operating Permit Renewal No.: 177-22598-00006. GHG

emissions were provided by the source as part of this permit action (SSM 177-29154-00006 and SPM 177-28547-00006).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Johns Manville, Inc. on October 9, 2009, relating to a change in raw material consumption. Johns Manville, Inc. is proposing to utilize more post-consumer (recycled) glass material in the electric melter. This change does not require any physical modifications or increase the capacity of the electric melter. However, it is considered a change in the method of operation which affects the potential to emit (PTE) at the electric melter and at numerous upstream and downstream facilities.

The increased use of post-consumer (recycled) glass requires adjustments to emissions calculations due to the change in the method of operation. The emissions calculation will be affected by this modification as follows:

(a) PM10, NOx, VOC, CO, and SO2 emission factors for the glass melter have been revised due to the increased cullet.

(b) The potential to emit (PTE) of the material handling facilities is based on the specific material being transferred. Although the overall amount of material transferred, in tons per year, will not change, the amounts transferred to specific material handling facilities, in tons per year, will change. This change affects the following units: Batch Mixer, Batch Transfer System, Day Bins 1 & 2, Railcar Receiving Station, Silos 1 through 8, and the Weigh Scales.

Additionally, the source has requested revisions to the netting analysis, conducted as part of the 177-22008-00006 permitting action. The source has submitted updated emission factors for several emission units; requested that material handling calculations be revised and based on AP-42 methodology rather than baghouse grainloading, air flow, and runtime; and requested corrections to throughput capacities. See State Rule Applicability Determination Section of this document for more details.

Enforcement Issues

There are no pending enforcement actions.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

This source modification is subject to 326 IAC 2-7-10.5(f)(2), because an emission unit is subject to the requirements of 326 IAC 8-1-6 as part of this modification.

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)(1), because the modification requires significant changes to existing Part 70 permit terms and conditions.

Permit Level Determination – PSD or Emission Offset or Nonattainment NSR

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.

	Potential to Emit (ton/yr)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO**	**NO_X**	**GHG**	**Fluoride**
	[1)] Actual to Projected Actual (ATPA)								
Electric Melter									
Baseline	0	0	0	0	0	0	0	0	0
Projected Actuals	1.42	1.42	1.42	9.95	32.89	46.66	7.28	433.45	0.03
ATPA	**1.42**	**1.42**	**1.42**	**9.95**	**32.89**	**46.66**	**7.28**	**433.45**	**0.03**
Batch Mixer									
Baseline	0	0	0	--	--	--	--	--	--
Projected Actuals	0.341	0.188	0.188	--	--	--	--	--	--
ATPA	**0.341**	**0.188**	**0.188**	--	--	--	--	--	--
Batch Transfer System									
Baseline	0	0	0	--	--	--	--	--	--
Projected Actuals	0.340	0.187	0.187	--	--	--	--	--	--
ATPA	**0.340**	**0.187**	**0.187**	--	--	--	--	--	--
Day Bins 1 & 2									
Baseline	0	0	0	--	--	--	--	--	--
Projected Actuals	0.393	0.217	0.217	--	--	--	--	--	--
ATPA	**0.393**	**0.217**	**0.217**	--	--	--	--	--	--
Railcar Receiving Station									
Baseline	0.082	0.042	0.042	--	--	--	--	--	--
Projected Actuals	0.338	0.186	0.186	--	--	--	--	--	--
ATPA	**0.256**	**0.144**	**0.144**	--	--	--	--	--	--
Silos 1 though 8									
Baseline	0.082	0.042	0.042	--	--	--	--	--	--
Projected Actuals	0.338	0.186	0.186	--	--	--	--	--	--
ATPA	**0.256**	**0.144**	**0.144**	--	--	--	--	--	--

	Potential to Emit (ton/yr)								
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**VOC**	**CO**	**NO_X**	**GHG**	**Fluoride**
Weigh Scales									
Baseline	0.084	0.043	0.043	--	--	--	--	--	--
Projected Actuals	0.393	0.217	0.217	--	--	--	--	--	--
ATPA	**0.310**	**0.174**	**0.174**	--	--	--	--	--	--
Emissions Increase for Modification	**3.28**	**2.45**	**2.45**	**9.95**	**32.89**	**46.66**	**7.28**	**433.45**	**0.03**
Significant Level Threshold	25	15	10	40	40	100	40	75,000 CO_2e	3.0

[1)] Pursuant to 326 IAC 2-2(rr)(2)(B), in lieu of using projected actual emissions the source may elect to use the potential to emit (PTE) of the unit. Johns Manville has elected to use the PTE in place of the projected actuals for PM, PM10, VOC, and GHG emissions.

This modification to an existing major stationary source is not major because the emissions increase is less then the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Since this source is considered a major PSD source and the unrestricted potential to emit of this modification is greater than twenty-five (25) tons of PM per year and fifteen (15) tons of PM_{10} per year, this source has elected to limit the potential to emit of this modification as follows:

Cullet Increase Project (SSM 177-29154-00006)		
Emission Unit/Facility	**PM10**	**units**
Day Bin 1	0.005	lb/ton material
Day Bin 2	0.005	lb/ton material
Mixer	0.005	lb/ton material
Weigh Scale	0.005	lb/ton material
Railcar Receiving Station	0.005	lb/ton material
Raw Material Silos (1-8)	0.005	lb/ton material
Batch Transfer System	0.005	lb/ton material
Electric Melter	0.49	lb/hr

Federal Rule Applicability Determination

NSPS:

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

NESHAP:

(a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

CAM:

(a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each new or modified pollutant-specific emission unit that meets the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

(b) A Compliance Assurance Monitoring (CAM) evaluation was conducted as part of the Part 70 Operating Permit Renewal No. 177-22598-00006, issued on December 20, 2011, and the following emission units were determined to be subject to the requirements of CAM:

(1) Line 2 Forming / Collection Module for PM and PM10
(2) Line 3 Forming / Collection Module for PM and PM10
(3) Line 3 Shredding & Packing Line for PM and PM10
(4) Line 4 Shredding & Packing Line for PM and PM10

Since this permitting action (SSM 177-29154-00006) is revising the PTE of these and other emission units, the CAM Applicability Analysis is being revisited.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
PM							
Electric Melter	Y	326 IAC 6.5-1	> 100	[1)] 1.42	100	Y	N
Line 2 Forming / Collection Module	Y	326 IAC 2-2-3 326 IAC 6.5-10-11	> 100	[1)] 49.67	100	Y	N
Line 3 Forming / Collection Module	Y	326 IAC 2-2-3 326 IAC 6.5-10-11	> 100	[1)] 45.55	100	Y	N
Line 2 Shredding / Packaging Line	Y	326 IAC 6.5-1-2	> 100	[1)] 1.89	100	Y	N
Line 3 Shredding / Packaging Line	Y	326 IAC 6.5-1-2	> 100	[1)] 1.62	100	Y	N
Railcar Receiving	Y	Y	< 100	0.338	100	N	N
Silos 1-8	Y	Y	< 100	0.338	100	N	N
Day Bin 1 & 2 (combined)	Y	Y	< 100	0.393	100	N	N
Mixer	Y	Y	< 100	0.341	100	N	N
Batch Transfer System	Y	Y	< 100	0.340	100	N	N
Weigh Scale	Y	Y	< 100	0.340	100	N	N
PM10							
Electric Melter	Y	326 IAC 2-2	> 100	1.42	100	Y	N
Line 2 Forming / Collection Module	Y	326 IAC 2-2 326 IAC 2-2-3	> 100	49.67	100	Y	N

CAM Applicability Analysis							
Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (ton/yr)	Controlled PTE (ton/yr)	Part 70 Major Source Threshold (ton/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
Line 3 Forming / Collection Module	Y	326 IAC 2-2 326 IAC 2-2-3	> 100	45.55	100	Y	N
Line 2 Shredding / Packaging Line	Y	326 IAC 2-2	> 100	1.89	100	Y	N
Line 3 Shredding / Packaging Line	Y	326 IAC 2-2	> 100	1.62	100	Y	N
Railcar Receiving	Y	Y	< 100	0.186	100	N	N
Silos 1-8	Y	Y	< 100	0.186	100	N	N
Day Bin 1 & 2 (combined)	Y	Y	< 100	0.217	100	N	N
Mixer	Y	Y	< 100	0.188	100	N	N
Batch Transfer System	Y	Y	< 100	0.187	100	N	N
Weigh Scale	Y	Y	< 100	0.217	100	N	N
VOC							
Line 2 Forming / Collection Module	Y	Y	< 100	49.67	100	N	N
Line 3 Forming / Collection Module	Y	Y	< 100	49.67	100	N	N

[1)] Although PM emission calculations were not conducted, for the purposes of this evaluation PM emissions are equal to PM10 calculated emissions.

(c) Based on this evaluation, the requirements of 40 CFR Part 64, CAM are still applicable to the following emission units for PM and PM10.

(1) Line 2 Forming / Collection Module
(2) Line 3 Forming / Collection Module
(3) Line 2 Shredding & Packing Line
(4) Line 3 Shredding & Packing Line

The Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

(d) A Compliance Assurance Monitoring (CAM) evaluation for the Electric Melter was not conducted as part of the Part 70 Operating Permit Renewal No. 177-22598-00006 (issued December 20, 2011). However, based on the controlled PTE of PM10 and the given control efficiency of baghouse of 99%, the uncontrolled PTE of PM10 is greater than 100 tons per year. Based on this analysis, the requirements of 40 CFR Part 64, CAM were applicable to the Electric Melter for PM and PM10 upon issuance of the Title V Renewal. Therefore, the requirements will be incorporated into the Part 70 operating permit as part of this permitting action (SSM 177-29154-00006). The Compliance Determination and Monitoring Requirements section includes a detailed description of the CAM requirements.

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 (PSD))

SSM 177-22008-00006 & SPM 177-22666-00006 (Electric Melter Project)
Significant Source Modification 177-22008-00006 (issued August 10, 2006) and Significant Permit Modification 177-22666-00006 (issued September 1, 2006) authorized the construction and operation of the following emission units:

- One (1) electric melter
- Two (2) day bins; identified as Day Bin 1 and Day Bin 2
- One (1) Mixer
- One (1) Batch Transfer System

The following analysis serves to document the projected emissions increase and net emissions increase of the electric melter project (SSM 177-22008-00006). See Appendix A of this document for detailed calculations.

Electric Melter Modification (SSM 177-22008 -00006)						
Emission Unit	PM	PM10	VOC	NOx	CO	SO2
Existing	*Actual to Projected Actual (tpy)*					
Line 2 Forming/Collection	7.95	7.95	14.42	1.09	44.70	2.14
Line 3 Forming/Collection	9.15	9.15	15.07	1.13	45.50	2.23
Dust Recycle	2.16E-05	2.16E-05	--	--	--	--
Railcar Receiving	0.128	0.128	--	--	--	--
Silos 1 - 8	0.171	0.171	--	--	--	--
Weigh scales	6.00E-04	6.00E-04	--	--	--	--
Line 2 Shredding	1.95	1.95	--	--	--	--
Line 3 Shredding	2.01	2.01	--	--	--	--
New	*Potential to Emit (PTE) (tpy)*					
Batch Mixer	0.001	0.001	--	--	--	--
Batch Transfer	0.234	0.234	--	--	--	--
Daybins 1 & 2	0.117	0.117	--	--	--	--
Electric Melter	2.17	2.17	4.84	1.66	3.65	0.07
Emissions Increase (tpy)	23.88	23.88	34.32	3.89	93.86	4.45
Significant Level Threshold (tpy)	25	15	40	40	100	40
Units to be Shut Down	*Contemporaneous Decreases (tpy)*					
Daybin 2N, 3W, 3E	n/a	0.0009	n/a	n/a	n/a	n/a
Mixer -old	n/a	0.0008	n/a	n/a	n/a	n/a
Batch Transfer - Old	n/a	0.002	n/a	n/a	n/a	n/a
Line 2 Furnace	n/a	2.980	n/a	n/a	n/a	n/a
Line 3 Furnace	n/a	3.060	n/a	n/a	n/a	n/a
Line 6 Furnace	n/a	0.200	n/a	n/a	n/a	n/a
Line 6 Baggers	n/a	0.180	n/a	n/a	n/a	n/a
Line 6 Collection Mod	n/a	3.520	n/a	n/a	n/a	n/a
	Contemporaneous Increases (tpy)					
	--	neg.	--	--	--	--
Net Emissions Increase (tpy)	n/a	13.94	n/a	n/a	n/a	n/a
Significant Level Threshold (tpy)	n/a	15	n/a	n/a	n/a	n/a

Note: Since the emissions increase of SO2, VOC, CO, NOx, and Fluoride (F^-) is less then the significant threshold level, a contemporaneous netting analysis was not required for these pollutants. See Technical Support Document for Fluoride (F^-) details.

Since this source was considered a major PSD source and the unrestricted net emissions increase of the electric melter modification was greater than fifteen (15) tons of PM_{10} per year, the source elected to limit the potential to emit of PM10. Lines 2 and 3 Collection Modules utilize a fog box/wet spray collection system to achieve twenty percent (20%) VOC control. Since the

unrestricted net emissions increase of the electric melter modification was greater than forty (40) tons of VOC per year, the source elected to limit the potential to emit of VOC. Since the net emissions increase of CO from the electric melter project was within 10% of the significant threshold and the CO emissions were not supported by testing, the source elected to limit the potential to emit of CO.

The following serves to document limits accepted by the source as part of the electric melter modification.

Electric Melter Modification (SSM 177-22008-00006)			
Emission Unit/Facility	**PM10** (lb/hr)	**VOC** (lb/hr)	**CO** (lb/hr)
Day Bin 1	0.01	--	--
Day Bin 2	0.01	--	--
Mixer	0.005	--	--
Weigh Scale	0.005	--	--
Railcar Receiving Station	0.095	--	--
Raw Material Silos (1-8)	0.04	--	--
Batch Transfer System	0.053	--	--
Electric Melter	0.49	1.1	0.83
Line 2 Forming & Collection Module	[1)] 10.3	[2)] 6.78	15.6
Line 3 Forming & Collection Module	[1)] 10.3	[2)] 6.78	15.6
Line 2 Shredding/Packing	0.9	--	--
Line 2 Shredding/Packing	0.9	--	--
Melter Dust Recycle System	0.001	--	--

[1)] Existing PM10 limits issued pursuant to 326 IAC 2-2-3 (BACT) were relied upon.
[2)] Existing VOC limits issued pursuant to 326 IAC 2-2-3 (BACT) were relied upon.

SSM 177-22008-00006 (Electric Melter Project) as revised by SSM 177-29154-00006
The source has requested revisions to the netting analysis, conducted as part of the 177-22008-00006 permitting action. The source has submitted updated emission factors for several emission units, which are based on stack testing. The source requested that material handling calculations be revised and based on AP-42 methodology rather than baghouse grainloading, air flow.

Additionally, the Line 2 Forming, Shredding, and Packaging facilities were permitted, under 177-22008-00006, with maximum capacity of 9,450 pounds per hour (lbs/hr). The Line 3 Forming, Shredding, and Packaging facilities were permitted with a maximum capacity of 8,100 lbs/hr. This equates to a combined throughput capacity of 17,550 lbs/hr. However, the calculations were based on a throughput of 8,750 lbs/hr, each. This equates to a combined throughput of 17,500 lbs/hr. Additionally, the value of 17,500 lbs/hr rather than 17,550 lbs/hr was used to calculate the emissions from the Electric Melter. The source has requested the calculations be revised to reflect the proper throughput.

The following adjustments were made to the calculations:

(a) Electric Melter: The PTE calculations have been revised to reflect the correct Line Pull-Rate Capacity.

(b) Line 2 Forming and Collection Module and Line 3 Forming and Collection Module

(1) The PTE calculations have been revised to reflect the correct Line Pull-Rate Capacity.
(2) The PTE calculations have been revised to reflect updated PM10, NOx, VOC, and CO emission factors, which are based on stack testing.

(c) Line 2 Shredding/Packaging Unit and Line 3 Shredding/Packaging Unit

(1) The PTE calculations have been revised to reflect the correct Line Pull-Rate Capacity.
(2) The PTE calculations have been revised to reflect updated PM10 emission factors, which is based on stack testing.

(d) Batch Mixer (new), Batch Transfer System (new), Day Bins 1 & 2, Dust Recycle System, Railcar Receiving Station, Silos 1 through 8, and Weigh Scales

(1) The baseline and PTE calculations have been revised to reflect AP-42 methodology rather than baghouse specific grain loading, air flow, and runtime.
(2) For baseline and PTE calculations, PM10 emissions are no longer assumed to be equal to PM emissions. Instead PM10 emissions have been calculated using PM10 specific emission factors.

(e) Mixer (old), Batch Transfer System (old)

(1) The baseline calculations have been revised to reflect AP-42 methodology rather than baghouse specific grain loading, air flow, and runtime.
(2) PM10 emissions are no longer assumed to be equal to PM emissions. Instead PM10 emissions have been calculated using PM10 specific emission factors.

These emission units were removed from the source upon completion of the project permitted under 177-22008-00006.

The following analysis serves to document the revised projected emissions increase and net emissions increase of the electric melter project (SSM 177-22008-00006). See Appendix A of this document for detailed calculations.

Electric Melter Modification (SSM 177-22008 -00006) as Revised by SSM 177-29154-00006						
Emission Unit	PM	PM10	VOC	NOx	CO	SO2
Existing	*Actual to Projected Actual (tpy)*					
Line 2 Forming/Collection	~~7.95~~ **12.57**	~~7.95~~ **12.57**	~~14.42~~ **< 0**	~~1.09~~ **0.89**	~~44.70~~ **9.67**	~~2.14~~ **2.53**
Line 3 Forming/Collection	~~9.15~~ **9.65**	~~9.15~~ **9.65**	~~15.07~~ **< 0**	~~1.13~~ **0.64**	~~45.50~~ **5.66**	~~2.23~~ **1.87**
Dust Recycle	~~2.16E-05~~ **2.69E-05**	~~2.16E-05~~ **7.84E-05**	--	--	--	--
Railcar Receiving	~~0.128~~ **0.055**	~~0.128~~ **0.028**	--	--	--	--
Silos 1 - 8	~~0.171~~ **0.055**	~~0.171~~ **0.028**	--	--	--	--
Weigh scales	~~6.00E-04~~ **0.045**	~~6.00E-04~~ **0.023**	--	--	--	--
Line 2 Shredding	~~1.95~~ **< 0**	~~1.95~~ **< 0**	--	--	--	--
Line 3 Shredding	~~2.01~~ **< 0**	~~2.01~~ **< 0**	--	--	--	--
New	*Potential to Emit (PTE) (tpy)*					
Batch Mixer	~~0.001~~ **0.129**	~~0.001~~ **0.066**	--	--	--	--
Batch Transfer	~~0.234~~ **0.129**	~~0.234~~ **0.066**	--	--	--	--
Daybins 1 & 2	~~0.117~~ **0.182**	~~0.117~~ **0.095**	--	--	--	--
Electric Melter	~~2.17~~ **2.18**	~~2.17~~ **2.18**	~~4.84~~ **4.85**	~~1.66~~ **1.67**	~~3.65~~ **3.66**	~~0.07~~ **0.07**

Electric Melter Modification (SSM 177-22008 -00006) as Revised by SSM 177-29154-00006						
Emission Unit	PM	PM10	VOC	NOx	CO	SO2
Emissions Increase (tpy)	~~23.88~~ **24.97**	~~23.88~~ **24.69**	~~34.32~~ **4.85**	~~93.86~~ **18.99**	~~8.89~~ **3.21**	~~4.45~~ **4.47**
Significant Level Threshold (tpy)	25	15	40	40	100	40
Units to be Shut Down	*Contemporaneous Decreases (tpy)*					
Daybin 2N, 3W, 3E	--	~~0.0009~~	--	--	--	--
Mixer -old	--	~~0.0008~~ **0.043**	--	--	--	--
Batch Transfer - Old	--	~~0.002~~ **0.043**	--	--	--	--
Line 2 Furnace	--	~~2.980~~ **2.985**	--	--	--	--
Line 3 Furnace	--	~~3.060~~ **3.055**	--	--	--	--
Line 6 Furnace	--	~~0.200~~ **0.203**	--	--	--	--
Line 6 Baggers	--	~~0.180~~ **0.183**	--	--	--	--
Line 6 Collection Mod	--	~~3.520~~ **3.523**	--	--	--	--
	Contemporaneous Increases (tpy)					
	--	neg.	--	--	--	--
Net Emissions Increase (tpy)	--	~~13.94~~ **14.66**	--	--	--	--
Significant Level Threshold (tpy)	--	15	--	--	--	--

Note: Since the emissions increase of SO2, VOC, CO, NOx, and Fluoride (F^-) is less then the significant threshold level, a contemporaneous netting analysis was not required for these pollutants. See Technical Support Document for Fluoride (F^-) details.

Due to the revisions requested by the source to the electric melter project emissions (SSM 177-22008-00006), the following limits have been adjusted as part of this permitting action (SSM 177-29154-00006).

Revisions to the Electric Melter Modification (SSM177-22008-00006)			
Emission Unit/Facility	**PM10**	**VOC**	**CO**
Day Bin 1	[1] See 177-29154-00006 (cullet increase project)		
Day Bin 2	[1] See 177-29154-00006 (cullet increase project)		
Mixer	[1] See 177-29154-00006 (cullet increase project)		
Weigh Scale	[1] See 177-29154-00006 (cullet increase project)		
Railcar Receiving Station	[1] See 177-29154-00006 (cullet increase project)		
Raw Material Silos (1-8)	[1] See 177-29154-00006 (cullet increase project)		
Batch Transfer System	[1] See 177-29154-00006 (cullet increase project)		
Electric Melter	[1] See 177-29154-00006 (cullet increase project)		[3] ~~0.83 lb/hr~~
Line 2 Forming & Collection Module	~~10.3 lb/hr~~ **11.34 lb/hr**	[2] ~~6.78 lb/hr~~	[3] ~~15.6~~
Line 3 Forming & Collection Module	~~10.3 lb/hr~~ **10.40 lb/hr**	[2] ~~6.78 lb/hr~~	[3] ~~15.6~~
Line 2 Shredding/Packing	~~0.9 lb/hr~~ **0.43 lb/hr**	--	--
Line 2 Shredding/Packing	~~0.9 lb/hr~~ **0.37 lb/hr**	--	--
Melter Dust Recycle System	~~0.001 (lb/hr)~~ **0.01 lb/ ton Melter Dust collected**	--	--

[1)] These units are affected units under the cullet increase modification (SSM 177-29154-00006). Therefore, the PTE of these units was agained altered by the cullet increase modification and the permitted limits reflect the PTE as effected by the cullet increase project. However, the PTE of these units as recalculated for the electric melter project is detailed in Appendix A of this document.

[2)] After revising the CO emissions calculations of the electric melter project, the emissions increase of CO is 18.99 tpy. This emissions increase of CO is substantially less than the PSD significant threshold. Therefore, IDEM, OAQ has determined that the CO limits, previously necessary to render the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter project are no longer required.

[3)] After revising the VOC emissions calculations of the electric melter project, the emissions increase of VOC is 4.85 tpy. This emissions increase of VOC is substantially less than the PSD significant threshold. Therefore, IDEM, OAQ has determined that the VOC limits, previously necessary to render the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter project are no longer required.

SSM 177-29154-00006 (Cullet Increase Project)
PSD applicability is discussed under the Permit Level Determination – PSD Section.

326 IAC 2-2-3 (Prevention of Significant Deterioration (PSD) Best Available Control Technology (BACT))

Lines 2 and 3 Forming and Collection Modules
As part of the SSM 177-22008-00006 permitting action the following changes were made:

(a) The capacity of the Line 2 Forming and Collection Module was increased from 7,200 pounds of pulled glass per hour to 8,750 pounds of pulled glass per hour.

(b) The capacity of the Line 3 Forming and Collection Module was increased from 7,200 pounds of pulled glass per hour to 8,750 pounds of pulled glass per hour.

(c) The PM/PM10 PSD-BACT limitations for Lines 2 & 3 were restructured as part of SSM 177-22008-00006. A BACT analysis was not conducted. The PSD-BACT limits of 3.70 pounds of PM/PM10 per ton glass pulled, each module, were converted to a lb/hr limit.

Restructuring the Line 2 Forming/Collection Module & Line 3 Forming/Collection Module limits of 3.70 lb/ton of glass to an equivalent lb/hr value is as follows:

PM/PM10 (lb/hr) = 3.70 lb/ton pulled glass x 7,200 lb/pulled glass per hour x 1/2000 lb/ton (each module)
PM/PM10 (lb/hr) = 13.32 lb/hr (each)

However, the restructured limits of 3.70 pounds of PM/PM10 per ton of glass pulled, where not incorporated into the permit. Lines 2 & 3 each required to PM10 limit of 10.3 pounds per hour, which rendered the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter project (SSM 177-22008-00006). Rather than place a separate PSD minor limit in the permit, the above restructure limit was lower to 10.3.

(d) As part of this permitting action (SSM 177-29154-00006), the restructured PM/PM10 PSD-BACT limitations for Lines 2 & 3 will be set at 13.32 lb/hr, and a separate PM10 PSD minor limit for Lines 2 & 3 will be added to the permit.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Pursuant to 326 IAC 6-3-1(c)(3), the requirements of 326 IAC 6-3 are not applicable if a particulate matter limitation is established in 326 IAC 6.5. Since all facilities associated with this permitting action are subject to a particulate matter limitation under 326 IAC 6.5, the requirements of 326 IAC 6-3-2 are not applicable.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
The Electric Melter is subject to the requirements of 326 IAC 8-1-6, because it was constructed after January 1, 1980, has potential emissions of twenty-five (25) tons per year or greater, and are not otherwise regulated by other provisions of 326 IAC 8-1; 326 IAC 20-48; or 326 IAC 20-56. Therefore, a Best Available Control Technology (BACT) analysis has been conducted and BACT for the Electric Melter has been determined to be the following:

(a) The VOC emissions from the Electric Melter shall not exceed 7.51 pounds per hour.

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 Requirements applicable to this modification are as follows:

(a) The Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3 (Railcar Receiving Station, Raw Material Silos, Day Bin 1, Day Bin 2, Day Bins, Mixer, Batch Transfer System, and 1 Weigh Scale) has applicable compliance determination conditions as specified below:

(1) The baghouse used to control PM and PM10 emissions and opacity from the Railcar Unloading Station and the Raw Material Silos shall be in operation and control emissions at all times the associated units are in operation.

(2) The baghouses used to control PM and PM10 emissions from Day Bin 1, Day Bin 2, Mixer, Batch Transfer System and Weigh Scale shall be in operation and control emissions at all times the associated units are in operation.

(b) The Electric Melter has applicable compliance determination conditions as specified below:

(1) In order to demonstrate compliance with 326 IAC 2-2 (PSD), the Permittee shall perform PM/PM10, VOC and CO testing on the Electric Melter no later than 180 days after initial startup utilizing methods approved by the commissioner. These tests shall be repeated once every five (5) years from the date of the most recent valid compliance demonstration.

(2) The dust collector used to control PM and PM10 emissions and from the Electric Melter shall be in operation and control emissions at all times the Electric Melter is in operation.

(c) The Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module have applicable compliance determination conditions as specified below:

(1) In order to demonstrate compliance with 326 IAC 2-2-3 (PSD - BACT) and 326 IAC 2-2 (PSD), the Permittee shall perform PM/PM10, VOC and CO testing on one of the Forming and Collection Modules within one hundred eighty (180) days after initial startup of the Electric Melter startup utilizing methods approved by the commissioner.

(2) The water spray systems must be operated shall be in operation at all times when the forming sections are in operation.

(d) The Line 2 shredding process, Line 2 packaging area, Line 3 shredding process, and Line 3 packaging area have applicable compliance determination conditions as specified below:

(1) In order to demonstrate compliance with 326 IAC 2-2 (PSD), the Permittee shall perform PM/PM10, testing on one of the Shredding and Packaging within one hundred eighty (180) days after initial startup of the Electric Melter utilizing methods approved by the commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration.

(2) The baghouses used to control PM and PM10 emissions and from the shredding and packaging operations shall be in operation and control emissions at all times the associated shredding and packaging facilities are in operation.

(e) The cold end housekeeping system has applicable compliance determination conditions as specified below:

(1) The baghouse used to control PM and PM10 emissions and from the cold end housekeeping system shall be in operation and control emissions at all times the cold end housekeeping system is in operation.

<u>The compliance monitoring requirements applicable to this modification are as follows:</u>

(a) The Railcar Receiving station and Raw Material Silos have applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the stack exhaust from the Railcar Receiving shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(2) The Permittee shall record the pressure drop across the baghouse used in conjunction with the Railcar Receiving Station at least once per day when the facility is in operation.

These monitoring conditions are necessary because the baghouse for the Railcar Receiving Station and the Raw Material Storage Silos must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-2-3-(PSD - BACT), 326 IAC 6.5-1-2(a) (Particulate Matter (PM)) and 326 IAC 2-7 (Part 70).

(b) Day Bin 1, and Day Bin 2 have applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the stack exhaust from the Day Bin 1 and Day Bin 2 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

(2) The Permittee shall record the pressure drop across the baghouses used in conjunction with the Day Bins at least once per day when the respective facilities are in operation.

These monitoring conditions are necessary because the baghouses for Day Bin 1, and Day Bin 2 must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 6.5-1-2(a) (Particulate Matter (PM)) and 326 IAC 2-7 (Part 70).

(c) The Electric Melter has applicable compliance monitoring conditions as specified below:

(1) 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.

(2) The Permittee shall record the pressure drop across the dust collector used in conjunction with the Electric Melter at least once per day when the respective facility is in operation.

These monitoring conditions are necessary because the dust collector for the Electric Melter must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 6.5-1-2(a) (Particulate Matter (PM)) and 326 IAC 2-7 (Part 70).

(d) The Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module have applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the stack exhaust from the Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

These monitoring conditions are necessary because the water spray systems for particulate control must operate properly to ensure compliance with 326 IAC 2-2 (PSD), 326 IAC 2-2-3 (PSD - BACT), and 326 IAC 2-7 (Part 70).

(e) The Line 2 shredding process, Line 2 packaging area, Line 3 shredding process, and Line 3 packaging area have applicable compliance monitoring conditions as specified below:

(1) Visible emission notations of the stack exhaust from the shredding and packaging area 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.

(2) The Permittee shall record the pressure drop across the baghouses used in conjunction with the shredding and packaging process at least once per day when the respective facility is in operation.

These monitoring conditions are necessary because the baghouse system for particulate control must operate properly to ensure compliance 326 IAC 2-2 (PSD), 326 IAC 6.5-1-2(a) (Particulate Matter (PM)) and 326 IAC 2-7 (Part 70).

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 177-22598-00006. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

IDEM Change 1:

The source has requested a name change. Therefore, throughout the permit the following revision has been made.

Johns Manville ~~International~~, Inc.

IDEM Change 2:

IDEM, OAQ has removed all references to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address. The permit forms have been revised accordingly and Condition A.2 - General Information has been revised as follows:

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 a fiberglass insulation manufacturing plant.

Source Address:	814 Richmond Ave, Richmond, Indiana 47374
~~Mailing Address:~~	~~814 Richmond Ave, Richmond, IN 47374~~
General Source Phone Number:	(765) 973-5243
SIC Code:	3296
County Location:	Wayne
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act 1 of 28 Source Categories

IDEM Change 3:

Several of IDEM's Branches and Sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to Permit Administration and Development Section and the Permits Branch have been changed to Permit Administration and Support Section. References to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch.

The following conditions have been revised due to this change:

- B.9 - Annual Compliance Certification
- B.10 - Preventive Maintenance Plan
- B.11 - Emergency Provisions
- B.16 - Permit Renewal (formerly B.17)
- B.17 - Permit Amendment or Modification (formerly B.18)
- B.19 - Operational Flexibility (formerly B.16)
- B.22 - Transfer of Ownership or Operational Control (formerly B.23)
- C.6 - Asbestos Abatement Projects
- C.9 - Compliance Monitoring
- C.15 - Emission Statement (formerly C.16)
- C.17 - General Reporting Requirements (formerly B.18)

Additionally, the permit forms have been revised accordingly.

IDEM Change 4:

The phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore all timelines have been switched to "no later than" or "not later than". The underlying rules for Title V fees, emergency provisions, continuous compliance plans, and

revocation of permits state "within". Therefore, conditions regulated under these rules were not updated.

The exceptions to this revision are as follows:

1. Wherever the timeframe states "within a reasonable" time. This is not considered a specifically stated timeframe.

2. Pursuant to 326 IAC 2-7-16(b)(4), for an emergency lasting one (1) hour or more, the Permittee notified the commissioner within four (4) business days. Pursuant to 326 IAC 2-7-16(b)(5), the Permittee submitted the notice either in writing or by facsimile of the emergency to the commissioner within two (2) working days. Therefore, this change has not been made in Section B - Emergency Provisions paragraph (b)(4) and (b)(5).

3. Pursuant to 326 IAC 2-7-19(b), a source shall pay the annual fee within thirty (30) calendar days of receipt of a billing by the department. Therefore, this change has not been made in Section B - Annual Fee Payment.

The following conditions have been revised due to this change:

- B.10 - Preventive Maintenance Plan
- C.9 - Compliance Monitoring
- C.17 - General Reporting Requirements (previously Condition C.18)

IDEM Change 5:

(a) 326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM is revising all instances of "the responsible official" to read "~~the~~ **a** responsible official."

(b) IDEM has clarified what rule requirements a certification needs to meet. IDEM has removed the last sentence dealing with the need for certification from the forms because the Conditions requiring the forms already address this issue.

The exceptions to this revision are as follows:

1. Section B - Annual Compliance Certification: With the exception of the final statement the word "certification" references the annual compliance certification report, not a certification in accordance with the requirements of 326 IAC 2-7-6(1). Therefore, the above revision is made only in the final statement.

2. Section B - Credible Evidence: The reference is to "compliance certifications" not a certification in accordance with 326 IAC 2-7-6(1).

3. Section C - Asbestos, Paragraph (d): The reference certification in the sentence " 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. " is not a certification in accordance with 326 IAC 2-7-6(1).

In all other conditions, the language "the certification..." has been changed to "~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)**..."

The following conditions have been revised due to this change:

- B.8 - Certification
- B.9 - Annual Compliance Certification

- B.10 - Preventive Maintenance Plan
- B.11 - Emergency Provisions
- B.15 - Permit Modification, Reopening, Revocation and Reissuance, or Termination (formerly B.16)
- B.16 - Permit Renewal (formerly B.17)
- B.17 - Permit Amendment or Modification (formerly B.18)
- B.19 - Operational Flexibility (formerly B.16)
- B.22 - Transfer of Ownership or Operational Control (formerly B.23)
- C.6 - Asbestos Abatement Projects
- C.7 - Performance Testing
- C.9 - Compliance Monitoring
- C.14 - Actions Related to Noncompliance Demonstrated by a Stack Test (formerly C.15)
- C.15 - Emission Statement (formerly C.16)
- C.17 - General Reporting Requirements (formerly C.18)

Additionally, the statement at the bottom of the forms included with the permit stating whether a certification need accompany the form has been removed.

IDEM Change 6:

Paragraph (a) of Section B - Duty to Provide Information has been revised as follows:

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.

IDEM Change 7:

To clarify that Section B - Certification only states what a certification must be, IDEM has revised paragraphs (a) and (b) of the condition as follows:

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

(a) ~~Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~ **A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:**

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

(2) the certification states 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.~~ **The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification**. One (1) certification may cover multiple forms in one (1) submittal.

(c) **A** ~~The~~ "responsible official" is defined at 326 IAC 2-7-1(34).

IDEM Change 8:

Paragraph (a) of Section B - Annual Compliance Certification has been revised as follows:

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

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. ~~All~~ **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 no later than July 1 of each year to:

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

* * *

(c) The annual compliance certification report shall include the following:

* * *

The submittal by the Permittee does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

IDEM Change 9:

IDEM, OAQ has added a new paragraph (b) to handle a future situation where the Permittee adds units that need preventive maintenance plans developed. IDEM, OAQ has clarified other aspects of Section B - Preventive Maintenance Plan.

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 ~~and implement~~ Preventive Maintenance Plans (PMPs) **no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later**, including the following information on each facility:

(1) * * *

(2) * * *

(3) * * *

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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(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 is the primary contributor to an exceedance of any limitation on emissions ~~or the potential to emit~~. The PMPs **and their submittal** do not require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

(c) * * *

IDEM Change 10:

IDEM, OAQ is revising Section B - Emergency Provisions to delete paragraph (h). 326 IAC 2-7-5(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report.

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

(a) * * *

(b) * * *

* * *

(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~~ **and Enforcement Branch**), or
Telephone Number: 317-233-0178 (ask for **Office of Air Quality**, Compliance ~~Section~~ **and Enforcement Branch**)
Facsimile Number: 317-233-6865

(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 **and Enforcement** Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

(6) * * * .

* * *

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

IDEM Change 11:

Having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM has removed Section B - Deviation form Permit Requirements and Conditions and added the requirements of that condition to Section C - General Reporting Requirements. Paragraph (d) of Section C - General Reporting Requirements has been removed because IDEM already states the timeline and certification needs of each report in the condition requiring the report.

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

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

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

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

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

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

~~C.18~~**C.17** General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

(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 **except that 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**. This report shall be submitted ~~within~~ **not later than** thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34). **A deviation is an**

exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) ~~The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to~~ **The address for report submittal is**:

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

(c) * * *

~~(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)~~**(d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period.** Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

~~(f)~~**(e)** * * *

~~(g)~~**(f)** The report for project at an existing emissions unit shall be submitted ~~within~~ **no later than** 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)~~ **(d)(1) and (2)** 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) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee ~~deems fit~~ **wishes** to include in this report **such as an explanation as to why the emissions differ from the preconstruction projection**.

Reports required in this part shall be submitted to:

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

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

IDEM Change 12:

IDEM, OAQ will state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B - Permit Renewal has been revised.

~~B.17~~**B.16** 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~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "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~~ **Permit Administration and Support Section**, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

* * *

(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, **pursuant to 326 IAC 2-7-4(a)(2)(D)**, in writing by IDEM, OAQ any additional information identified as being needed to process the application.

IDEM Change 13:

IDEM, OAQ will state that no notice is required for approved changes in Section B - Permit Revision Under Economic Incentives and Other Programs.

~~B.19~~**B.18** 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 **or notice** 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.

* * *

IDEM Change 14:

Section B - Source Modification Requirement has been revised as follows:

~~B.21~~**B.20** Source Modification Requirement [326 IAC 2-7-10.5]

~~(a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.~~

~~(b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2 (for sources located in NA areas).~~

IDEM Change 15:

IDEM, OAQ has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.

C.1 Opacity [326 IAC 5-1]

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

* * *

IDEM Change 16:

Section C - Fugitive Dust Emissions has been revised as follows:

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.**

IDEM Change 17:

Section C - Asbestos Abatement Projects has been revised as follows:

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

* * *

(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~~ **Compliance and Enforcement Branch**, Office of Air Quality
100 North Senate Avenue
~~MC-52~~ **MC 61-53** IGCN 1003
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 ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

(g) Indiana ~~Accredited~~ **Licensed** 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~~ **Licensed** Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana ~~Accredited~~ **Licensed** Asbestos inspector is not federally enforceable.

IDEM Change 18:

IDEM has removed the first paragraph of Section C - Performance Testing due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.

C.7 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.~~ **For performance testing required by this permit**, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance **and Enforcement** Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "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 ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

IDEM Change 19:

IDEM, OAQ has revised Section C - Compliance Monitoring. The reference to recordkeeping has been removed due to the fact that other conditions already address recordkeeping. The voice of the condition has been changed to clearly indicate that it is the Permittee that must follow the requirements of the condition.

C.9 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, **for** all monitoring requirements ~~and record keeping~~ not already legally required ~~shall be implemented~~, **the Permittee shall be allowed up to** ~~within~~ ninety (90) days **from the date** of permit issuance **or of initial start-up, whichever is later, to begin such** monitoring. ~~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 **the Permittee's** control, **any monitoring** ~~that~~ equipment **required by this permit** cannot be installed and operated ~~within~~ **no later than** ninety (90) days **after permit issuance or the date of initial startup**, whichever is later, 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 **and Enforcement** Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ a "responsible official" as defined by 326 IAC 2-7-1(34).

* * *

IDEM Change 20:

IDEM, OAQ has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.

~~C.10 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.~~

IDEM Change 21:

IDEM, OAQ has revised Section C - Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.

~~C.14~~**C.13** 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 (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.~~

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess 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~~ **The response** may include, but ~~are~~ **is** not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned **or are returning 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~~ **normal or usual manner of operation**.

(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; and/or

(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~~ **record the reasonable response steps taken**.

~~(1) monitoring data;~~

~~(2) monitor performance data, if applicable; and~~

~~(3) corrective actions taken.~~

IDEM Change 22:

Paragraph (b) of Section C - Emission Statement has been removed. It was duplicative of the requirement in Section C - General Reporting Requirements.

~~C.16~~**C.15** 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 2005 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~~ **Compliance and Enforcement Branch**, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require ~~the~~ **a** certification **that meets the requirements of 326 IAC 2-7-6(1)** by ~~the~~ **a** "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.~~

IDEM Change 23:

The voice of paragraph (b) of Section C - General Record Keeping Requirements has been changed to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.

~~C.17~~**C.16** General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner 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, for all record keeping requirements not already legally required ~~shall be implemented~~ **the Permittee shall be allowed up to** ~~within~~ ninety (90) days **from the date** of permit issuance **or the date of initial start-up, whichever is later, to begin such record keeping.**

(c) If there is a **reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a** "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z**)) 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) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

* * *

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) 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) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

~~(2)~~**(1)** * * *

~~(3)~~**(2)** * * *

IDEM Change 24:

IDEM has simplified the referencing in Section C - Compliance with 40 CFR 82 and 326 IAC 22-1.

~~C.19~~**C.18** 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 applicable standards for recycling and emissions reduction.

IDEM Change 25:

For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition." or other similar language.

The following Section D conditions have been revised due to this change:

- D.1.4 - Preventive Maintenance Plan
- D.1.6 - Visible Emissions Notations
- D.1.7 - Parametric Monitoring
- D.1.9 - Record Keeping Requirements
- D.2.4 - Preventive Maintenance Plan (previously Condition D.2.3)
- D.2.6 - Testing Requirements (previously Condition D.2.5)
- D.2.7 - Visible Emissions Notations (previously Condition D.2.6)
- D.2.8 - Parametric Monitoring (previously Condition D.2.7)
- D.2.9 - Record Keeping Requirements
- D.3.4 - Preventive Maintenance Plan
- D.3.6 - Testing Requirements
- D.3.7 - Visible Emissions Notations
- D.3.8 - Record Keeping Requirements
- D.4.3 - Preventive Maintenance Plan
- D.4.5 - Testing Requirements
- D.4.6 - Visible Emissions Notations
- D.4.7 - Parametric Monitoring
- D.4.9 - Record Keeping Requirements
- D.5.5 - Preventive Maintenance Plan

IDEM Change 26:

IDEM has decided to clarify Section D - Testing Requirements.

The following Section D conditions have been revised due to this change:

- D.2.6 - Testing Requirements (previously Condition D.2.5)
- D.3.6 - Testing Requirements
- D.4.5 - Testing Requirements

IDEM Change 27:

IDEM will allow the Permittee the option of using manufacturer's recommendations for the calibration frequency. Section D - Parametric Monitoring conditions have been revised.

The following Section D conditions have been revised due to this change:

- D.1.7 - Parametric Monitoring
- D.2.8 - Parametric Monitoring (previously Condition D.2.7)
- D.4.7 - Parametric Monitoring

IDEM Change 28:

The word "status" has been added to Section D - Recordkeeping Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

The following Section D conditions have been revised due to this change:

- D.1.9 - Record Keeping Requirements
- D.2.9 - Record Keeping Requirements
- D.3.8 - Record Keeping Requirements
- D.4.9 - Record Keeping Requirements

Modification No. 1:

Section A.2 - Emissions Units and Pollutant Control Equipment Summary has been modified and reflects corrected capacities at existing emission units and the pollution control device configuration at the Rail Car Receiving Station.

Section A.2 has been revised as follows:

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; with a maximum capacity of 40.5 tons per hour, 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;

* * *

(4) One (1) Mixer; constructed in 2006; a maximum capacity of ~~20,125~~ **20,182.5** pounds of raw materials per hour; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.

(5) One (1) Batch Transfer System; constructed in 2006; a maximum capacity of ~~20,125~~ **20,182.5** pounds of raw materials per hour; 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.

(6) One (1) Weigh Scale; constructed in 1967; a maximum capacity of ~~20,125~~ **20,182.5** pounds of raw materials per hour; 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) Electric Melter; constructed in 2006; a maximum production rate of ~~20,125~~ **20,182.5** pounds of molten glass per hour; emissions controlled by a ~~baghouse~~ **dust collector** and exhausting to stack S166. The molten glass flows from the melter to the Line 2 and Line 3 fiber forming/collection modules.

* * *

Modification No. 2:

The following changes have been made to Section D.1:

(a) The Facility Description Box has been modified and reflected corrected capacity at existing emission units and the pollution control device configuration at the Rail Car Receiving Station.

(b) Condition D.1.2(a) has been modified to reflect the current control device.

(c) The limitations contained in Condition D.1.3 have been revised.

(d) Condition D.1.5 has been modified. The requirement to operate the rail car unloading station baghouse and the raw material silos baghouses have been separated.

(e) Additionally, Condition D.1.5(c) which contains requirements for multi-compartment baghouses has been deleted since all the baghouses reference in Section D.1 are single compartment.

(f) New requirement Condition D.1.9(c) requires record keeping of the material input to Lines 2 and 3. New requirement D.1.10 requires the source to report the material input to Lines 2 and 3. A new report form has been added to the permit associated with the new reporting condition.

(g) The previously discussed IDEM Changes have been incorporated where applicable.

Section D.1 of the permit has been revised as follows:

SECTION D.1 FACILITY OPERATION CONDITIONS

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

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

(1) One (1) Rail car Receiving station; with a maximum capacity of 40.5 tons per hour, 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;

* * *

(4) One (1) Mixer; constructed in 2006; a maximum capacity of ~~20,125~~ **20,182.5** pounds of raw materials per hour; emissions controlled by a sock filter; exhausting indoors to general ventilation. Raw materials from the storage silos are weighed and transferred to the mixer.

(5) One (1) Batch Transfer System; constructed in 2006; a maximum capacity of ~~20,125~~ **20,182.5** pounds of raw materials per hour; 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.

(6) One (1) Weigh Scale; constructed in 1967; a maximum capacity of ~~20,125~~ **20,182.5** pounds of raw materials per hour; 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)]

* * *

D.1.2 PSD Limitations [326 IAC 2-2-3]

Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3 (Best Available Control Technology (BACT)), the raw material handling, storage and batching facilities stated above shall comply with the following limitations:

(a) The Railcar Receiving Station shall be equipped with a bootlift device or similar 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**. Johns Manville, Inc. has opted to equip the Railcar Receiving Station with a baghouse. The IDEM, OAQ considers the baghouse a similar device.**

* * *

D.1.3 **Prevention of Significant Deterioration (**PSD**)** Minor Modification 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, issued on August 10, 2006:~~

Pursuant to SSM 177-29154-00006, and 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the cullet increase modification (SSM 177-29154-00006), the Permittee shall comply with the following.

(a) The PM10 emissions from the Day Bin 1 shall **be less than** ~~not exceed 0.01 pounds per hour~~ **0.005 pounds per ton of material throughput**.

(b) The PM10 emissions from the Day Bin 2 shall **be less than** ~~not exceed 0.01 pounds per hour~~ **0.005 pounds per ton of material throughput**.

(c) The PM10 emissions from the Mixer shall **be less than** ~~not exceed 0.005 pounds per hour~~ **0.005 pounds per ton of material throughput**.

(d) The PM10 emissions from the Weigh Scale shall **be less than** ~~not exceed 0.005 pounds per hour~~ **0.005 pounds per ton of material throughput**.

(e) The PM10 emissions from the Railcar Receiving Station shall **be less than** ~~not exceed 0.095 pounds per hour~~ **0.005 pounds per ton of material throughput**.

(f) The PM10 emissions from the Raw Material Silos shall **be less than** ~~not exceed 0.04 pounds per hour, total~~ **0.005 pounds per ton of material throughput**.

(g) The PM10 emissions from the Batch Transfer System shall **be less than** ~~not exceed 0.053 pounds per hour~~ **0.005 pounds per ton of material throughput**.

(h) The material input to the Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3 system shall be less than 176,798,700 pounds per twelve (12) consecutive month period, total, with compliance determined at the end of each month.

~~Compliance with these limits and the limits in Conditions D.2.1, D.4.1, and D.5.2 render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.~~

Compliance with these limits and the limits in Condition D.2.1, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the cullet increase modification (SSM 177-29154-00006).

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for these facilities and ~~their~~ **the associated** control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.1.5 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),**and D.1.3(e)** ~~the boot lift device or similar device and~~ the baghouse used to control PM **and PM10** emissions and opacity from the rail car unloading station shall be in operation **and control emissions** 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(c), and D.1.3(f), the baghouses used to control PM and PM10 emissions and opacity shall be in operation and control emissions at all times the Raw Material Silos are in operation.

~~(b)~~**(c)** In order to comply with Conditions D.1.1~~,~~ ~~D.1.2(c)~~ and D.1.3, the baghouses used to control PM **and PM10** 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 **and control emissions** at all times the associated units are 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.~~

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

D.1.6 Visible Emissions Notations

(a) ~~Daily visible~~ **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. 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 or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. **An abnormal reading 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.1.7 Parametric Monitoring

* * *

(b) When for any one reading, the pressure drop across the 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 and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. 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 **or replaced** at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

D.1.8 Broken or Failed Bag Detection

* * *

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

D.1.9 Record Keeping Requirements

(a) To document **the** compliance **status** with Conditions D.1.2 and D.1.6, the Permittee shall maintain records of daily visible emission notations required by Condition D.1.6. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document **the** compliance **status** with Condition D.1.7, the Permittee shall maintain weekly records of the pressure drop during normal operations. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) To document the compliance status with Condition D.1.3(h), the Permittee shall maintain records of the material input to the Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3. This input can be measured as the input to the electric melter.

~~(c)~~ **(d)** ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements **contains the Permittee's obligation with regard to the records required by this condition** ~~of this permit~~.

Modification No. 3:

The following changes have been made to Section D.2:

(a) The Facility Description Box has been modified to reflect the corrected capacity pollution control device for the Electric Melter.

(b) As a result of adjustments made to the electric melter project (SSM 177-22008-00006) netting, the PSD minor limits for CO and VOC have been determined to no longer be necessary. Therefore, these limits have been removed from Condition D.2.1.

(c) As a result of the cullet increase project (SSM 177-29154-00006) the electric melter is subject the requirements of 326 IAC 8-1-6 (BACT). These requirements have been added as new Condition D.2.2

(d) The requirements of Compliance Assurance Monitoring (CAM) (40 CFR 64) have been added to Conditions D.2.7 (previously D.2.8) and D.2.8 (previously D.2.7).

(e) Original Condition D.2.8 - Broken or Failed Bag Detection has been removed from the permit, since it applies to single compartment baghouses and the Electric Melter vents to a multicompartment baghouse.

(f) Throughout Section D.2, the Electric Melter control device has been revised to reflect the current control device.

(g) The previously discussed IDEM Changes have been incorporated where applicable.

Section D.2 has been revised as follows:

SECTION D.2 FACILITY OPERATION CONDITIONS

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

(b) One (1) Electric Melter; constructed in 2006; a maximum production rate of ~~20,125~~ **20,182.5** pounds of molten glass per hour; emissions controlled by a ~~baghouse~~ **dust collector** 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 Prevention of Significant Deterioration (PSD) Minor Modification Limit [326 IAC 2-2]

~~Pursuant to SSM 177-22008-00006, issued August 10, 2006, and 326 IAC 2-2 (Prevention of Significant Deterioration), the Electric Melter shall comply with the following limitations:~~

Pursuant to SSM 177-29154-00006, and 326 IAC 2-2 (PSD), in order to render the requirements of 326 IAC 2-2 not applicable to the cullet increase modification (SSM 177-29154-00006), the Permittee shall comply with the following.

~~(a)~~ The PM10 emissions from the Electric Melter shall not exceed ~~0.49~~ **0.32** 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.~~

~~Compliance with these limits in combination with the limits in Conditions D.1.3, D.4.1, and D.5.2 will limit PM10, to less than 15, 40, and 100 tons per year, and will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the modification completed pursuant to SSM 177-22008-00006, issued on August 10, 2006.~~

Compliance with this limit and the limits in Condition D.1.3, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the cullet increase modification (SSM 177-29154-00006).

D.2.2 BACT FOR VOC FOR MELTER [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, the following BACT (Best Available Control Technology), the Electric Melter shall comply to with the following limit:

(a) The VOC emissions from the Electric Melter shall not exceed 7.51 pounds per hour.

~~D.2.2~~**D.2.3** Particulate Matter (PM) Emission Limitations [326 IAC 6.5-1]

* * *

~~D.2.3~~**D.2.4** Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the electric melter and its ~~baghouse~~ **dust collector**. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

~~D.2.4~~**D.2.5** Particulate Matter (PM) Control

(a) In order to comply with Conditions D.2.1 and ~~D.2.2~~**D.2.3**, the ~~baghouse~~ **dust collector** for PM **and PM10** control shall be in operation at all times the associated Electric Melter is in operation.

* * *

~~D.2.5~~**D.2.6** Testing Requirements [326 IAC 2-7-6(1),(6)]

In order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM/PM10, VOC and CO testing on the Electric Melter no later than 180 days after initial startup **utilizing methods approved by the commissioner**. These tests shall be repeated once every five (5) years from the date of **the most recent** valid compliance demonstration ~~utilizing methods approved by the Commissioner~~. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling).** Section C - Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition.**

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

~~D.2.6~~**D.2.7** Visible Emissions Notations **and Compliance Assurance Monitoring (CAM) [40 CFR 64]**

(a) ~~Daily visible~~ **Visible** emission notations of the stack exhaust from the Electric Melter 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) If abnormal emissions are observed, the Permittee shall take reasonable response**.** ~~steps in accordance with~~ Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. **An abnormal reading 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.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Electric Melter.

~~D.2.7~~**D.2.8** Parametric Monitoring **and Compliance Assurance Monitoring (CAM) [40 CFR 64]**

The Permittee shall record the pressure drop across the ~~baghouse~~ **dust collector** used in conjunction with the Electric Melter, at least once per day when the process is in operation. When for any one reading, the pressure drop across the ~~baghouse~~ **dust collector** 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 and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. 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 **or replaced** at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Electric Melter.

~~D.2.8 Broken or Failed Bag Detection~~

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

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

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

D.2.9 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition ~~D.2.6~~ **D.2.7**, the Permittee shall maintain once per day records of the visible emission notations of the Electric Melter stack S166 exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document **the** compliance **status** with Condition ~~D.2.7~~ **D.2.8**, the Permittee shall maintain once per day records of the pressure drop during normal operation when venting to the atmosphere. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements **contains the Permittee's obligation with regard to the records required by this condition** ~~of this permit~~.

Modification No. 4:

The following changes have been made to Section D.3:

(a) The PM/PM10 PSD BACT emission limits for the Lines 2 & 3 Forming and Collection Modules have been revised in Condition D.3.1

(b) As a result of adjustments made to the electric melter project (SSM 177-22008-00006) netting, the PSD minor limits for CO and VOC have been determined to no longer be necessary. Therefore, these limits have been removed from Condition D.3.2.

(c) New PSD minor limits for PM10 for Lines 2 & 3 Forming and Collection Modules have been added to Condition D.3.2. These limits are necessary to render the requirements of PSD not applicable to the electric melter project (SSM 177-22008-00006). Previous permitting actions relied on the PM/PM10 PSD BACT limitations.

(d) The requirements of Compliance Assurance Monitoring (CAM) (40 CFR 64) have been added to Condition D.3.7.

(e) Conditions D.3.9 and D.3.10 have been deleted. These conditions incorporated the applicable requirements of the General Provisions Relating to New Source Performance Standards (NSPS) [326 IAC 12-1] [40 CFR Part 60, Subpart A] and the New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants: Requirements [40 CFR Part 60, Subpart PPP]. The applicable requirements of the NSPS are now detailed in new Section E.1.

(f) The previously discussed IDEM Changes have been incorporated where applicable.

Section D.3 has been revised as follows:

SECTION D.3 FACILITY OPERATION CONDITIONS

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

* * *

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

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

D.3.1 PSD BACT Limitations [326 IAC 2-2(a)(3)]

Pursuant to CP-177-5873-00006, issued April 22, 1999, and 326 IAC 2-2-3(a)(3) (Best Available Control Technology (BACT)), ~~and~~ as **restructured** ~~revised~~ by SSM 177-22008-00006 **(**issued ~~on~~ August 10, 2006**)**, **and as restructured by SSM 177-29154-00006,** each Forming and Collection Module shall comply with the following limitations:

Facility	Pollutant Emission Limitations		
	PM/PM10 (lbs/hr)	VOC (lbs/hr)	CO (lbs/hr)
Line 2 Forming and Collection	~~10.3~~ **13.32**	6.78	21.0
Line 3 Forming and Collection	~~10.3~~ **13.32**	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.

D.3.2 Prevention of Significant Deterioration (PSD) Minor Limitations [326 IAC 2-2]

~~(a) In order to render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the modification completed pursuant to SSM 177-22008-00006 issued on August 10, 2006:~~

~~(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 15.0 pounds per hour.~~

~~Compliance with these limits in combination with the limits in Condition D.2.1(c) shall limit the CO emissions increase of the modification described in SSM 177-22008-00006 to less than one hundred (100) tons per year.~~

(a) Pursuant to SSM 177-22008-00006 (issued August 10, 2006), and 326 IAC 2-2 (PSD), and as revised by SSM 177-29154-00006, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter modification (177-22008-00006), the Permittee shall comply with the following.

(1) The PM10 emissions from the L2 Forming and Collection Module shall not exceed 11.34 pounds per hour, each.

(2) The PM10 emissions from the L3 Forming and Collection Module shall not exceed 10.40 pounds per hour, each.

Compliance with these limits in combination with the limits in Conditions ~~D.1.3~~, D.4.1, and D.5.2 will limit PM10, ~~VOC and CO~~ to less than **fifteen (**15**)**, **(**~~40~~**),** ~~and (100)~~ tons per year and will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the **electric melter** modification completed pursuant to SSM 177-22008-00006~~,~~ **(**issued ~~on~~ August 10, 2006).

(b) Pursuant to CP177-5873-00006 **(**issued April 22, 1999**)** and revised by T177-22598-00006 **(issued December 20, 2007) and SSM 177-29154-00006**, 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	~~4.53~~ **0.46**
Line 3 Forming and Collection	~~4.53~~ **0.40**

* * *

D.3.3 Particulate Limitations Except Lake County [326 IAC 6.5-10-11]

* * *

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for this facility and its control device. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.3.5 Control Device Operating Conditions

In order to demonstrate compliance with Condition D.3.1 **and D.3.2(a)**, the water spray systems associated with the Line 2 and Line 3 Forming and Collection Modules shall be operated at all times when the forming sections are in operation.

D.3.6 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.3.1 and D.3.2, the Permittee shall perform PM/PM10, VOC and CO testing on one of the Forming and Collection Modules within one hundred and eighty (180) days after initial startup of the Electric Melter startup **utilizing methods approved by the commissioner**. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling).** Section C - Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition.**

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

D.3.7 Visible Emissions Notations **and Compliance Assurance Monitoring (CAM) [40 CFR 64]**

(a) ~~Daily visible~~ **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. 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 or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. **An abnormal reading 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.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module.

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

D.3.8 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.3.7, the Permittee shall maintain records of daily visible emission notations of the stack exhaust from the Line 2 and Line 3 Forming and Collection Modules. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation, (i.e. the process did not operate that day).

(b) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements **contains the Permittee's obligation with regard to the records required by this condition** ~~of this permit~~.

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

~~D.3.9 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~~

MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

D.3.10 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 follows:

PART 60—STANDARDS OF PERFORMANCE FOR NEW STATIONARY SOURCES Subpart PPP—Standard of Performance for Wool Fiberglass Insulation Manufacturing Plants

§ 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 1b/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:

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

where:

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

C_t = concentration of particulate matter, g/dscm (gr/dscf).

Q_{sd} = volumetric flow rate of effluent gas, dscm/hr (dscf/hr).

~~P_{avg}= 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_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^2 (lb/ft^2).~~

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

~~K'=conversion factor, 6×10^{-5}(min Mg)/(hr g) [3×10^{-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]~~

Modification No. 5:

The following changes have been made to Section D.4:

(a) As a result of adjustments made to the electric melter project (SSM 177-22008-00006) netting, the PM10 PSD minor limits in Condition D.4.1 have been revised.

(b) Condition D.4.4(b), which contains requirements for multi-compartment baghouses has been deleted since all the baghouses reference in Section D.4 are single compartment.

(c) The requirements of Compliance Assurance Monitoring (CAM) (40 CFR 64) have been added to Conditions D.4.6 and D.4.7.

(d) The previously discussed IDEM Changes have been incorporated where applicable.

Section D.4 has been revised as follows:

SECTION D.4 FACILITY CONDITIONS

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

* * *

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

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

D.4.1 PSD Minor Modification Limitations [326 IAC 2-2]

Pursuant to SSM 177-22008-00006, and 326 IAC 2-2 (PSD), and as revised by SSM 177-29154-00006, in order to render the requirements of 326 IAC 2-2 not applicable to the **electric melter** modification ~~completed pursuant to~~ **(**SSM 177-22008-00006**), the following shall apply**:

(a) The PM10 emissions from the L2 Shredding Process and L2 Packaging Area shall not exceed ~~0.9~~ **0.43** pounds per hour, total.

(b) The PM10 emissions from the L3 Shredding Process and L3 Packaging Area shall not exceed ~~0.9~~ **0.37** pounds per hour, total.

~~Compliance with these limits and the limits in Conditions D.1.3, D.2.1, and D.5.2 render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.~~

Compliance with these limits and the limits in Conditions D.3.2, and D.5.2, limits the increase of PM10 to less than fifteen (15) tons per year and renders 326 IAC 2-2 (PSD) not applicable to the electric melter modification (SSM 177-22008-00006).

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

* * *

D.4.3 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~~ **the associated** control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.4.4 Particulate Matter

~~(a)~~ In order to comply with Conditions D.4.1 and D.4.2 the baghouses for PM control shall be in operation **and control emissions** 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 baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

D.4.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.4.1, the Permittee shall perform PM/PM10, testing on one of the Shredding and Packaging within one hundred and eighty (180) days after initial startup of the Electric Melter **utilizing methods approved by the commissioner**. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling).** Section C - Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition.**

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

D.4.6 Visible Emissions Notations **and Compliance Assurance Monitoring (CAM) [40 CFR 64]**

(a) ~~Daily visible~~ **Visible** emission notations of the shredding and packaging area 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.

* * *

(e) If abnormal emissions are observed, the Permittee shall take reasonable response**.** ~~steps in accordance with~~ Section C - Response to Excursions or Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. **An abnormal reading 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.

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Line 2 shredding process and packaging area and the Line 3 shredding process and packaging area.

D.4.7 Parametric Monitoring **and Compliance Assurance Monitoring (CAM) [40 CFR 64]**

The Permittee shall record the pressure drop across the baghouses used in conjunction with the shredding and packaging process, at least once per day when the process is in operation. When for any one reading, the pressure drop across the baghouses are 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 and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. Section C – Response to Excursions and Exceedances **contains the Permittee's obligation with regard to the reasonable response steps required by this condition**. 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 **or replaced** at least once every six (6) months **or other time period specified by the manufacturer. The Permittee shall maintain records of the manufacturer specifications, if used.**

Pursuant to 40 CFR 64 (Compliance Assurance Monitoring (CAM)), these monitoring requirements are required for the Line 2 shredding process and packaging area and the Line 3 shredding process and packaging area.

D.4.8 Broken or Failed Bag Detection

* * *

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

D.4.9 Record Keeping Requirements

(a) To document **the** compliance **status** with Condition D.4.6, the Permittee shall maintain records of daily visible emission notations of the stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document **the** compliance **status** with Condition D.4.7, the Permittee shall maintain daily records of the pressure drop during normal operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

(c) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements **contains the Permittee's obligation with regard to the records required by this condition** ~~of this permit~~.

Modification No. 6:

The following changes have been made to Section D.5:

(a) As a result of adjustments made to the electric melter project (SSM 177-22008-00006) netting, the PM10 PSD minor limits in Condition D.5.2 have been revised.

(b) Condition D.5.6(b), which contains requirements for multi-compartment baghouses has been deleted since all the baghouses reference in Section D.5 are single compartment.

(c) The previously discussed IDEM Changes have been incorporated where applicable.

Section D.5 has been revised as follows:

SECTION D.5 FACILITY OPERATION CONDITIONS

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

* * *

(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.5.1 PSD Modification Limitations [326 IAC 2-2-3]

* * *

D.5.2 PSD Minor Modification Limitations [326 IAC 2-2]

Pursuant to SSM 177-22008-00006~~,~~ **(**issued August 10, 2006**), and 326 IAC 2-2 (PSD), and as revised by SSM 177-29154-00006**, **in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to the electric melter project (SSM 177-22008-00006),** the PM10 emissions from the Melter Dust Recycle System shall not exceed **0.001 pound per ton of Melter Dust collected** ~~0.001 pounds per hour~~.

Compliance with this limit in combination with the limits in Conditions D.2.1, and D.4.1 will limit the PM10 emissions to less than fifteen (15) tons per year and will render 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the modification completed pursuant to SSM 177-22008-00006 issued August 10, 2006.

D.5.3 Particulate Emission Limitations [326 IAC 6.5]

* * *

D.5.4 Sulfur Dioxide Emission Limitations [326 IAC 7-4-4]

* * *

D.5.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan~~, in accordance with Section B - Preventive Maintenance Plan, of this permit,~~ is required for the ancillary equipment and the cold end housekeeping system

baghouse. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

Compliance Determination Requirements

D.5.6 Particulate Matter

~~(a)~~ In order to comply with Conditions D.5.1(a), (b), and D.5.3, the baghouse for PM control shall be in operation **and control emissions** at all times the cold end housekeeping system is in operation.

~~(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

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

D.5.7 Broken or Failed Bag Detection

* * *

Modification No. 7:

New Section E.1 has been and incorporates the applicable requirements of the General Provisions Relating to New Source Performance Standards (NSPS) and the New Source Performance Standards (NSPS) for Wool Fiberglass Insulation Manufacturing Plants: Requirements.

SECTION E.1 FACILITY OPERATION CONDITIONS

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

(c) Forming Facilities:

(1) 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 9,450 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)

(2) 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 8,100 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)

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

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

E.1.1 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 New Source Performance Standards for Wool Fiberglass Insulation Manufacturing Plants: Requirements [326 IAC 12] [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 (included as Attachment A of this permit), which are incorporated by reference as 326 IAC 12, for the Line 2 Forming and Collection Module and the Line 3 Forming and Collection Module as follows:

(a) 40 CFR 60.680
(b) 40 CFR 60.681
(c) 40 CFR 60.682
(d) 40 CFR 60.685 (a), (b), and (c)

Modification No. 8:

In order to incorporate the previously discussed IDEM Changes and to add a reporting form for the material input limit in Section D.1, the reporting forms have been revised. (forms begin on following page.

The remainder of this page is intentionally left blank

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Johns Manville ~~International~~, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
~~Mailing Address: 814 Richmond Ave, Richmond, IN 47374~~
Part 70 Permit No.: T177-22598-00006

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

Please check what document is being certified:

□ Annual Compliance Certification Letter

□ Test Result (specify)

□ Report (specify)

□ Notification (specify)

□ Affidavit (specify)

□ Other (specify)

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

Signature:
Printed Name:
Title/Position:
Phone:
Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE **AND ENFORCEMENT** BRANCH
100 North Senate Avenue
MC 61-64 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Johns Manville ~~International~~, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
~~Mailing Address: 814 Richmond Ave, Richmond, IN 47374~~
Part 70 Permit No.: T177-22598-00006

This form consists of 2 pages Page 1 of 2

□ This is an emergency as defined in 326 IAC 2-7-1(12)

- The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

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

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

If any of the following are not applicable, mark N/A Page 2 of 2

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

~~A certification is not required for this report~~.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE **AND ENFORCEMENT BRANCH** ~~DATA SECTION~~

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION

Source Name: Johns Manville ~~International~~, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
~~Mailing Address: 814 Richmond Ave, Richmond, IN 47374~~
Part 70 Permit No.: T177-22598-00006

□ Natural Gas Only □ Alternate Fuel burned From:_____ To:_____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Signature:
Printed Name:
Title/Position:
Phone:
Date:

~~A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: **Johns Manville, Inc.**
Source Address: **814 Richmond Ave, Richmond, Indiana 47374**
Part 70 Permit No.: **T093-24556-00002**
Facility: **Raw Material Handling, Storage and Batching Equipment for Lines 2 and 3**
Parameter: **Material input**
Limit: **176,798,700 pounds per twelve (12) consecutive month period.**

FACILITY: _____ **QUARTER:** _____ **YEAR:** _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

☐ **No deviation occurred in this quarter.**

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

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE **AND ENFORCEMENT BRANCH** ~~DATA SECTION~~
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Johns Manville ~~International~~, Inc.
Source Address: 814 Richmond Ave, Richmond, Indiana 47374
~~Mailing Address: 814 Richmond Ave, Richmond, IN 47374~~
Part 70 Permit No.: T177-22598-00006

Months: _____ to Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

□ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

□ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

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

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

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

Form Completed by:_____

Title / Position: _____

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. 177-29154-00006 and Significant Permit Modification No. 177-28547-00006. The staff recommends to the Commissioner that this Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Jenny Acker at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-9327 or toll free at 1-800-451-6027 extension 3-9327

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Calculations
Emissions Summary (VOC, SO2, NOx, CO, Fluoride)
(page 1 of 2)

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

VOC Emissions (tpy)

Source/Stack Description	Baseline Actuals	Projected Actuals or PTE (New Unit) 22008	Rev 22008	29154	22008 ATPA	22008 New Units	Revised 22008 ATPA	Revised 22008 New Units		29154 ATPA
Line 2 Furnace	0.01	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 2 Collection Module	19.33	*33.75*	1.42	not affected unit	14.42	--	< 0	--		not affected unit
Line 3 Furnace	0.01	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 3 Collection Module	18.68	*33.75*	1.22	not affected unit	15.07	--	< 0	--		not affected unit
Line 6 Furance	0.23	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 6 Collection Module	0.68	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Electric Melter	0	*4.84*	4.85	*32.89*	--	4.84	--	4.85		32.89
					29.49	4.84	0.00	4.85		32.89

	22008	Rev 22008		29154
Permit No.:	**22008**	**Rev 22008**	Permit No.:	**29154**
Sum of ATPA Increases (tpy)	29.49	0.00	Sum of ATPA Increases (tpy)	32.89
PTE New Units (tpy)	4.84	4.85		
Emissions Increase (tpy) (Hybrid Test)	**34.32**	**4.85**	**Emissions Increase (tpy)**	**32.89**

SO2 Emissions (tpy)

Source/Stack Description	Baseline Actuals	Projected Actuals or PTE (New Unit) 22008	Rev 22008	29154	22008 ATPA	22008 New Units	Revised 22008 ATPA	Revised 22008 New Units		29154 ATPA
Line 2 Furnace	0.24	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 2 Collection Module	2.68	4.82	5.20	not affected unit	2.14	--	2.53	--		not affected unit
Line 3 Furnace	0.25	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 3 Collection Module	2.59	4.82	4.46	not affected unit	2.23	--	1.87	--		not affected unit
Line 6 Furance	0.62	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 6 Collection Module	0.24	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Electric Melter	0	0.07	0.07	9.95	--	0.07	--	0.07		9.95
					4.37	0.07	4.40	0.07		9.95

	22008	Rev 22008		29154
Permit No.:	**22008**	**Rev 22008**	Permit No.:	**29154**
Sum of ATPA Increases (tpy)	4.37	4.40	Sum of ATPA Increases (tpy)	9.95
PTE New Units (tpy)	0.07	0.07		
Emissions Increase (tpy) (Hybrid Test)	**4.45**	**4.47**	**Emissions Increase (tpy)**	**9.95**

NOx Emissions (tpy)

Source/Stack Description	Baseline Actuals	Projected Actuals or PTE (New Unit) 22008	Rev 22008	29154	22008 ATPA	22008 New Units	Revised 22008 ATPA	Revised 22008 New Units		29154 ATPA
Line 2 Furnace	14.09	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 2 Collection Module	1.13	2.23	2.03	not affected unit	1.09	--	0.89	--		not affected unit
Line 3 Furnace	14.42	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 3 Collection Module	1.10	2.23	1.74	not affected unit	1.13	--	0.64	--		not affected unit
Line 6 Furance	0.04	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 6 Collection Module	0.18	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Electric Melter	0	1.66	1.67	7.28	--	1.66	--	1.67		7.28
					2.23	1.66	1.54	1.67		7.28

	22008	Rev 22008		29154
Permit No.:	**22008**	**Rev 22008**	Permit No.:	**29154**
Sum of ATPA Increases (tpy)	2.23	1.54	Sum of ATPA Increases (tpy)	7.28
PTE New Units (tpy)	1.66	1.67		
Emissions Increase (tpy) (Hybrid Test)	**3.89**	**3.21**	**Emissions Increase (tpy)**	**7.28**

Appendix A: Emission Calculations
Emissions Summary (VOC, SO2, NOx, CO, Fluoride)
(page 2 of 2)

CO Emissions (tpy)										
	Baseline	Projected Actuals or PTE (New Unit)			22008		Revised 22008			29154
Source/Stack Description	Actuals	22008	Rev 22008	29154	ATPA	New Units	ATPA	New Units		ATPA
Line 2 Furnace	0.14	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 2 Collection Module	23.98	68.68	33.64	not affected unit	44.70	--	9.67	--		not affected unit
Line 3 Furnace	0.14	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 3 Collection Module	23.17	68.68	28.84	not affected unit	45.50	--	5.66	--		not affected unit
Line 6 Furance	1.16	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Line 6 Collection Module	2.78	0	0	no longer exists	< 0	--	< 0	--		not affected unit
Electric Melter	0	3.65	3.66	46.66	--	3.65	--	3.66		46.66
					90.21	3.65	15.33	3.66		46.66

Permit No.:	22008	Rev 22008
Sum of ATPA Increases (tpy)	90.21	15.33
PTE New Units (tpy)	3.65	3.66
Emissions Increase (tpy) (Hybrid Test)	**93.86**	**18.99**

Permit No.:	29154
Sum of ATPA Increases (tpy)	46.66
Emissions Increase (tpy)	**46.66**

Fluoride Emissions (tpy)				
	Baseline	PTE		PTE
Source/Stack Description	Actuals	22008		29154
Line 2 Furnace	NA	NA		NA
Line 2 Collection Module	NA	NA		NA
Line 3 Furnace	NA	NA		NA
Line 3 Collection Module	NA	NA		NA
Line 6 Furance	NA	NA		NA
Line 6 Collection Module	NA	NA		NA
Electric Melter	NA	0.03		0.03
Emissions Increase (tpy)		**0.03**		**0.03**

Methodology

Pursuant to 326 IAC 2-2(rr)(2)(B), in lieu of calculating the Projected Actuals the Permittee may elect to use the potential to emit (PTE).
Where the emissions units are limited for the Actual to Projected Actual (ATPA) Test, Saint-Gobain has elected to consider the PTE as the Projected Actuals.

22008
ATPA (tpy) = PTE 22008 (tpy) - baseline actuals (tpy)
Emissions Increase (tpy) (Hybrid Test) = Sum of ATPA Increases (tpy) + PTE New Units (tpy)

Revised 22008
- Line 2 Furnace, Line 3 Furnace, Line 6 Furnace and the Line 6 Collection Module were shut down as part of the 22008 modification.
  Therefore, these units are not part of the 29154 modification and the emissions increase is not revised.

For the Line 2 Furnace, Line 3 Furnace, Line 6 Furnace and the Line 6 Collection Module: ATPA (tpy) = PTE 22008 (tpy) - baseline actuals (tpy)
For the Line 2 Collection Module and Line 3 Collection Module: ATPA (tpy) = PTE 29154 (tpy) - baseline actuals (tpy)
Emissions Increase (tpy) (Hybrid Test) = Sum of ATPA Increases (tpy) + PTE New Units (tpy)

29154
ATPA (tpy) = PTE 29154 (tpy) - baseline actuals (tpy)
Emissions Increase (tpy) (Hybrid Test) = Sum of ATPA Increases (tpy)

Appendix A: Emission Calculations
Emissions Summary (PM/PM10)
(page 1 of 2)

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

	22008 Emissions			
	PM/PM10 Emissions (tpy)			
Description	Baseline	Prj. or PTE	ATPA	New Units
New Batch Mixer	0	0.0014	--	0.001
New Batch Transfer System	0	0.234	--	0.234
Daybins 1 & 2	0	0.117	--	0.117
Electric Melter	0	2.17	--	2.170
Line 2 Forming/Collection Module	37.100	45.050	7.95	--
Line 3 Forming/Collection Module	35.900	45.050	9.15	--
Dust Recycle System	0.00	2.61E-05	2.61E-05	--
Railcar Receiving Station	0.290	0.418	0.128	--
sum of silos 1 - 8:	0.004	0.175	0.171	--
Weigh Scales	0.0008	0.0014	6.00E-04	--
Line 2 Shredding/Packaging BH				
Line 2 Shredding/Packaging BH	2.01	3.96	1.95	--
Line 2 Shredding/Packaging BH				
Line 3 Shredding/Packaging BH				
Line 3 Shredding/Packaging BH	1.95	3.96	2.01	--
Line 3 Shredding/Packaging BH				
		Totals:	21.36	2.52

	Revised 22008 Emissions (tpy)							
	Baseline		Projected or PTE		PM		PM10	
	PM	PM10	PM	PM10	ATPA	New Units	ATPA	New Units
New Batch Mixer	0	0	0.129	0.066	--	0.129	--	0.066
New Batch Transfer System	0	0	0.129	0.066	--	0.129	--	0.066
Daybins 1 & 2	0	0	0.182	0.095	--	0.182	--	0.095
Electric Melter	0	0	2.177	2.177	--	2.18	--	2.18
Line 2 Forming/Collection Module	37.100	37.100	49.669	49.669	12.57	--	12.57	--
Line 3 Forming/Collection Module	35.900	35.900	45.554	45.554	9.65	--	9.65	--
Dust Recycle System	7.91E-05	2.30E-04	1.06E-04	3.09E-04	2.69E-05	--	7.84E-05	--
Railcar Receiving Station	0.102	0.052	0.158	0.080	0.055	--	0.028	--
sum of silos 1 - 8:	0.102	0.052	0.158	0.080	0.055	--	0.028	--
Weigh Scales	0.084	0.043	0.129	0.066	0.045	--	0.023	--
Line 2 Shredding/Packaging BH								
Line 2 Shredding/Packaging BH	2.01	2.01	1.89	1.89	< 0	--	< 0	--
Line 2 Shredding/Packaging BH								
Line 3 Shredding/Packaging BH								
Line 3 Shredding/Packaging BH	1.95	1.95	1.62	1.62	< 0	--	< 0	--
Line 3 Shredding/Packaging BH								
			Totals:		22.38	2.62	22.30	2.40

	29154 (tpy)			
	PTE		PM	PM10
	PM	PM10	ATPA	ATPA
New Batch Mixer	*0.341*	*0.188*	*0.341*	*0.188*
New Batch Transfer System	*0.340*	*0.187*	*0.340*	*0.187*
Daybins 1 & 2	*0.393*	*0.217*	*0.393*	*0.217*
Electric Melter	*1.420*	*1.420*	*1.420*	*1.420*
Line 2 Forming/Collection Module	not affected unit		not affected unit	
Line 3 Forming/Collection Module	not affected unit		not affected unit	
Dust Recycle System	not affected unit		not affected unit	
Railcar Receiving Station	*0.338*	*0.186*	*0.236*	*0.134*
sum of silos 1 - 8:	*0.338*	*0.186*	*0.236*	*0.134*
Weigh Scales	*0.393*	*0.217*	*0.310*	*0.174*
Line 2 Shredding/Packaging BH				
Line 2 Shredding/Packaging BH	not affected unit		not affected unit	
Line 2 Shredding/Packaging BH				
Line 3 Shredding/Packaging BH				
Line 3 Shredding/Packaging BH	not affected unit		not affected unit	
Line 3 Shredding/Packaging BH				
			3.28	2.45

Permit No.:	177-22008-00006		Revised 22008	
	PM	PM10	PM	PM10
Sum of ATPA Increases (tpy)	21.36	21.36	22.38	22.30
PTE New Units (tpy)	2.52	2.52	2.62	2.40
Emissions Increase (tpy) (Hybrid Test)	**23.88**	**23.88**	**25.00**	**24.71**
Significant Threshold Levels	*25.0*	*15.0*	*25.0*	*15.0*
	Netting Analysis			
Contemporaneous Increases (tpy)	--	neg	--	neg.
Contemporaneous Decreases (tpy)	--	9.94	--	10.03
Net Emissions Increase (tpy)	--	**13.94**	--	**14.67**

Permit No.:	177-29154-00006	
	PM	PM10
Sum of ATPA Increases (tpy)	3.28	2.45
Emissions Increase (tpy) (ATPA)	**3.28**	**2.45**
Significant Threshold Levels	*25.0*	*15.0*

	22008 PTE (tpy)		Revised 22008 PTE (tpy)			
Units Shut Down as Part of 22008	PM/PM10 Emissions		PM		PM10	
Description	Baseline	PTE	Baseline	PTE	Baseline	PTE
Daybin 2N, 3W, 3E	0.00090	0	0.0009	0	0.0009	0
Mixer - Old	0.0008	0	0.084	0	0.043	0
Old Batch Transfer System	0.002	0	0.084	0	0.043	0
Line 2 Furnace	2.980	0	2.985	0	2.985	0
Line 3 Furnace	3.060	0	3.055	0	3.055	0
Line 6 Furnace	0.200	0	0.203	0	0.203	0
Line 6 Baggers (shredding/pack)	0.180	0	0.183	0	0.183	0
Line 6 Collection Module	3.520	0	3.523	0	3.523	0
Totals from shutdown equipment	9.94		10.12		10.03	

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.

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: 8/8/2011

CO2e Calculations for Affected Existing Units

Emission factors for carbonate based raw material usage from 40 CFR 98 Subpart N (Glass Production) & the following calculation:

PTE CO_2 (Mton) = Mfi x (Mi x 2000/2205) x EFi x Fi

Where:

MFi = Annual average mass fraction of carbonate-base mineral i in carbonate-based raw material i (%, expressed as a decimal). Per, 40 CFR 98.143 (c) can use a value of 1.
Mi = Annual amount of carbonate-based raw material i charged to furnace (tons).
EFi = Emission factor for carbonate-based raw material i (metric ton CO2 per metric ton carbonate-based raw material, as shown in Table N–1 to this subpart).
Fi = Fraction of calcination achieved for carbonate-based raw material i, assumed to be equal to 1.0 (percentage, expressed as a decimal).

Emission Factors:	CO2	CH4	N2O
Mton/Mton Li_2CO_3	0.596	0	0

Furnace No. 2 - Baseline	Throughput (tpy)	CO2 (Mtons)	GWP	Resultant CO_2e (Mtpy)
[2] limestone usage	88,399	477.88	1.00	477.88
Electric Melter PTE (Mton/yr) =		477.88	1.00	477.88
Electric Melter PTE (tpy) =		**433.45**	**0.91**	**433.45**

Note: As a conservative approach, it was assumeed that all feed to the furnace is carbonate based and is Li_2CO_3 which has the highest emission factor.

Appendix A: Emission Calculations
Material Handling PM & PM10 Emissions
(page 1 of 4)

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Description: 22008 (electric melter modification): Construction of new mixer, new batch transfer system, and new daybins No. 1 & 2 authorized as part of this modification, SSM 177-22008-00006 (issued September 10, 2006)
Rev 22008: Updated emissions due to revised methodology, no change in throughput capacity
29154 (cullet increase modification): The potential to emit (PTE) of the material handling facilities is based on the specific material being transferred. Although the overall amount of material transferred, in tons per year, will not change, the specific amounts transferred, in tons per year, will change. This change affects the following units: Batch Mixer, Batch Transfer System, Day Bins 1 & 2, Railcar Receiving Station, Silos 1 through 8, and the Weigh Scales.

1. Capacities

Max Annual Electric Melter Input (Rev 22008)	20,182.5	(lb/hr)
	176,798,700	(lb/yr)
	88,399	(tpy)
Max Electric Melter Input Batch (Rev 22008)	6,706	(lbs/batch)

	L2 Furnace	L3 Furnace	L6 Melter	Total	
Baseline Annual Glass pulled (Rev 22008)	54,557,280	55,845,000	4,296,680	114,698,960	(lb/yr)
Baseline Input (Rev 22008)	27,279	27,923	2,148	57,349	(tpy)

2. Railcar Receiving (each) Rev 22008 Emissions

material	lb material per Railcar Batch	ton material/ton ton railcar batch	[1] Emission Factor (E.F.) lb/ton material) PM	PM10	[2] Emission Factor (E.F.) (lb/ton batch) PM	PM10
sand	1224	0.2124	0.00099	0.00034	0.0002	0.0001
syenite	912	0.1582	0.00099	0.00034	0.0002	0.0001
Internal cullet	800	0.1388	0.0069	0.0033	0.0010	0.0005
borax	738	0.1280	0.0089	0.0049	0.0011	0.0006
bd lime	331	0.0574	0.0089	0.0049	0.0005	0.0003
soda ash	642	0.1114	0.0089	0.0049	0.0010	0.0005
Borosilicate cullet	223	0.0387	0.00099	0.00034	0.0000	0.0000
Plate Cullet	894	0.1551	0.00099	0.00034	0.0002	0.0001
Railcar Batch (lbs):	5764		Mean Emission Factor (lb/ton batch) =		0.0042	0.0021

PTE (tpy) (Rev 22008) =	**0.158**	**0.080**
Baseline PTE (tpy) (Rev 22008) =	**0.102**	**0.052**

	(lb/yr)	(tpy)
Max Annual Throughput: Railcars	151,963,571	75,982
Baseline Throughput: Railcars	98,587,057	49,294

3. Silos 1-8 Rev 22008 Emissions

material	lb material per Silo Batch	ton material/ton ton silo/rcar batch	[1] Emission Factor (E.F.) lb/ton material) PM	PM10	[2] Emission Factor (E.F.) (lb/ton batch) PM	PM10
sand	1224	0.2124	0.00099	0.00034	0.0002	0.0001
syenite	912	0.1582	0.00099	0.00034	0.0002	0.0001
Internal cullet	800	0.1388	0.0069	0.0033	0.0010	0.0005
borax	738	0.1280	0.0089	0.0049	0.0011	0.0006
bd lime	331	0.0574	0.0089	0.0049	0.0005	0.0003
soda ash	642	0.1114	0.0089	0.0049	0.0010	0.0005
Borosilicate cullet	223	0.0387	0.00099	0.00034	0.0000	0.0000
Plate Cullet	894	0.1551	0.00099	0.00034	0.0002	0.0001
Silo/Railcar Batch (lbs):	5764		Mean Emission Factor (lb/ton batch) =		0.0042	0.0021

PTE (tpy) (Rev 22008) =	**0.000**	**0.000**
Baseline PTE (tpy) (Rev 22008) =	**0.000**	**0.000**

	(lb/yr)	(tpy)
Max Annual Throughput: Silos	151,963,571	75,982
Baseline Throughput: Silos	98,587,057	49,294

Appendix A: Emission Calculations
Material Handling PM & PM10 Emissions
(page 2 of 4)

4. Batch Transfer System: Rev 22008 Emissions

material	lb material per Bucket Elevator Batch	ton material/ton bucket elevator batch	[1] Emission Factor (E.F.) lb/ton material)		[2] Emission Factor (E.F.) (lb/ton batch)	
			PM	PM10	PM	PM10
sand	1224	0.2109	0.00099	0.00034	0.0002	0.0001
syenite	912	0.1571	0.00099	0.00034	0.0002	0.0001
Internal cullet	800	0.1378	0.00099	0.00034	0.0001	0.0000
borax	738	0.1272	0.0089	0.0049	0.0011	0.0006
bd lime	331	0.0570	0.0089	0.0049	0.0005	0.0003
soda ash	642	0.1106	0.0089	0.0049	0.0010	0.0005
Borosilicate cullet	223	0.0384	0.00099	0.00034	0.0000	0.0000
Plate Cullet	894	0.1540	0.00099	0.00034	0.0002	0.0001
Melter Dust	40	0.0069	0.0089	0.0049	0.0001	0.0000
Batch Transfer System (lbs):	5804		Mean Emission Factor (lb/ton batch) =		0.0034	0.0017

PTE (tpy) (Rev 22008) = 0.129 0.066
Baseline PTE (tpy) (Rev 22008) = 0.084 0.043

	(lb/yr)	(tpy)
Max Annual Throughput: NEW Batch Transfer System	153,018,141	76,509
Baseline Throughput: Old Batch Transfer System	99,271,214	49,636

5. Mixer: Rev 22008 Emissions

material	lb material per Mixer Batch	ton material/ton ton mixer batch	[1] Emission Factor (E.F.) lb/ton material)		[2] Emission Factor (E.F.) (lb/ton batch)	
			PM	PM10	PM	PM10
sand	1224	0.2108	0.00099	0.00034	0.0002	0.0001
Carbocite	2	0.0003	0.00099	0.00034	0.0000	0.0000
syenite	912	0.1571	0.00099	0.00034	0.0002	0.0001
Internal cullet	800	0.1378	0.00099	0.00034	0.0001	0.0000
borax	738	0.1271	0.0089	0.0049	0.0011	0.0006
bd lime	331	0.0570	0.0089	0.0049	0.0005	0.0003
soda ash	642	0.1106	0.0089	0.0049	0.0010	0.0005
Borosilicate cullet	223	0.0384	0.00099	0.00034	0.0000	0.0000
Plate Cullet	894	0.1540	0.00099	0.00034	0.0002	0.0001
Melter Dust	40	0.0069	0.0089	0.0049	0.0001	0.0000
Mixer Batch (lbs):	5806		Mean Emission Factor (lb/ton batch) =		0.0034	0.0017

PTE (tpy) (Rev 22008) = 0.129 0.066
Baseline PTE (tpy) (Rev 22008) = 0.084 0.043

	(lb/yr)	(tpy)
Max Annual Throughput: NEW Mixer	153,070,870	76,535
Baseline Throughput: OLD Mixer	99,305,422	49,653

6. Weigh Scale: Rev 22008 Emissions

material	lb material per Weigh Scale Batch	ton material/ton weigh scale batch	[1] Emission Factor (E.F.) lb/ton material)		[2] Emission Factor (E.F.) (lb/ton batch)	
			PM	PM10	PM	PM10
sand	1224	0.1825	0.00099	0.00034	0.0002	0.0001
Carbocite	2	0.0003	0.00099	0.00034	0.0000	0.0000
syenite	912	0.1360	0.00099	0.00034	0.0001	0.0000
Internal cullet	800	0.1193	0.00099	0.00034	0.0001	0.0000
borax	738	0.1101	0.0089	0.0049	0.0010	0.0005
bd lime	331	0.0494	0.0089	0.0049	0.0004	0.0002
soda ash	642	0.0957	0.0089	0.0049	0.0009	0.0005
Borosilicate cullet	223	0.0333	0.00099	0.00034	0.0000	0.0000
Plate Cullet	894	0.1333	0.00099	0.00034	0.0001	0.0000
Fluorspar	100	0.0149	0.0089	0.0049	0.0001	0.0001
Bottle Cullet	800	0.1193	0.0089	0.0049	0.0011	0.0006
Melter Dust	40	0.0060	0.0089	0.0049	0.0001	0.0000
Weigh Scale Batch (lbs):	6706		Mean Emission Factor (lb/ton batch) =		0.0041	0.0021

PTE (tpy) (Rev 22008) = 0.182 0.095
Baseline PTE (tpy) (Rev 22008) = 0.118 0.061

	(lb/yr)	(tpy)
Max Annual Throughput: Weigh Scale	176,798,700	88,399
Baseline Throughput: Weigh Scale	114,698,960	57,349

Appendix A: Emission Calculations
Material Handling PM & PM10 Emissions
(page 3 of 4)

7. Day Bins 1 & 2 (combined).: Rev 22008 Emissions

material	lb material per Day Bin Batch	ton material/ton day bin batch	[1] Emission Factor (E.F.) lb/ton material)		[2] Emission Factor (E.F.) (lb/ton batch)	
			PM	PM10	PM	PM10
sand	1224	0.1825	0.00099	0.00034	0.0002	0.0001
Carbocite	2	0.0003	0.00099	0.00034	0.0000	0.0000
syenite	912	0.1360	0.00099	0.00034	0.0001	0.0000
Internal cullet	800	0.1193	0.00099	0.00034	0.0001	0.0000
borax	738	0.1101	0.0089	0.0049	0.0010	0.0005
bd lime	331	0.0494	0.0089	0.0049	0.0004	0.0002
soda ash	642	0.0957	0.0089	0.0049	0.0009	0.0005
Borosilicate cullet	223	0.0333	0.00099	0.00034	0.0000	0.0000
Plate Cullet	894	0.1333	0.00099	0.00034	0.0001	0.0000
Fluorspar	100	0.0149	0.0089	0.0049	0.0001	0.0001
Bottle Cullet	800	0.1193	0.0089	0.0049	0.0011	0.0006
Melter Dust	40	0.0060	0.0089	0.0049	0.0001	0.0000
Day Bins 1 & 2 (lbs):	6706		Mean Emission Factor (lb/ton batch) =		0.0041	0.0021

PTE (tpy) (Rev 22008) = 0.182 0.095
Baseline PTE (tpy) (Rev 22008) = 0.118 0.061

	(lb/yr)	(tpy)
Max Annual Throughput: Day Bins 1 & 2	176,798,700	88,399
Baseline Throughput: Day Bins 1 & 2	114,698,960	57,349

8. Melter Dust Recycle System (MDRS): Rev 22008 Emissions

material	lb Melter Dust/ lb glass pulled	Dust Captured (lb/yr)	[1] Emission Factor (E.F.) (lb/ton material)		PTE (tpy)	
			PM	PM10	PM	PM10
Baseline Emissions	0.01	930,771	0.00034	0.00099	0.0001	0.0002
PTE Emissions	0.01	1,247,568	0.00034	0.00099	0.0001	0.0003

9. Methodology for Rev 22008 Calculations

[1] Emission Factors (lb/ton material) from AP-42, Table 11.12-2 (controlled emission factors)
[2] Emission Factors (lb/ton batch) = E.F. (lb/ton material) * ton material/ton batch
ton material/ton batch = [material (lb/batch) x 1/2000 (lb/ton)] / [lb per batch x 1/2000 (lb/ton)]
For the Processes Described in 2 through 6 above:
Max Annual Throughput "x" (lb/yr) = Max Annual Electric Melter Input (Rev 22008) (lb/yr) x
(lb material per batch "x" / Max Electric Melter Input Batch (Rev 22008) (lb/batch))
Where "x" = processes defined in 1 through 7 above
Baseline Throughput "x" (lb/yr) = Baseline Input (Rev 22008) (lb/yr) x
(lb material per batch "x" / Max Electric Melter Input Batch (Rev 22008) (lb/batch))
Where "x" = processes defined in 2 through 6 above
PTE (tpy) (Rev 22008) = Mean Emission Factor (lb/ton) x Max Annual Throughput (tpy) x 1/2000 (ton/lb)
Baseline PTE (tpy) (Rev 22008) = Mean Emission Factor (lb/ton) x Baseline hroughput (tpy) x 1/2000 (ton/lb)
For the Melter Dust Recycle System (MDRS):
Dust Captured (lb/yr) = lb Melter Dust/lb glass pulled x Glassed Pulled (lb/yr)
PTE (PM/PM10) (tpy) = (Dust Captured (lb/yr) x 1/2000 (ton/lb)) x E.F. (lb/ton) x 1/2000 (ton/lb)

Appendix A: Emission Calculations
Material Handling PM & PM10 Emissions
(page 4 of 4)

10. 29154 Emissions

Johns Manville will be changing the balances of the material as part of the increased cullet modification (SSM 075-29154-00006). Johns Manville has requested that the modified 'recipe' of materials be confidential. However, the total tonage will not change. The worst case emission factors, in conjunction with the max annual throughput, will be used as a conversative PTE.

Process	Max. Annual Throughput (tpy)	[1)] Emission Factor (E.F.) lb/ton material)		PTE (tpy)	
		PM	PM10	PM	PM10
Silos (1-8)	75,982	0.0089	0.0049	0.338	0.186
Railcar Receving	75,982	0.0089	0.0049	0.338	0.186
Batch Transfer System	76,509	0.0089	0.0049	0.340	0.187
Mixer (NEW)	76,535	0.0089	0.0049	0.341	0.188
Weigh Scale	88,399	0.0089	0.0049	0.393	0.217
Day Bins 1 & 2 (combined)	88,399	0.0089	0.0049	0.393	0.217

To calculate uncontrolled PTE, assume a conservative control efficiency of 99%.

Methodology

[1)] Emission Factors (lb/ton material) from AP-42, Table 11.12-2

PTE (PM/PM10) (tpy) = (Max Annual Throughput (lb/yr) x 1/2000 (ton/lb)) x E.F. (lb/ton material) x 1/2000 (ton/lb)

Appendix A: Emission Calculations
New Cold Top Electric Melter

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Cold Top Electric Melter
Control Device: Baghouse
Description: 22008 (electric melter modification): Construction authorized as part of this modication, SSM 177-22008-00006 (issued September 10, 2006)
Rev 22008: Updated emissions due to correction to capacity, and updated emissions factors based on stack testing.
29154 (cullet increase modification): Affected unit under this modification, due to a change in the method of operation.
Specifically, the material input to the electric melter has been revised.

Factors:

	PM10	VOC	NOx	CO	SO2	HF
22008 Safety Factor	10%	~~20%~~	100%	100%	100%	100%
29154 Safety Factor	no change	**0%**	no change	no change	no change	no change
Control Efficiency	99%	0%	0%	0%	0%	0%

	Actuals	Emission Factors	Potentials 22008	Potentials Rev 22008	Potentials 29154	Stack Test Basis for Revised 22008 Potential Emission Factors
PM10 :	NA	*lb./lb of glass*	~~2.832E-05~~	no change	**1.847E-05**	JM Waterville Mass Balance of Baghouse Dust 2008
VOC :	NA	*lb./lb of glass*	~~6.312E-05~~	no change	**4.279E-04**	Willows 50% Cullet Stack Test 10/22/2009
NOx :	NA	*lb./lb of glass*	~~2.172E-05~~	no change	**9.474E-05**	SORG Testing Jan. 2009
CO :	NA	*lb./lb of glass*	~~4.765E-05~~	no change	**6.070E-04**	Willows 50% Cullet Stack Test 10/22/2009
SO2 :	NA	*lb./lb of glass*	~~9.163E-07~~	no change	**1.294E-04**	Willows 50% Cullet Stack Test 10/22/2009
Fluoride:	NA	*lb./lb of glass*	3.665E-07	no change	no change	JM Werthiem, Germany Testing

EMISSION ESTIMATES

	22008	Rev 22008	29154		
AVG. Actual Hours of Operation :	0.0	no change	no change	hr/yr.	
Actual Line Pull-Rate Average :	0.0	no change	no change	lbs. glass/hr	
Permitted Hours	8,760.0	no change	no change		
PTE in Hours :	8,760.0	no change	no change	hr/yr.	Max Potential
PTE Line Pull-Rate:	~~17,500.0~~	**17,550.0**	no change	lbs. glass/hr	Rated Capacity
Assumed fusion loss	15%	no change	no change		
PTE Line Feed-Rate:	~~20,125.0~~	**20,182.5**	no change	lbs. glass/hr	

			22008			Rev 22008		29154	
Pollutant	**Actual (lb/hr)**	**Actual (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**	**Permit Limited (lb/hr)**	**Potential (lb/hr)**	**Potential (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**
PM10 :	-	-	0.50	2.17	0.49	0.50	2.18	0.32	1.42
VOC :	-	-	1.10	4.84	1.10	1.11	4.85	7.51	32.89
NOx :	-	-	0.38	1.66	--	0.38	1.67	1.66	7.28
CO :	-	-	0.83	3.65	0.83	0.84	3.66	10.65	46.66
SO2 :	-	-	0.02	0.07	--	0.02	0.07	2.27	*9.95*
HF :	-	-	0.01	0.03	--	0.01	0.03	0.01	*0.03*

Revisions to 22008 emissions are the result of a correction to the throughput capacity of the electric melter
The melter is bottlenecked at 17,550 lb/hr by Line 2 shredding and packaging (9,450 lb/hr) and Line 3 shredding and packaging (8,100 lb/hr)

Revisions to 29154 are the result of the change in raw materials.

Appendix A: Emission Calculations
Line 2 Climate ProCollection Module

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Line 2 Climate ProCollection Module

Control Device: Fog box / wet spray collection system.

Description: 22008 (electric melter modification): Fiberizers and water spray collection system were physically modified as part of this modification, SSM 177-22008-00006 (issued September 10, 2006)
Rev 22008: Updated emissions due to correction to capacity, and updated emissions factors based on stack testing.
29154 (cullet increase modification): Not an afffected unit under this modification.

Factors:	PM10	VOC	NOx	CO	SO2
22008 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		
			22008	Rev 22008	Stack Test Basis for Revised 22008 Potential Emission Factors
PM10 :	1.585E-03	*lb./lb of glass*	~~1.175E-03~~	**1.200E-03**	Engineering Stack Test Line 2 (8/2/2009)
VOC :	8.256E-04	*lb./lb of glass*	~~8.806E-04~~	**3.432E-05**	Richmond Line 2 Stack Test 1/30/2008
NOx :	4.845E-05	*lb./lb of glass*	~~5.814E-05~~	**4.903E-05**	Richmond Line 2 Stack Test 1/30/2008
CO :	1.024E-03	*lb./lb of glass*	~~1.792E-03~~	**8.128E-04**	Richmond Line 2 Stack Test 1/30/2008
SO2 :	1.143E-04	*lb./lb of glass*	1.257E-04	no change	

EMISSION ESTIMATES

	22008	Rev 22008		
AVG. Actual Hours of Operation :	7,519.0	no change	hr/yr.	Average for October 1, 2003 to September 30, 2005
Actual Line Pull-Rate Average :	6,228.0	no change	lbs. glass/hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0	no change		
PTE in Hours :	8,760.0	no change	hr/yr.	Max Potential
PTE Line Pull-Rate:	~~8,750.0~~	**9,450.0**	lbs. glass/hr	Rated Capacity

			22008			Rev 22008 as Part of 29154	
Pollutant	**Actual (lb/hr)**	**Actual (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**	**Permit Limited (lb/hr)**	**Potential (lb/hr)**	**Potential (tpy)**
PM10 :	9.87	37.10	10.29	45.05	10.30	11.34	49.67
VOC :	5.14	19.33	7.71	33.75	6.78	0.32	1.42
NOx :	0.30	1.13	0.51	2.23	--	0.46	2.03
CO :	6.38	23.98	15.68	68.68	15.6	7.68	33.64
SO2 :	0.71	2.68	1.10	4.82		*1.19*	*5.20*

Appendix A: Emission Calculations
Line 3 Climate ProCollection Module

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Line 3 Climate ProCollection Module

Control Device: Fog box / wet spray collection system.

Description: 22008 (electric melter modification): Fiberizers and water spray collection system were physically modified as part of this modification, SSM 177-22008-00006 (issued September 10, 2006)
Rev 22008: Updated emissions due to correction to capacity, and updated emissions factors based on stack testing.
29154 (cullet increase modification): Not an afffected unit under this modification.

Factors:

	PM10	VOC	NOx	CO	SO2
22008 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%

			Potentials		
	Actuals	**Emission**	**22008**	**Rev 22008**	Stack Test Basis for Revised 22008 Potential Emission Factors
PM10 :	1.585E-03	*lb./lb of glass*	~~1.175E-03~~	**1.284E-03**	Engineering Stack Test Line 2 (8/2/2009)
VOC :	8.256E-04	*lb./lb of glass*	~~8.806E-04~~	**3.432E-05**	Richmond Line 2 Stack Test 1/30/2008
NOx :	4.845E-05	*lb./lb of glass*	~~5.814E-05~~	**4.903E-05**	Richmond Line 2 Stack Test 1/30/2008
CO :	1.024E-03	*lb./lb of glass*	~~1.792E-03~~	**8.128E-04**	Richmond Line 2 Stack Test 1/30/2008
SO2 :	1.143E-04	*lb./lb of glass*	1.257E-04	no change	

EMISSION ESTIMATES

	22008	Rev 22008		
AVG. Actual Hours of Operation :	7,100.0	no change	hr/yr.	Average for October 1, 2003 to September 30, 2005
Actual Line Pull-Rate Average :	6,375.0	no change	lbs. glass/hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0	no change		
PTE in Hours :	8,760.0	no change	hr/yr.	Max Potential
PTE Line Pull-Rate:	~~8,750.0~~	**8,100.0**	lbs. glass/hr	Rated Capacity

			22008			Rev 22008 as Part of 29154	
Pollutant	**Actual (lb/hr)**	**Actual (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**	**Permit Limited (lb/hr)**	**Potential (lb/hr)**	**Potential (tpy)**
PM10 :	10.10	35.86	10.29	45.05	10.30	10.40	45.55
VOC :	5.26	18.68	7.71	33.75	6.78	0.28	1.22
NOx :	0.31	1.10	0.51	2.23	--	0.40	1.74
CO :	6.53	23.17	15.68	68.68	15.60	6.58	28.84
SO2 :	0.73	2.59	1.10	4.82	--	1.02	4.46

Appendix A: Emission Calculations
Line 2 and Line 3 Shredding and Packaging

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Line 2 Shredding and Packaging
Control Device: Two baghouses in parallel
Description: 22008 (electric melter modification): Debottlenecked and modified as a result of this modification, SSM 177-22008-00006 (issued September 10, 2006)
Rev 22008: Updated emissions due to correction to capacity, and updated emissions factors based on stack testing.
29154 (cullet increase modification): Not an afffected unit under this modification.

Factors:

	22008
Safety Factor	20%
Control Efficiency	99%

			Potentials		
	Actuals	**Emission Factors**	**22008**	**Rev 22008**	Basis for Revised 22008 Potential Emission Factors
PM10 :	8.602E-05	*lb./lb of glass*	~~1.032E-04~~	**4.562E-05**	Aug. 2008 Stack Testing for Baghouses

EMISSION ESTIMATES

	22,008	Rev 22008	29154		
Line 2 Actual Hours of Operation :	7,519.0	no change	no change	hr/yr.	Average for October 1, 2003 to September 30, 2005
Glass Pull :	6,228.00	no change	no change	lbs./hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0	no change	no change		
PTE in Hours :	8,760.0	no change	no change	hr/yr.	Max Potential
PTE Line Pull-Rate:	~~8,750.0~~	**9,450.0**	no change	lbs./hr	Rated Capacity

			22008		Rev 22008			
Pollutant	**Actual (lb/hr)**	**Actual (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**	**Permit Limited (lb/hr)**	**(tpy)**
PM10 :	0.54	2.01	0.90	3.96	0.43	1.89	*0.43*	*1.88*

Line 3 Shredding and Packaging
Control Device: Two baghouses in parallel
Description: 22008 (electric melter modification): Debottlenecked and modified as a result of this modification, SSM 177-22008-00006 (issued September 10, 2006)
Rev 22008: Updated emissions due to correction to capacity, and updated emissions factors based on stack testing.
29154 (cullet increase modification): Not an afffected unit under this modification.

Factors:

	220.08
Safety Factor	20%
Control Efficiency	99%

			Potentials		
	Actuals	**Emission Factors**	**22008**	**Rev 22008**	Basis for Revised 22008 Potential Emission Factors
PM10 :	8.602E-05	*lb./lb of glass*	~~1.032E-04~~	**4.562E-05**	Aug. 2008 Stack Testing for Baghouses

EMISSION ESTIMATES - based on airflows

	22008	Rev 22008		
Line 2 Actual Hours of Operation :	7,100.0	no change	hr/yr.	Average for October 1, 2003 to September 30, 2005
Glass Pull :	6,375.0	no change	lbs./hr	Average for October 1, 2003 to September 30, 2005
Permitted Hours	8,760.0	no change		
PTE in Hours :	8,760.0	no change	hr/yr.	Max Potential
PTE Line Pull-Rate:	~~8,750.0~~	**8,100.0**	ACFM	Rated Capacity

			22008		Rev 22008 as Part of 29154	
Pollutant	**Actual (lb/hr)**	**Actual (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**	**Potential (lb/hr)**	**Potential (tpy)**
PM10 :	0.55	1.95	0.90	3.96	0.37	1.62

Appendix A: Emission Calculations
L2 and L3 Furnace Emissions

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Blowing Wool Furnace
Control Device: Control is a dry electrostatic precipitator
Shared with Line 3 Furnace
Description: Removed as part of SSM 177-22008-00006 (issued September 10, 2006)

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 2 AVG. Actual Hours of Operation :	8,760	hr/yr.	Furnaces run continuously
Line 2 Actual Line Pull-Rate Average :	6,228	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 :	0.68	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 SSM 177-22008-00006 (issued September 10, 2006)

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	21.24	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

Appendix A: Emission Calculations
L6 Electric Melter

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Line 6 Electric Melter
Control Device: Baghouse
Description: Removed as part of SSM 177-22008-00006 (issued September 10, 2006)

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

Appendix A: Emission Calculations
Line 6 Blowing Wool Collection Module

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Line 6 Blowing Wool Collection Module
Control Device: Fog box
Description: Removed as part of SSM 177-22008-00006 (issued September 10, 2006)

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

Appendix A: Emission Calculations
Line 6 Shredding and Packaging

Company Name: Johns Manville
Company Address: 814 Richmond Ave., Richmond IN 47374
Significant Source Modification No.: 177-29154-00006
Significant Permit Modification No.: 177-28547-00006
Reviewer: Jenny Acker
Date: December 7, 2010

Line 6 Shredding and Packaging
Control Device: Two baghouses in parallel
Description: Removed as part of SSM 177-22008-00006 (issued September 10, 2006)

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

Line 6 Actual Hours of Operation :	3,259.0	hr/yr.	Average for October 1, 2003 to September 30, 2005
Glass Pull :	1,304.00	lbs./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:	.	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

Batch Day Bins
Control Device: Dust Collectors
Description: Removed as part of SSM 177-22008-00006 (issued September 10, 2006)

	PM10
Control Efficiency	**99%**

EMISSION ESTIMATES

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

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

Indiana Department of Environmental Management
Office of Air Quality

Appendix B – Best Available Control Technology (BACT) Analysis
Significant Source Modification No.: 177-29154-00006 Significant Permit Modification No.: 177-28547-00006

Source Background and Description

Source Name:	Johns Manville, Inc.
Source Location:	814 Richmond Ave., Richmond, IN 47374
County:	Wayne
SIC Code:	3296
Operation Permit No.:	T177-22598-00006
Operation Permit Issuance Date:	December 20, 2007
Significant Source Modification No.:	177-29154-00006
Significant Permit Modification No.:	177-28547-00006
Permit Reviewer:	Jenny Acker

Proposed Expansion

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Johns Manville, Inc. on October 9, 2009, relating to a change in raw material consumption. Johns Manville, Inc. is proposing to utilize more post-consumer (recycled) glass material in the electric melter. This change does not require any physical modifications or increase the capacity of the electric melter. However, it is considered a change in the method of operation which affects the potential to emit of VOC at the electric melter.

Requirement for VOC BACT

Pursuant to 326 IAC 8-1-6 (New facilities; general reduction requirements), new facilities (as of January 1, 1980) that: have potential emissions of twenty-two and seven-tenths (22.7) megagrams (twenty-five (25) tons) or more per year; are located anywhere in the state; and, are not otherwise regulated by other provisions of this article, 326 IAC 20-48, or 326 IAC 20-56; shall reduce VOC emissions using best available control technology (BACT).

Upon completion of increasing the post-consumer (recycled) glass material input to the electric melter, the PTE of VOC will be greater than twenty-five (25) tons per year. The electric melter was constructed after January 1, 1980, and is not subject to any of the aforementioned articles or rules. Therefore, the electric melter is subject to best available control technology (BACT).

Summary of the Best Available Control Technology (BACT) Process

BACT is a mass emission limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations. Such reductions are necessary to demonstrate that the emissions remaining after application of BACT will not cause or contribute to air pollution, thereby protecting public health and the environment.

Federal guidance on BACT requires an evaluation that follows a "top down" process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by regulation or permit, or controls achieved in practice. The highest level of control is then evaluated for technical feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

The first step is to identify potentially "available" control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies, innovative technologies, and controls applied to similar source categories. There is no requirement in the State or Federal regulations to require innovative control to be used as BACT.

Step 2: Eliminate Technically Infeasible Options

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Innovative control means a control that has not been demonstrated in a commercial application on similar units. Only available and proven control technologies are evaluated. A control technology is considered available when there are sufficient data indicating that the technology results in a reduction in emissions of regulated pollutants.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

Step 4: Evaluate the Most Effective Controls and Document the Results

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

Step 5: Select BACT

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The permitting agency has to choose the most stringent limit as BACT unless the applicant demonstrates in a convincing manner why that limit is not feasible. The final BACT determination would be the technology with the most stringent corresponding limit that is economically feasible. BACT must, at a minimum, be no less stringent than the level of control

required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

The Office of Air Quality (OAQ) makes BACT determinations by following the five steps identified above.

Step 1: Identify Potential Control Technologies

The following table lists the proposed VOC BACT determination along with the existing VOC BACT determinations for similar operations. All data in the table is based on the information obtained from the permit application submitted by Johns Manville, Inc., the U.S. EPA RACT/BACT/LAER Clearinghouse (RBLC), and electronic versions of permits available at the websites of other permitting agencies.

COMPARABLE BACT DETERMINATIONS			
Company Name County, State	**RBCL ID Date**	**Limits**	**Control Method**
Johns Manville, Plant 8 Defiance County, OH	OH-0324 10/ 26/2009	- Units #84 & #85 (VOC): 3.2 lb/hr & 14.02 tpy - Unit #87 (VOC): 7.51 lb/hr & 32.89 tpy - Throughput capacities are confidential	none
Guardian Fiberglass Grant County, WA	WA-0388 11/30/2010	- (VOC): 2.07 lb/hr (1-hr ave), & 9.07 tpy, - (VOC) 0.460 lb/ton glass pulled this was considered a NG fired furnace for purposes of the BACT analysis	none
Owens Corning Crisp County, GA	GA-0125 12/23/2005	- (VOC) 0.380 lb/ton glass pulled (melter)	none
Johns Manville Johnson County, TX	TX-0480 10/01/2007	- (VOC) 0.320 lb/hr & 1.39 tpy (melter)	none
Guardian Fiberglass Berkeley County, WV	WV-0017 06/21/2004	- (VOC) 0.215 lb/ton glass pulled (melting & refining 2nd production line, NG furnace at 8,000 lb glass/hr) - (VOC) 0.216 lb/ton glass pulled (electric arc melter on 1st line at 7,500 lb glass/hr)	none

There are two categories of controls for VOCs: destruction processes and reclamation processes. Destruction technologies reduce the VOC concentration by high temperature oxidation into carbon dioxide and water vapor. Reclamation is the capture of VOCs for reuse or disposal. There are also commercially available combinations of reclamation and destruction technologies.

Destruction Control Methods

The destruction of organic compounds usually requires temperatures ranging from 1200°F to 2200°F for direct thermal oxidizers or 600°F to 1200°F for catalytic systems. Combustion temperature depends on the chemical composition and the desired destruction efficiency. Carbon dioxide and water vapor are the typical products of complete combustion. Turbulent mixing and combustion chamber retention times of 0.5 to 1.0 seconds are needed to obtain high destruction efficiencies.

Fume oxidizers typically need supplemental fuel. Concentrated VOC streams with high heat contents obviously require less supplementary fuel than more dilute streams. VOC streams sometimes have a heat content high enough to be self-sustaining, but a supplemental fuel-firing rate equal to about 5% of the total oxidizer heat input is usually needed to stabilize the burner flame. Natural gas is the most common fuel for VOC oxidizers, but fuel oil is an option in some circumstances.

Combustion control technologies include:

(1) Recuperative Thermal Oxidizer
(2) Regenerative Thermal Oxidizer
(3) Catalytic Oxidizer

Reclamation Control Methods
Organic compounds may be reclaimed by one of three possible methods:

(1) Adsorption
(2) Absorption (scrubbing)
(3) Biofiltration

In general, the organic compounds are separated from the emission stream and reclaimed for reuse or disposal. Depending on the nature of the contaminant and the inlet concentration of the emission stream, recovery technologies can reach efficiencies of 98%.

Adsorption is a surface phenomenon where attraction between the carbon and the VOC molecules binds the pollutants to the carbon surface. Both carbon and VOC are chemically intact after adsorption. The VOCs may be removed, or desorbed, from the carbon and reclaimed or destroyed.

Absorption is a unit operation where components of a gas phase mixture (pollutants) are selectively transferred to a relatively nonvolatile liquid, usually water. Sometimes, organic liquids, such as mineral oil or non volatile hydrocarbons, are suitable absorption solvents. The choice of solvent depends on cost and the solubility of the pollutant in the solvent.

Step 2: Eliminate Technically Infeasible Options

Catalytic or Regenerative Oxidation: The glass melter currently uses a baghouse for particulate control. A catalytic or regenerative oxidizer is highly effective in low solid airstreams and is used on organic based applications with little organic dust materials. The glass manufacturing process contains boron and other solid particles that cannot be destroyed in an incinerator and would cause immediate clogging of the incinerator bed. Even after the application of the baghouse, the air stream contains a high level of inorganic condensable particulate that would quickly clog the oxidation beds and would make these systems inoperative very quickly. Therefore, this system is not considered technically feasible and has been eliminated from consideration.

Carbon Adsorption: A carbon adsorption system is highly effective in low solid air streams and is used on organic based applications with little organic dust materials. Even after the application of the baghouse, the air stream contains a high level of condensable particulate that would quickly clog and make the carbon adsorption system inoperative very quickly. Therefore, this system is not considered technically feasible and has been eliminated from consideration.

Biofiltration: A biofiltration system is highly effective in low solid air streams and is used on organic based applications with little organic dust materials. Even after the application of the baghouse, the air stream contains a high level of condensable particulate that would quickly clog and make the biofiltration system inoperative very quickly. Therefore, this system is not considered technically feasible and has been eliminated from consideration.

Direct Fire Thermal Oxidation: The use of a thermal oxidizer for the control of VOCs on the electric melter gas exhaust stream would work in theory, although it has not been employed on any glass melters in the US. Therefore, this system will be further evaluated.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

Control Effectiveness		
Control Technology	**Rank**	**Destruction Efficiency**
Regenerative Thermal Oxidizer	1	98%
Wet Scrubber with Oxidant	2	40%

Step 4: Evaluate the Most Effective Controls and Document the Results
None of the glass melter operations listed in U.S. EPA RACT/BACT/LAER (RBLC) Clearinghouse database are equipped with VOC control technology.

Economic analysis:

Further evaluation including economic, energy and environmental impacts are required for controlling VOC emissions from the electric glass melter. Annualized costs were determined in accordance with the EPA guidance (EPA's *Office of Air Quality Planning and Standards Control Cost Manual*) and economic feasibility was evaluated.

RTO				
DIRECT COST (Pollution Control Equipment)			**Unit Cost**	**TOTAL ($)**
Direct Purchased Equipment				
	Oxidizer Units			$524,522
	Ductwork, fan, stack			$52,452
	Equipment Total (A)		A =	$17,600,000
	Instruments (included in price)		0.01 A	$176,000
	Sales Taxes & freight		0.08 A	$46,158
Total Equipment Costs (B)			B =	$623,132
Direct Installation Cost				
	Foundation and Support		0.08 B	$49,851
	Handling and Erection		0.14 B	$87,238
	Electrical		0.04 B	$24,925
	Piping		0.02 B	$12,463
	Insulation		0.01 B	$6,231
	Site Prep (painting)		0.01 B	$6,231
Total Direct Installation Costs				$186,939

RTO			
TOTAL Direct Investment (TDI) = (Total Equipment Cost + Total Direct Installation Cost)		TDI =	$810,071
Indirect Installation Costs			
	Engineering	0.10 B	$62,313
	Contractor Fees	0.10 B	$31,157
	Construction and Field Expenses	0.05 B	$62,313
	Start-up	0.02 B	$12,463
	Performance Test	0.01 B	$6,231
	Contingencies	0.03 B	$18,694
Total Indirect Installation Costs (TIC)		TIC =	$193,171
TOTAL CAPITAL INVESTMENT (TCI) = (TDC +TIC)		**TCI =**	**$1,003,242**
ANNUAL OPERATION & MAINTENANCE			
Direct Operating Costs (DA)			
	Operating Labor (546.0 hr/yr x 25.0 $/hr) (Operating Cost)		$13,650
	Supervisory Labor (15% of operating labor) (Operating Cost)		$2,048
	Maintenance Labor (547.5 hr/yr x 25.0 $/hr) (Maintenance Cost)		$13,650
	Maintenance Materials (100% labor cost) (Maintenance Cost)	0.05 TDI	$13,650
	Natural Gas (6,000 $/MMcf x 83.03 MMcf/yr)		$498,170
	Natural Gas Reduction (VOC+CO heat input)		-$9,783
	Electricity ($0.05/kWh x 150,876 kwh/yr)		$7,544
Total Direct Operating Costs (DA)		DA =	$538,928
Indirect Operating Costs (IC)			
	Overhead (0.60 of O&M)	0.06 O&M	$25,799
	Taxes, Insurance, Administrative Costs	0.04 TCI	$40,129
	Capital Recovery Factor (system) = 0.1424 x TCI (Assumes 10% compound interest rate and system useful life of 10 years)	0.16 TCI	$163,273
Total Indirect Operating Costs (IA)		IA =	$ 229,201
Total operating Costs (DA + IA)		**TOC =**	**$768,129**
Tons VOC Removed @ 98% =			32.23 tpy
Cost per Ton VOC Removed =			**$23,833**

Wet Scrubber with Oxidant			
DIRECT COST (Pollution Control Equipment)		**Unit Cost**	**TOTAL ($)**
Direct Purchased Equipment			
	Basic Unit		$350,000
	Ductwork, fan, stack		$35,000
	Equipment Total (A)	A =	$385,000

Wet Scrubber with Oxidant			
	Instruments (included in price)		$7,000
	Sales Taxes & freight		$30,800
Total Equipment Costs (B)		B =	$422,800
Direct Installation Cost			
	Foundation and Support	0.12 B	$50,736
	Handling and Erection	0.40 B	$169,120
	Electrical	0.01 B	$4,228
	Piping	0.30 B	$126,840
	Insulation	0.01 B	$4,228
	Site Prep (painting)	0.01 B	$4,2281
Total Direct Installation Costs			$359,380
TOTAL Direct Investment (TDI) = (Total Equipment Cost + Total Direct Installation Cost)		TDI =	$782,180
Indirect Installation Costs			
	Engineering	0.10 B	$42,280
	Contractor Fees	0.10 B	$42,280
	Construction and Field Expenses	0.10 B	$42,280
	Start-up	0.01 B	$4,228
	Performance Test	0.01 B	$4,228
	Contingencies	0.03 B	$12,684
Total Indirect Installation Costs (TIC)		TIC =	$147,980
TOTAL CAPITAL INVESTMENT (TCI) = (TDC +TIC)		**TCI =**	**$930,160**
ANNUAL OPERATION & MAINTENANCE			
Direct Operating Costs (DA)			
	Operating Labor (546.0 hr/yr x 25.0 $/hr) (Operating Cost)		$13,650
	Supervisory Labor (15% of operating labor) (Operating Cost)		$2,048
	Chemicals (5,256 gal H20 x $ 1.50/gal) (Operating Materials)		$7,884
	Maintenance Labor (546.0 hr/yr x 25.0 $/hr) (Maintenance Cost)		$13,650
	Maintenance Labor (Materials (100% labor cost) (Maintenance Cost)		$13,650
	Water Usage (3.36 $/Mgal x 526 Mgal)		$1,767
	Electricity ($0.05/kWh x 57,419 kwh/yr)		$2,871
Total Direct Operating Costs (DA)		DA =	$55,520
Indirect Operating Costs (IC)			
	Overhead (0.60 of O&M)	0.06 O&M	$25,799
	Administrative Costs	0.02 TCI	$18,603
	Insurance Costs	0.01 TCI	$9,302
	Taxes	0.01 TCI	$9,302

Wet Scrubber with Oxidant			
	Capital Recovery Factor (system) = 0.1424 x TCI (Assumes 10% compound interest rate and system useful life of 10 years)	0.16 TCI	$151,379
Total Indirect Operating Costs (IA)		IA =	$214,384
Total operating Costs (DA + IA)		**TOC =**	**$269,904**
Tons VOC Removed @ 40% =			13.7
Cost per Ton VOC Removed =			**$19,730**

Step 5: Select BACT

Based on the control technology evaluation made, IDEM has determined that VOC control technology is economically infeasible.

The emission limitation for the electric melter shall be as follows:

(a) The VOC emissions from the Electric Melter shall not exceed 7.51 pounds per hour.

Compliance Determination, Monitoring, and Testing Requirements

There are no Compliance Determination, Monitoring, and Testing Requirements included in the permit due to the usage of non-phenol/formaldehyde binder at Lines 613 and 614.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Joseph V Ehrenreich
814 Richmond Ave
Richmond, IN 47374

DATE: November 4, 2011

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Title V
177-29154-00006

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

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Thomas W. Easterly
Commissioner

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Toll Free (800) 451-6027
www.idem.IN.gov

TO: Morrison Reeves Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: **Johns Manville, Inc.**
Permit Number: **177-29154-00006**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	DPABST 11/4/2011 Johns Manville, Inc. 177-29154-00006(Final)		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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2		Morrisson Reeves Public Library 80 N 6th St Richmond IN 47374-3079 *(Library)*									
3		Mr. Thomas Lee Clevenger 4005 South Franks Lane Selma IN 47383 *(Affected Party)*									
4		Richmond City Council and Mayors Office 50 North 5th Street Richmond IN 47374 *(Local Official)*									
5		Wayne County Commissioners 401 East Main Street Richmond IN 47374 *(Local Official)*									
6		Mr. Randall Shrock 2764 Abington Pike Richmond IN 47374 *(Affected Party)*									
7		Wayne County Health Department 401 E. Main Street Richmond IN 47374-4388 *(Health Department)*									
8		Josh Yosick 107 Godley Way Pooler GA 31322-4019 *(Affected Party)*									
9		Mickey Myers Myers Environmental Services, Inc. 20385 Flint Lane Morrison CO 80465-2433 *(Consultant)*									
10		Mark Zeltwanger 26545 CR 52 Nappanee IN 46550 *(Affected Party)*									
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