



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

Michael R. Pence  
Governor

Carol S. Comer  
Commissioner

## NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

Preliminary Findings Regarding the Renewal of a  
Federally Enforceable Operating Permit (FESOP)

for Johns Manville in Marshall County

FESOP Renewal No.: F099-36361-00042

The Indiana Department of Environmental Management (IDEM) has received an application from Johns Manville located at 1215 West Dewey Street, Bremen, Indiana 46506 for a renewal of its FESOP issued on July 21, 2006. If approved by IDEM's Office of Air Quality (OAQ), this proposed renewal would allow Johns Manville to continue to operate its existing source.

This draft FESOP does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Bremen Public Library  
304 N. Jackson Street  
Bremen, IN 46506

and

IDEM Northern Regional Office  
300 N. Michigan Street, Suite 450  
South Bend, IN 46601-1295

A copy of the preliminary findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>.

### How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30<sup>th</sup> day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number F099-36361-00042 in all correspondence.

**Comments should be sent to:**

Brian Williams  
IDEM, Office of Air Quality  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
(800) 451-6027, ask for extension 4-5375  
Or dial directly: (317) 234-5375  
Fax: (317) 232-6749 attn: Brian Williams  
E-mail: bwilliam@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**What will happen after IDEM makes a decision?**

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, at the IDEM Regional Office indicated above, and the IDEM public file room on the 12<sup>th</sup> floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Brian Williams or my staff at the above address.

  
Iryn Calilung, Section Chief  
Permits Branch  
Office of Air Quality



Michael R. Pence  
Governor

Carol S. Comer  
Commissioner

DRAFT

# Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

**Johns Manville  
1215 West Dewey Street  
Bremen, Indiana 46506**

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

**The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-8-11.1, applicable to those conditions

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

Operation Permit No.: F099-36361-00042	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date:  Expiration Date:

## TABLE OF CONTENTS

<b>SECTION A</b>	<b>SOURCE SUMMARY .....</b>	<b>4</b>
A.1	General Information [326 IAC 2-8-3(b)]	
A.2	Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]	
A.3	Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(l)]	
A.4	FESOP Applicability [326 IAC 2-8-2]	
<b>SECTION B</b>	<b>GENERAL CONDITIONS .....</b>	<b>8</b>
B.1	Definitions [326 IAC 2-8-1]	
B.2	Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]	
B.3	Term of Conditions [326 IAC 2-1.1-9.5]	
B.4	Enforceability [326 IAC 2-8-6] [IC 13-17-12]	
B.5	Severability [326 IAC 2-8-4(4)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]	
B.7	Duty to Provide Information [326 IAC 2-8-4(5)(E)]	
B.8	Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]	
B.9	Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.10	Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.11	Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]	
B.12	Emergency Provisions [326 IAC 2-8-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.14	Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]	
B.15	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]	
B.16	Permit Renewal [326 IAC 2-8-3(h)]	
B.17	Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]	
B.18	Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]	
B.19	Source Modification Requirement [326 IAC 2-8-11.1]	
B.20	Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]	
B.21	Transfer of Ownership or Operational Control [326 IAC 2-8-10]	
B.22	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]	
B.23	Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]	
<b>SECTION C</b>	<b>SOURCE OPERATION CONDITIONS.....</b>	<b>18</b>
	<b>Emission Limitations and Standards [326 IAC 2-8-4(1)] .....</b>	<b>18</b>
C.1	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2	Overall Source Limit [326 IAC 2-8]	
C.3	Opacity [326 IAC 5-1]	
C.4	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6	Fugitive Dust Emissions [326 IAC 6-4]	
C.7	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
	<b>Testing Requirements [326 IAC 2-8-4(3)].....</b>	<b>20</b>
C.8	Performance Testing [326 IAC 3-6]	
	<b>Compliance Requirements [326 IAC 2-1.1-11] .....</b>	<b>21</b>
C.9	Compliance Requirements [326 IAC 2-1.1-11]	
	<b>Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)] .....</b>	<b>21</b>
C.10	Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]	
C.11	Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]	

<b>Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]</b> .....	<b>22</b>
C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]	
C.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]	
C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]	
<b>Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]</b> .....	<b>23</b>
C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]	
C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]	
<b>Stratospheric Ozone Protection</b> .....	<b>24</b>
C.17 Compliance with 40 CFR 82 and 326 IAC 22-1	
<b>SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>25</b>
<b>Emission Limitations and Standards [326 IAC 2-8-4(1)]</b> .....	<b>26</b>
D.1.1 FESOP Limitations (PM <sub>10</sub> , PM <sub>2.5</sub> , and VOC) [326 IAC 2-8-4]	
D.1.2 PSD Minor Limits [326 IAC 2-2]	
D.1.3 Particulate [326 IAC 6-3-2]	
D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]	
D.1.5 Preventative Maintenance Plan [326 IAC 2-8-4(9)]	
<b>Compliance Determination Requirements [326 IAC 2-8-4(1)]</b> .....	<b>28</b>
D.1.6 Volatile Organic Compound (VOC) Emissions	
D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]	
D.1.8 Particulate Control	
<b>Compliance Monitoring Requirements [326 IAC 2-8-4(1)][326 IAC 2-8-5(a)(1)]</b> .....	<b>30</b>
D.1.9 Dust Collector System Parametric Monitoring	
D.1.10 Broken or Failed Bag Detection	
D.1.11 Cyclone Failure Detection	
D.1.12 Regenerative Thermal Oxidizer Temperature	
D.1.13 Regenerative Thermal Oxidizer Parametric Monitoring	
<b>Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]</b> .....	<b>32</b>
D.1.14 Record Keeping Requirement	
D.1.15 Reporting Requirement	
<b>SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS</b> .....	<b>33</b>
<b>Emission Limitations and Standards [326 IAC 2-8-4(1)]</b> .....	<b>33</b>
D.2.1 Particulate [326 IAC 6-2-4]	
<b>CERTIFICATION</b> .....	<b>34</b>
<b>EMERGENCY OCCURRENCE REPORT</b> .....	<b>35</b>
<b>FESOP Quarterly Report</b> .....	<b>37</b>
<b>FESOP Quarterly Report</b> .....	<b>38</b>
<b>QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT</b> .....	<b>39</b>

## SECTION A SOURCE SUMMARY

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

### A.1 General Information [326 IAC 2-8-3(b)]

---

The Permittee owns and operates a stationary rigid polyisocyanurate foam panel manufacturing source.

Source Address:	1215 West Dewey Street, Bremen, Indiana 46506
General Source Phone Number:	(574) 546-4666
SIC Code:	3086 (Plastics Foam Products)
County Location:	Marshall
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

---

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

- (a) One (1) foam head, identified as EU1, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, uncontrolled and exhausting to Stack 202.
- (b) One (1) foaming laminator, identified as EU2, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, uncontrolled and exhausting to Stack 201.
- (c) One (1) inline cutting process, identified as EU3, with a maximum capacity of 78,000 board feet per hour constructed in 1990, modified in 2015, consisting of an edge trim saw, cross cut saw, and gang saw.

The inline cutting process EU3 operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

PC1 consists of a cyclone and baghouse. PC2 consists of a baghouse.

- (d) One (1) foot slicer, identified as FS, with a maximum capacity of 640 board feet per hour, constructed in 1990.

The foot slicer (FS) operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

- (e) One (1) panel saw, identified as PS, with a maximum capacity of 640 board feet per hour, constructed in 1990.

The panel saw (PS) operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

The RTO, common control for EU3, FS and PS, is rated at rated at 5.0 MMBtu/hr.

- (f) One (1) warehouse area, identified as EU4, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, consisting of curing, staging and shipping areas for the finished panels.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) The following VOC and HAP storage containers:
  - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
  - (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (b) Cleaners and solvents having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20°C (68°F); the use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months.
- (c) Any operation using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs including the following:
  - (1) One (1) aerosol based degreaser, identified as DG-1, constructed in 2015, with a maximum throughput of 100 gallons per 12 months of a solution containing no VOCs and no HAPs.

- (d) Replacement or repair of bags in baghouses and filters in other air filtration equipment.
- (e) Heat exchanger cleaning and repair.
- (f) Process vessel degassing and cleaning to prepare for internal repairs.
- (g) Paved and unpaved roads and parking lots with public access.
- (h) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (i) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (j) The following VOC storage tanks:
  - (1) Two (2) tanks, identified as Tank 1 and Tank 2, capacity: 10,000 gallons, each.
  - (2) One (1) tank, identified as Tank 3, capacity: 5,000 gallons.
  - (3) Two (2) tanks, identified as Tank 4 and Tank 5, capacity: 5,434 gallons, each.
  - (4) One (1) tank, identified as Tank 6, capacity: 10,000 gallons.
  - (5) One (1) tank, identified as Tank 7, capacity: 10,000 gallons.
  - (6) One (1) tank, identified as Tank 8, capacity: 5,000 gallons.
  - (7) One (1) tank, identified as Tank 9, capacity: 5,434 gallons.
  - (8) One (1) tank, identified as Tank 10, capacity: 5,434 gallons.
  - (9) One (1) tank, identified as Tank 12, capacity: 30,000 gallons.
- (k) One (1) pressure vessel designed to operate in excess of 204.9 kPa and without emissions to the atmosphere, identified as Tank 11, capacity: 30,000 gallons.
- (l) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
  - (1) Four (4) natural gas-fired make-up air heaters, with a maximum heat input capacity of 1.21 MMBtu/hr, each.
  - (2) Five (5) natural gas-fired thermocyclers, with a maximum heat input capacity of 0.4 MMBtu/hr, each.
  - (3) Two (2) natural gas-fired furnaces, with a maximum heat input capacity of 0.126 MMBtu/hr, each.
  - (4) Four (4) natural gas-fired thermocyclers, with a maximum heat input capacity of 0.58 MMBtu/hr, each.
  - (5) Three (3) natural gas-fired make-up air heaters, with a maximum heat input capacity of 0.75 MMBtu/hr, each.

- (6) Three (3) natural gas-fired make-up air heaters, with a maximum heat input capacity of 0.972 MMBtu/hr, each.
- (7) Two (2) natural gas-fired process furnaces, with a maximum heat input capacity of 1.5 MMBtu/hr, each.
- (m) One (1) maintenance arc welder, identified as maintenance wire welder #1, with a maximum electrode usage of 120 pounds per year.
- (n) One (1) abrasive blast cabinet, identified as BC-1, constructed in 1999, with a maximum process weight rate of 4.24 pounds per hour (1.58 pounds of sodium bicarbonate blast media per hour and 2.66 pounds of foaming laminator parts per hour), used to remove material from laminator parts, equipped with a bag filter as control, and exhausting internally.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) to renew a Federally Enforceable State Operating Permit (FESOP).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-8-1]

---

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 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

---

- (a) This permit, F099-36361-00042, is issued for a fixed term of ten (10) 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, 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 2-8-6] [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 2-8-4(4)]

---

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 2-8-4(5)(D)]

---

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

### B.7 Duty to Provide Information [326 IAC 2-8-4(5)(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 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:
- (1) it contains a certification by an "authorized individual", as defined by 326 IAC 2-1.1-1(1), 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) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.9 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

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

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

- (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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]**

---

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

**B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]**

---

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

- (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.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (d) 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.12 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ or Northern Regional Office 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  
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

- (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 2-8-4(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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
  - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
  - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
    - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
    - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

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

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

---

- (a) All terms and conditions of permits established prior to F099-36361-00042 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

**B.14 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]**

---

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 2-8-3(h) and 326 IAC 2-8-9.

**B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]**

---

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.16 Permit Renewal [326 IAC 2-8-3(h)]

- (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 2-8-3. 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(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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 2-8 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 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (c) 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 approval required by 326 IAC 2-8-11.1 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 2-8-15(b)(1) and (c). 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 2-8-15(b)(1) and (c).

(b) **Emission Trades [326 IAC 2-8-15(b)]**  
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 2-8-15(b).

(c) **Alternative Operating Scenarios [326 IAC 2-8-15(c)]**  
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 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.

(d) 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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]

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 FESOP 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.22 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than 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) 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.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][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 2-8-4(1)]

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

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

#### C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

#### C.3 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.4 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.5 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.6 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).

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

---

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

- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management  
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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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.

### **Testing Requirements [326 IAC 2-8-4(3)]**

#### **C.8 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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

---

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements 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 2-8-4(1)][326 IAC 2-8-5(a)(1)]**

#### **C.10 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]**

---

- (a) For new units:  
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:  
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 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, 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

#### **C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(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. The analog instrument shall be capable of measuring values outside of the normal range.
- (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 2-8-4][326 IAC 2-8-5(a)(1)]**

**C.12 Risk Management Plan [326 IAC 2-8-4] [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 2-8-4] [326 IAC 2-8-5]**

---

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 2-8-4][326 IAC 2-8-5]**

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

**C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

- (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. Support information includes the following, where applicable:
  - (AA) All calibration and maintenance records.
  - (BB) All original strip chart recordings for continuous monitoring instrumentation.
  - (CC) Copies of all reports required by the FESOP.Records of required monitoring information include the following, where applicable:
  - (AA) The date, place, as defined in this permit, and time of sampling or measurements.
  - (BB) The dates analyses were performed.
  - (CC) The company or entity that performed the analyses.
  - (DD) The analytical techniques or methods used.
  - (EE) The results of such analyses.
  - (FF) The operating conditions as existing at the time of sampling or measurement.

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.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

---

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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) 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.

**Stratospheric Ozone Protection**

**C.17 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 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

- (a) One (1) foam head, identified as EU1, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, uncontrolled and exhausting to Stack 202.
- (b) One (1) foaming laminator, identified as EU2, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, uncontrolled and exhausting to Stack 201.
- (c) One (1) inline cutting process, identified as EU3, with a maximum capacity of 78,000 board feet per hour constructed in 1990, modified in 2015, consisting of an edge trim saw, cross cut saw, and gang saw.

The inline cutting process EU3 operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

PC1 consists of a cyclone and baghouse. PC2 consists of a baghouse.

- (d) One (1) foot slicer, identified as FS, with a maximum capacity of 640 board feet per hour, constructed in 1990.

The foot slicer (FS) operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

- (e) One (1) panel saw, identified as PS, with a maximum capacity of 640 board feet per hour, constructed in 1990.

The panel saw (PS) operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

The RTO, common control for EU3, FS and PS, is rated at rated at 5.0 MMBtu/hr.

(f) One (1) warehouse area, identified as EU4, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, consisting of curing, staging and shipping areas for the finished panels.

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

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

**D.1.1 FESOP Limitations (PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC) [326 IAC 2-8-4]**

Pursuant to 326 IAC 2-8-4 (FESOP) and in order to render 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

- (a) The PM<sub>10</sub> and PM<sub>2.5</sub> emissions after control from the following operations shall not exceed the emission limits listed in the table below:

Facilities	Control Device	PM <sub>10</sub> (lb/hr)	PM <sub>2.5</sub> (lb/hr)
Inline Cutting Process (EU3)	Dust Collector System PC1 and PC2 in series or PC1 alone	12.44	12.44
Panel Saw (PS)	Dust Collector System PC1 and PC2 in series or PC1 alone	0.58	0.58

- (b) The VOC input to the following shall be limited such that the total VOC emissions from these units shall not exceed 91.51 tons per twelve (12) consecutive month period, with compliance determined at the end of each month:

- (1) foam head (EU1),
- (2) foaming laminator (EU2),
- (3) inline cutting process (EU3), and
- (4) warehouse area (EU4).

Compliance with these limits, combined with the PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC from other emission units, shall limit emissions from the entire source to less than one hundred (100) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

**D.1.2 PSD Minor Limits [326 IAC 2-2]**

In order to render 326 IAC 2-2 (PSD) not applicable, the PM emissions after control from the following operations shall not exceed the emission limits listed in the table below:

Unit Description	Control Device	PM (lb/hr)
Inline Cutting Process (EU3)	Dust Collector System PC1 and PC2 in series or PC1 alone	12.44
Panel Saw (PS)	Dust Collector System PC1 and PC2 in series or PC1 alone	0.58

Compliance with these limits, combined with the PM from other emission units, shall limit emissions from the entire source to less than two hundred fifty (250) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (PSD) not applicable.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the facilities listed below, shall be limited as specified when operating at the respective process weight rate:

Emission Units	Process Weight Rate (lb/hr)	Process Weight Rate (ton/hr)	Allowable PM Emission Rate (lb/hr)
Inline Cutting Process (EU3)	10,485.24	5.24	12.44
Panel Saw (PS)	106.67	0.05	0.58
Foot Slicer (FS)	106.67	0.05	0.58

The pounds per hour allowable particulate emission rates were calculated with the following equation:

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

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

#### D.1.4 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT), Significant Permit Revision No.099-14499-00042 issued October 16, 2001, and Significant Permit Revision No.099-26867-00042 issued November 25, 2008, the Permittee shall control the VOC emissions for the rigid polyisocyanurate foam panel manufacturing process using Best Available Control Technology (BACT). The BACT for this process has been determined to be:

- (a) A regenerative thermal oxidizer (RTO) shall be in operation at all times that the inline cutting process (EU3) is in operation, with an overall control efficiency of 90%; except as specified in Condition D.1.4(c).
- (b) Throughput for the entire rigid polyisocyanurate foam panel manufacturing process (EU1 through EU4) shall not exceed 678,356,560 board feet per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (c) Pursuant to 326 IAC 8-1-2(a)(2), the RTO is not required to be in operation when the inline cutting process (EU3) is in operation during the months of November, December, January, February, and March.

#### D.1.5 Preventative Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for these facilities and any 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 [326 IAC 2-8-4(1)]

### D.1.6 Volatile Organic Compound (VOC) Emissions

---

Compliance with the VOC emission limitation contained in Condition D.1.1(b) shall be determined for each month using the quarterly reporting form located at the end of this permit. Compliance shall be based on the combined VOC emitted from EU1, EU2, EU3, and EU4 for the previous month added to the total VOC emitted from EU1, EU2, EU3 and EU4 for the previous 11 months, so as to arrive at the total VOC emitted for the most recent 12 consecutive month period.

- (a) The VOC emission from the foam head process (EU1) shall be calculated as follows:

$$\text{VOC}_{\text{EU1}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{EU1}}$  = VOC emissions

EF = Emission Factor (0.0000683 lb VOC/bdft)

X = Total rigid polyisocyanurate foam panel board feet manufactured per period

- (b) The VOC emission from the foaming laminator (EU2) shall be calculated as follows:

$$\text{VOC}_{\text{EU2}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{EU2}}$  = VOC emissions

EF = Emission Factor (0.000121 lb VOC/bdft)

X = Total rigid polyisocyanurate foam panel board feet manufactured per period

- (c) When the RTO is in operation the VOC emissions from the inline cutting process (EU3) shall be calculated as follows:

$$\text{VOC}_{\text{w/ RTO}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{w/ RTO}}$  = VOC emissions with RTO control

EF = Emission Factor determined from the most recent valid stack test

X = Total rigid polyisocyanurate foam panel board feet manufactured per period

- (d) When the RTO is not in operation during the months of November, December, January, February, and March, the VOC emissions from the inline cutting process (EU3) shall be calculated as follows:

$$\text{VOC}_{\text{w/o RTO}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{w/o RTO}}$  = VOC emissions without RTO control

EF = Emission Factor determined from the most recent valid stack test

X = Total board feet of rigid polyisocyanurate foam panels manufactured per period

- (e) The VOC emission from the warehouse area (EU4) shall be calculated as follows:

$$\text{VOC}_{\text{EU4}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{EU4}}$  = VOC emissions

EF = Emission Factor (0.00000771 lb VOC/bdft)

X = Total rigid polyisocyanurate foam panel board feet manufactured per period

- (f) The Total VOC emissions for each compliance period shall be determined using the following equation:

$$\text{Total VOC Emissions} = \text{VOC}_{\text{EU1}} + \text{VOC}_{\text{EU2}} + \text{VOC}_{\text{w/RTO}} + \text{VOC}_{\text{w/o RTO}} + \text{VOC}_{\text{EU4}}$$

Where:

$\text{VOC}_{\text{EU1}}$  = VOC emissions from the foam head process (EU1)

$\text{VOC}_{\text{EU2}}$  = VOC emissions from the foaming laminator (EU2)

$\text{VOC}_{\text{w/RTO}}$  = VOC emissions from the inline cutting process (EU3) with RTO control

$\text{VOC}_{\text{w/o RTO}}$  = VOC emissions from the inline cutting process (EU3) without RTO control

$\text{VOC}_{\text{EU4}}$  = VOC emissions from the warehouse area (EU4)

**D.1.7 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]**

- (a) In order to demonstrate compliance with Conditions D.1.1(a) and D.1.4(a), the Permittee shall perform VOC testing (inlet, outlet, and overall control efficiency) of the regenerative thermal oxidizer not later than five (5) years from the date of the most recent valid compliance demonstration, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the most recent valid compliance demonstration.
- (b) Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C- Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

**D.1.8 Particulate Control**

- (a) In order to comply with Conditions D.1.1, D.1.2, and D.1.3, the following control devices for the emission units listed in the table below shall be in operation at all times that the emission units are in operation:

Emission Unit	Control Device
Inline Cutting Process (EU3)	Dust Collector System PC1 in series with Dust Collector System PC2 or Dust Collector System PC1 alone
Foot Slicer (FS)	Dust Collector System PC1 in series with Dust Collector System PC2 or Dust Collector System PC1 alone
Panel Saw (PS)	Dust Collector System PC1 in series with Dust Collector System PC2 or Dust Collector System PC1 alone

- (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 2-8-4(1)][326 IAC 2-8-5(a)(1)]**

**D.1.9 Dust Collector System Parametric Monitoring**

- (a) The Permittee shall record the pressure drop across the dust collector system used in conjunction with the emission units identified in the table below at least once per day. When for any one reading, the pressure drop across any of the dust collector system is outside the normal range, the Permittee shall take reasonable response. The normal range for the dust collector system is a pressure drop between the values listed in the table below unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C- Response to Excursions or 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 ranges is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Emission Unit	Control ID	Pressure Drop Range (inches of H <sub>2</sub> O)
Inline Cutting Process (EU3)	Dust Collector System PC1 in series with Dust Collector System PC2 or Dust Collector System PC1 alone	0.5 - 6.0
Foot Slicer (FS)	Dust Collector System PC1 in series with Dust Collector System PC2 or Dust Collector System PC1 alone	0.5 - 6.0
Panel Saw (PS)	Dust Collector System PC1 in series with Dust Collector System PC2 or Dust Collector System PC1 alone	0.5 - 6.0

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

**D.1.10 Broken or Failed Bag Detection**

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

#### D.1.11 Cyclone Failure Detection

---

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Section C – Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

#### D.1.12 Regenerative Thermal Oxidizer Temperature

---

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour rolling average. The Permittee shall operate the regenerative thermal oxidizer at or above the hourly average temperature as determined in the most recent valid stack test.
- (b) The Permittee shall determine the 3-hour rolling average temperature from the most recent valid stack test that demonstrates compliance with limits in Conditions D.1.1(b) and D.1.4.
- (c) On and after the date the stack test results are available, the Permittee shall operate the regenerative thermal oxidizer at or above the 3-hour rolling average temperature as observed during the most recent valid stack test.
- (d) If the 3-hour rolling average temperature falls below the above mentioned 3-hour rolling average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A 3-hour rolling average temperature reading below the above mentioned 3-hour rolling average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

#### D.1.13 Regenerative Thermal Oxidizer Parametric Monitoring

---

- (a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Conditions D.1.1(b) and D.1.4.
- (b) The duct pressure or fan amperage shall be observed at least once per day when the regenerative thermal oxidizer is in operation. On and after the date the stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent valid stack test
- (c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 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.

- (d) The instruments used for determining the pressure drop 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.

### **Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

#### **D.1.14 Record Keeping Requirement**

---

- (a) To document the compliance status with Conditions D.1.1(b) and D.1.4(b), the Permittee shall maintain monthly records of the number of board feet of rigid polyisocyanurate foam panels manufactured.
- (b) To document the compliance status with Conditions D.1.1(b), D.1.4(a), and D.1.4.(c), the Permittee shall maintain monthly records of when the RTO is and is not in operation. Strip charts or computer records will be deemed sufficient.
- (c) To document the compliance status with Condition D.1.9, the Permittee shall maintain records once per day of the pressure drop across the:
  - (1) dust collector system PC1 and PC2 in series used in conjunction with the inline cutting process (EU3), foot slicer (FS), and panel saw (PS) during normal operation when PC1 and PC2 control emissions in series.
  - (2) dust collector system PC1 used in conjunction with the inline cutting process (EU3), foot slicer (FS), and panel saw (PS) during normal operation when PC1 controls emissions.

The Permittee shall include in its daily record when the 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).

- (d) To document the compliance status with Conditions D.1.12 and D.1.13, the Permittee shall maintain the following:
  - (1) The continuous temperature records for the regenerative thermal oxidizer and the temperature used to demonstrate compliance during the most recent compliance stack test.
  - (2) Daily records of the duct pressure or fan amperage. The Permittee shall include in its daily record when the duct pressure or fan amperage are not taken and the reason for the lack of the readings (e.g., the process did not operate that day).
- (e) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

#### **D.1.15 Reporting Requirement**

---

A quarterly summary of the information to document the compliance status with Conditions D.1.1(b) and D.1.4(b) shall be submitted using the reporting forms located at the end of this permit, or their equivalent, no later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:** Insignificant Activities

- (1) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (2) Five (5) natural gas-fired thermocyclers, with a maximum heat input capacity of 0.4 MMBtu/hr, each.
- (4) Four (4) natural gas-fired thermocyclers, with a maximum heat input capacity of 0.58 MMBtu/hr, each.

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

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

**D.2.1 Particulate [326 IAC 6-2-4]**

---

Pursuant to 326 IAC 6-2-4(a), (Particulate Emission Limitations for Sources of Indirect Heating) the PM emissions from the natural gas-fired thermocyclers shall not exceed 0.6 pounds or particulate matter per million British thermal units heat input (lb/mmBtu).

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
CERTIFICATION**

Source Name: Johns Manville  
Source Address: 1215 West Dewey Street, Bremen, Indiana 46506  
FESOP Permit No.: F099-36361-00042

**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:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY  
COMPLIANCE AND ENFORCEMENT BRANCH  
100 North Senate Avenue  
MC 61-53 IGCN 1003  
Indianapolis, Indiana 46204-2251  
Phone: (317) 233-0178  
Fax: (317) 233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
EMERGENCY OCCURRENCE REPORT**

Source Name: Johns Manville  
Source Address: 1215 West Dewey Street, Bremen, Indiana 46506  
FESOP Permit No.: F099-36361-00042

**This form consists of 2 pages**

**Page 1 of 2**

- |   |
|---|
| <input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12) <ul style="list-style-type: none"><li>• The Permittee must notify the Office of Air Quality (OAQ), within four (4) daytime business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and</li><li>• 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 2-8-12</li></ul> |
|---|

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

Form Completed by: \_\_\_\_\_

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

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

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

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

**FESOP Quarterly Report**

Source Name: Johns Manville  
Source Address: 1215 West Dewey Street, Bremen, Indiana 46506  
FESOP Permit No.: F099-36361-00042  
Facility: EU1 through EU4  
Parameter: Combined VOC Emissions  
Limit: Shall not exceed 91.51 tons per twelve (12) month period, with compliance determined at the end of each month.

See Condition D.1.6 for Compliance Determination Equations

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

Month	VOC Emissions (tons)	VOC Emissions (tons)	VOC Emissions (tons)
	This Month	Previous 11 Months	12 Month Total

- 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**

**FESOP Quarterly Report**

Source Name: Johns Manville  
Source Address: 1215 West Dewey Street, Bremen, Indiana 46506  
FESOP Permit No.: F099-36361-00042  
Facility: EU1 through EU4  
Parameter: Amount of rigid polyisocyanurate foam panels manufactured  
Limit: Shall not exceed 678,356,560 board feet per twelve (12) month period, with compliance determined at the end of each month.

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

Month	Foam Panel Production (board feet)	Foam Panel Production (board feet)	Foam Panel Production (board feet)
	This Month	Previous 11 Months	12 Month Total

- 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  
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Johns Manville  
Source Address: 1215 West Dewey Street, Bremen, Indiana 46506  
FESOP Permit No.: F099-36361-00042

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

Page 1 of 2

<p>This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C- General Reporting. Any deviation from the requirements of this permit, 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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	
<b>Permit Requirement</b> (specify permit condition #)	
<b>Date of Deviation:</b>	<b>Duration of Deviation:</b>
<b>Number of Deviations:</b>	
<b>Probable Cause of Deviation:</b>	
<b>Response Steps Taken:</b>	

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

Form Completed by: \_\_\_\_\_

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

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

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

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

Technical Support Document (TSD) for a  
Federally Enforceable State Operating Permit Renewal

<b>Source Background and Description</b>
--

<b>Source Name:</b>	<b>Johns Manville</b>
<b>Source Location:</b>	<b>1215 West Dewey Street, Bremen, IN, 46506</b>
<b>County:</b>	<b>Marshall</b>
<b>SIC Code:</b>	<b>3086 (Plastics Foam Products)</b>
<b>Permit Renewal No.:</b>	<b>F099-36361-00042</b>
<b>Permit Reviewer:</b>	<b>Nancy Dollar/Brian Williams</b>

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Johns Manville relating to the operation of a stationary rigid polyisocyanurate foam panel manufacturing source. On October 5, 2015, Johns Manville submitted an application to the OAQ requesting to renew its operating permit. Johns Manville was issued its first FESOP Renewal F000-17832-00042 on July 21, 2006.

<b>Permitted Emission Units and Pollution Control Equipment</b>
---

The emission unit descriptions have been updated in this permit renewal.

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

- (a) One (1) foam head, identified as EU1, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, uncontrolled and exhausting to Stack 202.
- (b) One (1) foaming laminator, identified as EU2, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, uncontrolled and exhausting to Stack 201.
- (c) One (1) inline cutting process, identified as EU3, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, modified in 2015, consisting of an edge trim saw, cross cut saw, and gang saw.

The inline cutting process EU3 operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

PC1 consists of a cyclone and baghouse. PC2 consists of a baghouse.

- (d) One (1) foot slicer, identified as FS, with a maximum capacity of 640 board feet per hour, constructed in 1990.

The foot slicer (FS) operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
  - (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.
- (e) One (1) panel saw, identified as PS, with a maximum capacity of 640 board feet per hour, constructed in 1990.

The panel saw (PS) operates with either one of the following control options:

- (1) exhausting to a dust collector system, identified as PC1, in series to a secondary dust collector system, identified as PC2, for particulate control, which then exhausts to a natural gas fired regenerative thermal oxidizer (RTO) for VOC control, exhausting to Stack CD-1; or
- (2) exhausting only through the dust collector system, identified as PC1, for particulate control, exhausting to Stack SB-1.

The RTO, common control for EU3, FS and PS, is rated at rated at 5.0 MMBtu/hr.

- (f) One (1) warehouse area, identified as EU4, with a maximum capacity of 78,000 board feet per hour, constructed in 1990, consisting of curing, staging and shipping areas for the finished panels.

<b>Emission Units and Pollution Control Equipment Removed From the Source</b>
---

The source has removed the following insignificant activities:

- (a) Equipment used exclusively for the following: Packaging lubricants and greases, filling drums, pails or other packaging containers with lubricating oils, waxes, and greases.

This unit has been removed in this permit renewal based on input from the source.

- (b) Any unit emitting greater than 1 pound per day but less than 5 pounds per day or 1 ton per year of a single HAP: Spray degreaser operation.

The spray degreaser was replaced by an aqueous degreaser in 2015. Insignificant activity (c) has been revised in this permit renewal to include the aqueous degreaser.

<b>Insignificant Activities</b>
---------------------------------

The source also consists of the following insignificant activities:

- (a) The following VOC and HAP storage containers:
- (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
  - (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (b) Cleaners and solvents having a vapor pressure equal to or less than 0.7 kiloPascals; 5 millimeters of mercury; or 0.1 pounds per square inch measured at 20°C (68°F); the use of which

for all cleaners and solvents combined does not exceed 145 gallons per 12 months.

- (c) Any operation using aqueous solutions containing less than 1 percent by weight of VOCs excluding HAPs including the following:

(1) One (1) aerosol based degreaser, identified as DG-1, constructed in 2015, with a maximum throughput of 100 gallons per 12 months of a solution containing no VOCs and no HAPs.

This insignificant activity description has been revised in this permit renewal.

- (d) Replacement or repair of bags in baghouses and filters in other air filtration equipment.
- (e) Heat exchanger cleaning and repair.
- (f) Process vessel degassing and cleaning to prepare for internal repairs.
- (g) Paved and unpaved roads and parking lots with public access.
- (h) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- (i) Equipment used to collect any material that might be released during a malfunction, process upset, or spill cleanup, including catch tanks, temporary liquid separators, tanks, and fluid handling equipment.
- (j) The following VOC storage tanks:
- (1) Two (2) tanks, identified as Tank 1 and Tank 2, capacity: 10,000 gallons, each.
- (2) One (1) tank, identified as Tank 3, capacity: 5,000 gallons.
- (3) Two (2) tanks, identified as Tank 4 and Tank 5, capacity: 5,434 gallons, each.
- (4) One (1) tank, identified as Tank 6, capacity: 10,000 gallons.
- (5) One (1) tank, identified as Tank 7, capacity: 10,000 gallons.
- (6) One (1) tank, identified as Tank 8, capacity: 5,000 gallons.
- (7) One (1) tank, identified as Tank 9, capacity: 5,434 gallons.
- (8) One (1) tank, identified as Tank 10, capacity: 5,434 gallons.
- (9) One (1) tank, identified as Tank 12, capacity: 30,000 gallons.
- (k) One (1) pressure vessel designed to operate in excess of 204.9 kPa and without emissions to the atmosphere, identified as Tank 11, capacity: 30,000 gallons.
- (l) Natural gas-fired combustion sources with heat input equal to or less than ten (10) million Btu per hour.
- (1) Four (4) natural gas-fired make-up air heaters, with a maximum heat input capacity of 1.21 MMBtu/hr, each.
- (2) Five (5) natural gas-fired thermocyclers, with a maximum heat input capacity of 0.4

MMBtu/hr, each.

- (3) Two (2) natural gas-fired furnaces, with a maximum heat input capacity of 0.126 MMBtu/hr, each.
  - (4) Four (4) natural gas-fired thermocyclers, with a maximum heat input capacity of 0.58 MMBtu/hr, each.
  - (5) Three (3) natural gas-fired make-up air heaters, with a maximum heat input capacity of 0.75 MMBtu/hr, each.
  - (6) Three (3) natural gas-fired make-up air heaters, with a maximum heat input capacity of 0.972 MMBtu/hr, each.
  - (7) Two (2) natural gas-fired process furnaces, with a maximum heat input capacity of 1.5 MMBtu/hr, each.
- (m) One (1) maintenance arc welder, identified as maintenance wire welder #1, with a maximum electrode usage of 120 pounds per year.
- (n) One (1) abrasive blast cabinet, identified as BC-1, constructed in 1999, with a maximum process weight rate of 4.24 pounds per hour (1.58 pounds of sodium bicarbonate blast media per hour and 2.66 pounds of foaming laminator parts per hour), used to remove material from laminator parts, equipped with a bag filter as control, and exhausting internally.

The source requested that this existing abrasive blast cabinet, previously not included in the permit, be added in this permit renewal. Pursuant to 326 IAC 2-7-1(21), the abrasive blast cabinet is being added as an insignificant maintenance activity because the abrasive blast cabinet is used to clean residue from the foaming laminator parts, and is not used as part of the source's manufacturing processes.

#### Existing Approvals

Since the issuance of the FESOP Renewal No. F099-17832-00042 on July 21, 2006, the source has constructed or has been operating under the following additional approvals:

- (a) Administrative Amendment No.: F099-25710-00042, issued on January 22, 2008;
- (b) Significant Permit Revision No.: F099-26867-00042, issued on November 25, 2008;
- (c) Administrative Amendment No.: F099-32276-00042, issued on October 3, 2012; and
- (d) Significant Permit Revision No.: F099-35004-00042, issued on January 29, 2015.

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

#### Enforcement Issue

There are no enforcement actions pending.

#### Emission Calculations

See Appendix A of this document for detailed emission calculations.

### County Attainment Status

The source is located in Marshall County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
PM <sub>2.5</sub>	Unclassifiable or attainment effective April 5, 2005, for the annual PM <sub>2.5</sub> standard.
PM <sub>2.5</sub>	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM <sub>2.5</sub> standard.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

<sup>1</sup>Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

- (a) **Ozone Standards**  
Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Marshall County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
Marshall County has been classified as attainment for PM<sub>2.5</sub>. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**  
Marshall County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

**Unrestricted Potential Emissions**

This table reflects the unrestricted potential emissions of the source.

<b>Unrestricted Potential Emissions (tons/year)</b>									
Emission Unit	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Single HAPs
Foam Head (EU1)	0.00	0.00	0.00	0.00	0.00	23.33	0.00	0.20	0.20 MDI
Foaming Laminator (EU2)	0.00	0.00	0.00	0.00	0.00	41.34	0.00		
Inline Cutting Process (EU3)	731.11	731.11	731.11	0.00	0.00	217.97	0.00	0.01	0.01 MDI
Foot Slicer (FS)	12.79	12.79	12.79	0.00	0.00	0.59	0.00	0.00	0.00
Panel Saw (PS)	6.39	6.39	6.39	0.00	0.00	0.59	0.00	0.00	0.00
Warehouse Area (EU4)	0.00	0.00	0.00	0.00	0.00	2.63	0.00	0.00	0.00
Natural Gas Combustion	0.18	0.74	0.74	0.06	9.70	0.53	8.14	0.18	0.17 Hexane
Maintenance Wire Welder #1	3.1E-04	3.1E-04	3.1E-04	0.00	0.00	0.00	0.00	1.9E-04	1.9E-04 Manganese
Aqueous Solvent Degreaser	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Storage Tanks	0.00	0.00	0.00	0.00	0.00	1.64	0.00	0.55	0.55 MDI
Abrasive Blast Cabinet	0.07	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total PTE</b>	<b>750.55</b>	<b>751.08</b>	<b>751.08</b>	<b>0.06</b>	<b>9.70</b>	<b>288.63</b>	<b>8.14</b>	<b>0.94</b>	<b>0.76 MDI</b>
Title V Major Source Thresholds	NA	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	NA	NA
* Under the Part 70 Permit program (40 CFR 70), PM <sub>10</sub> and PM <sub>2.5</sub> , not particulate matter (PM), are each considered as a "regulated air pollutant". **PM <sub>2.5</sub> listed is direct PM <sub>2.5</sub> .									

Appendix A of this TSD reflects the unrestricted potential emissions of the source.

- (a) The potential to emit (as defined in 326 IAC 2-7-1(30)) of PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC is equal to or greater than 100 tons per year. However, the Permittee has agreed to limit the source's PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC emissions to less than Title V levels, therefore the Permittee will be issued a FESOP Renewal.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(30)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(30)) of any single HAP is less than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(30)) of a combination of HAPs is less than twenty-five (25) tons per year.
- (d) On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

**Potential to Emit After Issuance**

The source has opted to remain a FESOP source. The table below summarizes the potential to emit, reflecting all limits of the emission units. Any control equipment is considered enforceable only after issuance of this FESOP and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)								
	PM	PM <sub>10</sub> <sup>1</sup>	PM <sub>2.5</sub> <sup>2</sup>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Foam Head (EU1) <sup>3</sup>	0.0	0.0	0.0	0.0	0.0	91.51	0.0	0.20	0.20 MDI
Foaming Laminator (EU2) <sup>3</sup>	0.0	0.0	0.0	0.0	0.0		0.0		
Inline Cutting Process (EU3) <sup>3,4</sup>	54.49	54.49	54.49	0.0	0.0		0.0	0.01	0.01 MDI
Warehouse Area (EU4) <sup>3</sup>	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Foot Slicer (FS)	12.79	12.79	12.79	0.0	0.0	0.59	0.0	0.0	0.0
Panel Saw (PS) <sup>4</sup>	2.52	2.52	2.52	0.0	0.0	0.599	0.0	0.0	0.0
Natural Gas Combustion	0.18	0.74	0.74	0.06	9.70	0.53	8.14	0.18	0.17 Hexane
Maintenance Wire Welder #1	3.1E-04	3.1E-04	3.1E-04	0.0	0.0	0.0	0.0	1.9E-04	1.9E-04 Manganese
Aerosol Based Degreaser	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Storage Tanks	0.0	0.0	0.0	0.0	0.0	1.64	0.0	0.55	0.55 MDI
Abrasive Blast Cleaner	0.07	0.07	0.05	0	0	0	0	0	0
<b>Total PTE of Entire Source</b>	<b>70.06</b>	<b>70.59</b>	<b>70.59</b>	<b>0.06</b>	<b>9.70</b>	<b>94.86</b>	<b>8.14</b>	<b>0.94</b>	<b>0.76 MDI</b>
Title V Major Source Thresholds	-	100	100	100	100	100	100	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	-	-

negl. = negligible  
<sup>1</sup> Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".  
<sup>2</sup> PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.  
<sup>3</sup> VOC emissions have been limited for these processes to render 326 IAC 2-7 (Part 70) not applicable.  
<sup>4</sup> Limited PM emissions based on 326 IAC 6-3-2 allowable emissions. PM10 and PM2.5 emissions from these processes have also been limited to render 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70) not applicable.

(a) **FESOP Status**

This renewal to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants and HAPs from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

The BACT requirements to comply with 326 IAC 8-1-6 also show compliance with 326 IAC 2-8-4 (FESOP) and render 326 IAC 2-7 not applicable. See State Rule Applicability Determination section below for details.

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

PM<sub>10</sub> and PM<sub>2.5</sub> Emissions

Inline Cutting Process (EU3)

- (1) PM<sub>10</sub> emissions after control from the inline cutting process (EU3) shall not exceed 12.44 pounds per hour, equivalent to 54.49 tons per year.
- (2) PM<sub>2.5</sub> emissions after control from the inline cutting process (EU3) shall not exceed 12.44 pounds per hour, equivalent to 54.49 tons per year.

The PM<sub>10</sub> and PM<sub>2.5</sub> limits are existing limits for the inline cutting process (EU3).

Panel Saw (PS)

- (3) PM<sub>10</sub> emissions after control from the panel saw (PS) shall not exceed 0.58 pounds per hour, equivalent to 2.52 tons per year.
- (4) PM<sub>2.5</sub> emissions after control from the panel saw (PS) shall not exceed 0.58 pounds per hour, equivalent to 2.52 tons per year.

The PM<sub>10</sub> and PM<sub>2.5</sub> limits are revised limits for the panel saw (PS), because of a change in process weight rate provided by the source. This is a Title 1 change.

VOC Emissions

The VOC input to the following shall be limited such that the total VOC emissions from these units shall not exceed 91.51 tons per twelve (12) consecutive month period, with compliance determined at the end of each month:

- (1) foam head (EU1),
- (2) foaming laminator (EU2),
- (3) inline cutting process (EU3), and
- (4) warehouse area (EU4).

The VOC emission limits have been revised to combine separate limits for each of the units EU1, EU2, EU3 and EU4 into one VOC limit for flexibility, but maintaining the numerical limit. This is a Title 1 change. The source will use the sum of five equations to demonstrate compliance with this limit. These equations have been updated in this permit renewal to require the use of the emission factor from the most recent valid stack test. This is a Title 1 change.

Compliance with these limits, combined with the potential to emit PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC from all other emission units at this source, shall limit the source-wide total potential to emit of PM<sub>10</sub> and PM<sub>2.5</sub> to less than 100 tons per twelve (12) consecutive month period, each, shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (PSD) not applicable.

- (b) **PSD Minor Source**  
This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

In order to render with the requirements of 326 IAC 2-2 (Potential for Significant Deterioration (PSD)) not applicable, the source shall comply with the following:

PM Emissions

- Inline Cutting Process (EU3)  
(1) PM emissions after control from the inline cutting process (EU3) shall not exceed 12.44 pounds per hour, equivalent to 54.49 tons per year.

This PM limit is an existing limit for the inline cutting process (EU3).

- Panel Saw (PS)  
(2) PM emissions after control from the panel saw (PS) shall not exceed 0.58 pounds per hour, equivalent to 2.52 tons per year.

This PM limit is a revised limit for the panel saw (PS), because of a change in process weight rate provided by the source. This is a Title 1 change.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

- (c) 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).

<b>Federal Rule Applicability</b>
-----------------------------------

Compliance Assurance Monitoring (CAM)

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

New Source Performance Standards (NSPS)

- (b) The requirements of the New Source Performance Standard 326 IAC, (40 CFR, Part 60.11b, Subpart Kb) are not included in this permit for Tanks 1 through 10 because each tank is less than 75 cubic meters (20,000 gallons); Tank 12 is less than 151 cubic meters (40,000 gallons) and Tank 11 is a pressure vessel designed to operate in excess of 204.9 KPa and without emissions to the atmosphere and is exempt from 40 CFR 60.110b(d)(2).
- (c) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit for this source.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Flexible Polyurethane Foam Production, 40 CFR Part 63, Subpart III (326 IAC 20-22), are still not included in the permit, since this source does not produce flexible polyurethane foam at major source of HAPs. This source produces rigid polyisocyanurate foam panels.
- (e) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Flexible Polyurethane Foam Fabrication Operations, 40 CFR Part 63, Subpart M (326 IAC 20-66), are still not included in the permit, since this source does not operate a flexible polyurethane foam fabrication operation at major source of HAPs. This source produces rigid polyisocyanurate foam panels.
- (f) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Flexible Polyurethane Foam Production and Fabrication Area Sources, 40 CFR Part 63, Subpart OOOOOO, are still not included in the permit, since the source produces rigid polyisocyanurate, not flexible polyurethane foam or rebond foam.
- (g) There are no National Emission Standards for Hazardous Air Pollutants (40 CFR Part 63), 326 IAC 14 and 326 IAC 20 included for permit renewal.

<b>State Rule Applicability - Entire Source</b>
---

- (a) 326 IAC 2-8-4 (FESOP)  
See PTE of the Entire Source After Issuance of the Renewal Section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration (PSD))  
See PTE of the Entire Source After Issuance of the Renewal Section above.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the entire source is 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.
- (d) 326 IAC 2-6 (Emission Reporting)  
This source is not subject to 326 IAC 2-6 (Emission Reporting) because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70); it is not located in Lake, Porter, or LaPorte County, and its potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.
- (e) 326 IAC 5-1 (Opacity Limitations)  
This source is subject to the opacity limitations specified in 326 IAC 5-1-2(1).
- (f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)  
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.
- (g) 326 IAC 6.5 PM Limitations Except Lake County  
This source is not subject to 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.
- (h) 326 IAC 12 (New Source Performance Standards)  
See Federal Rule Applicability Section of this TSD.

- (i) 326 IAC 20 (Hazardous Air Pollutants)  
 See Federal Rule Applicability Section of this TSD.

**State Rule Applicability – Foam Panel Production Line**

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the emission units listed in the table below shall not exceed the listed pounds per hour limits when operating at the maximum process weight rate listed in the table.

Emission Units	Process Weight Rate (lb/hr)	Process Weight Rate (ton/hr)	Allowable PM Emission Rate (lb/hr)
Inline Cutting Process (EU3)	10,485.24	5.24	12.44
Panel Saw (PS)	106.67	0.053	0.58
Foot Slicer (FS)	106.67	0.053	0.58

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

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

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

Based on the calculated potential to emit particulate in Appendix A, the control devices for the inline cutting process (EU3), panel saw (PS), and foot slicer (FS) shall be in operation under either one of the following control options:

- (1) Option 1: Inline cutting process (EU3), panel saw (PS), and/or foot slicer (FS) exhausts to a dust collector, identified as PC1, which then exhausts in series to a secondary dust collector system, identified as PC2; and
- (2) Option 2: Inline cutting process (EU3), panel saw (PS), and/or foot slicer (FS) exhausts through the dust collector system for particulate control identified as PC1.

- (b) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
 The Foam Head (EU1), Foaming Laminator (EU2), Inline Cutting Process (EU3), and Warehouse Area (EU4) operate in series and have combined potential VOC emissions of 285.27 tons per year. Because the total VOC emissions from these processes are greater than twenty five (25) tons per year, constructed after January 1, 1980, and no other 326 IAC 8 rules apply, 326 IAC 8-1-6 is applicable to these operations.

Pursuant to significant permit revision (SPR) No. 099-14499-00042, issued on October 16, 2001, best available control technology (BACT) for these processes was determined to be:

- (1) A regenerative thermal oxidizer shall be in operation at all times that the inline cutting process (EU3) is in operation, with an overall control efficiency of 90%.
- (2) Throughput for the entire rigid polyisocyanurate foam panel manufacturing process (EU1 through EU4) shall not exceed 678,356,560 board feet per twelve (12) consecutive month period, with compliance determined at the end of each month.

Pursuant to SPR No. 099-26867-00042, issued on November 25, 2008, a permit condition was added to revise BACT item (1) above to not require the operation of the RTO during non-ozone season months as follows:

- (3) Pursuant to 326 IAC 8-1-2(a)(2), the RTO is not required to be in operation when the inline cutting process (EU3) is in operation during the months of November, December, January, February, and March.

No change has been made to these requirements under this renewal.

#### **State Rule Applicability – RTO and Insignificant Natural Gas Combustion**

- (a) 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating)  
The RTO, gas-fired make up heaters, and furnaces are not subject to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating), because, pursuant to 326 IAC 1-2-19, they do not meet the definition of an indirect heating unit.
- Pursuant to 326 IAC 6-2-4(a), the PM emissions from the natural gas-fired thermocyclers shall not exceed 0.6 pounds of particulate matter per million British thermal units heat input (lb/mmBtu).
- (b) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
The RTO is exempt from the requirements of 326 IAC 6-3, because, pursuant to 326 IAC 1-2-59, liquid and gaseous fuels and combustion air are not considered as part of the process weight.
- The gas-fired make-up air heaters, thermocyclers, and furnaces are exempt from the requirements of 326 IAC 6-3 because these insignificant combustion units are not considered manufacturing processes.
- (c) 326 IAC 7-1.1-1 (Sulfur Dioxide Emission Limitations)  
The RTO, gas-fired make-up air heaters, thermocyclers, and furnaces are exempt from the requirements of 326 IAC 7-1.1-1 because the potential to emit sulfur dioxide is less than twenty-five (25) tons per year and ten (10) pounds per hour from each emission unit.
- (d) 326 IAC 9-1-1 (Carbon Monoxide Emission Limits)  
The RTO, gas-fired make-up air heaters, thermocyclers, and furnaces are not subject to 326 IAC 9-1-1 (Carbon Monoxide Emission Limits) because there is no applicable emission limit for the source under 326 IAC 9-1-2.
- (e) 326 IAC 10-1-1 (Nitrogen Oxides Control)  
The RTO, gas-fired make-up air heaters, thermocyclers, and furnaces are not subject to 326 IAC 10-1-1 (Nitrogen Oxides Control) because they have the potential to emit NO<sub>x</sub> less than forty (40) tons per year and this source is not located in Clark or Floyd Counties.

#### **State Rule Applicability – Storage Tanks**

- (a) 326 IAC 8-9 (Volatile Organic Liquid Storage Tanks)  
The requirements of 326 IAC 8-9 are not applicable to the storage tanks at this facility because they are not located in Clark, Floyd, Lake, or Potter County. There are no Article 8 rules applicable to these storage tanks.

**State Rule Applicability – Abrasive Blast Cabinet**

- (a) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(14), the particulate matter (PM) from the one (1) abrasive blast cabinet, identified as BC-1, is exempt from 326 IAC 6-3, because it has the potential to emit is less than 0.551 pounds per hour.

**State Rule Applicability – Aerosol Based Degreaser**

- (a) 326 IAC 8-3-2 (Cold cleaner degreaser control equipment and operation)  
Pursuant to 326 IAC 8-3-1(d)(1)(B), the requirements of 8-3-2 are not applicable to the aerosol based degreaser because it uses an aqueous based solution containing no VOCs and no HAPs.

**State Rule Applicability – Maintenance Wire Welder**

- (a) 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(9), the particulate matter (PM) from the one (1) maintenance wire welder cabinet, is exempt from 326 IAC 6-3, because it uses less than six hundred twenty-five (625) pounds of wire per day.

**Compliance Determination and Monitoring Requirements**

Permits issued under 326 IAC 2-8 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 2-8-4. 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 source are as follows:

- (a) Particulate Compliance Determination

The following control devices for the emission units listed in the table below shall be in operation at all times that the emission units are in operation

<b>Emission Unit</b>	<b>Control Device</b>
Inline Cutting Process (EU3)	Dust Collector System PC1 and PC2 in series Or alone <sup>1</sup>
Foot Slicer (FS)	Dust Collector System PC1 and PC2 in series Or alone <sup>1</sup>
Panel Saw (PS)	Dust Collector System PC1 and PC2 in series Or alone <sup>1</sup>

<sup>1</sup>This is a new compliance determination requirement to clarify that there are two options for particulate control for these processes.

These requirements are required to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-2 (PSD Minor Limits).

(b) VOC Compliance Determination

Compliance with the VOC limit shall be determined by the following equations:

- (1) The VOC emission from the foam head process (EU1) shall be calculated as follows:

$$\text{VOC}_{\text{EU1}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{EU1}}$  = VOC emissions

EF = Emission Factor (0.0000683 lb VOC/bdft)

Y=Total rigid polyisocyanurate foam panel board feet manufactured per period.

- (2) The VOC emission from the foaming laminator (EU2) shall be calculated as follows:

$$\text{VOC}_{\text{EU2}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{EU2}}$  = VOC emissions

EF = Emission Factor (0.000121 lb VOC/bdft)

Y=Total rigid polyisocyanurate foam panel board feet manufactured per period.

- (3) When the RTO is in operation the VOC emissions from the inline cutting process (EU3) shall be calculated as follows:

$$\text{VOC}_{\text{w/ RTO}} = (\text{EF} * \text{Y}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{w/ RTO}}$  = VOC emissions with RTO control

EF = Emission Factor-determined from the most recent valid stack test

X=Total rigid polyisocyanurate foam panel board feet manufactured per period.

This condition has been updated in this permit renewal to require the emission factor to be determined from the most recent valid stack test. This is a Title 1 change.

- (4) When the RTO is not in operation during the months of November, December, January, February, and March, the VOC emissions from the inline cutting process (EU3) shall be calculated as follows:

$$\text{VOC}_{\text{w/o RTO}} = (\text{EF} * \text{X}) / 2,000 \text{ lb/ton}$$

Where:

$\text{VOC}_{\text{w/o RTO}}$  = VOC emissions without RTO control

EF = Emission Factor determined from the most recent valid stack test

Y=Total rigid polyisocyanurate foam panel board feet manufactured per period.

This condition has been updated in this permit renewal to require the emission factor to be determined from the most recent valid stack test. This is a Title 1

change.

- (5) The VOC emission from the warehouse area (EU4) shall be calculated as follows:

$$VOC_{EU4} = (EF * X) / 2,000 \text{ lb/ton}$$

Where:

$VOC_{EU4}$  = VOC emissions

EF = Emission Factor (0.0000071 lb VOC/bdft)

X=Total rigid polyisocyanurate foam panel board feet manufactured per period.

- (6) Total VOC emissions for each compliance period shall be determined using the following equation:

$$\text{Total VOC Emissions} = VOC_{EU1} + VOC_{EU2} + VOC_{w/RTO} + VOC_{w/o RTO} + VOC_{EU4}$$

Where:

$VOC_{EU1}$  = VOC emissions from the foam head process (EU1)

$VOC_{EU2}$  = VOC emissions from the foaming laminator (EU2)

$VOC_{w/RTO}$  = VOC emissions from the inline cutting process (EU3) with RTO control

$VOC_{w/o RTO}$  = VOC emissions from the inline cutting process (EU3) without RTO control

$VOC_{EU4}$  = VOC emissions from the warehouse area (EU4)

The equations to determine VOC emissions have been revised in this permit renewal due to the new combined VOC limit.

These requirements are required to ensure compliance with 326 IAC 2-2 (PSD Minor Limits) and 326 IAC 8-1-6 (VOC BACT).

- (b) The compliance monitoring requirements applicable to this source are as follows:

Compliance Monitoring Requirements				
Emission Unit	Control Device	Parameter	Frequency	Range
Inline Cutting Process (EU3)	Dust Collector System PC1 and PC2 in series Or Dust Collector System PC1 alone <sup>1</sup>	Water Pressure Drop (PC1)	Daily	0.5 to 6 inches
Foot Slicer (FS)	Dust Collector System PC1 and PC2 in series Or Dust Collector System PC1 alone <sup>2</sup>	Water Pressure Drop (PC1)	Daily	0.5 to 6 inches

Compliance Monitoring Requirements				
Emission Unit	Control Device	Parameter	Frequency	Range
Panel Saw (PS)	Dust Collector System PC1 and PC2 in series Or Dust Collector System PC1 alone <sup>2</sup>	Water Pressure Drop (PC1)	Daily	0.5 to 6 inches
Inline Cutting Process (EU3), Foot Slicer (FS), Panel Saw (PS)	RTO <sup>3</sup>	Temperature	Continuous	At or above the 3-hour rolling average temperature as observed during the compliant stack test
		Duct pressure or fan amperage	Daily	Normal range as established in the most recent compliant stack test

<sup>1</sup>These are revised compliance monitoring requirements for the controls for the inline cutting process EU3. The visible emission notation requirements have been removed as a monitoring condition in this permit renewal. This is a Title 1 change. These monitoring conditions are necessary because the control for the inline cutting process must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations) and 326 IAC 2-8 (FESOP).

<sup>2</sup>These are new compliance monitoring requirements for the foot slicer and panel saw dust collector system. This is a Title 1 change.

<sup>3</sup>Upon re-evaluation for this permit renewal, the RTO operating temperature output from the continuous monitoring system shall be recorded on a 3-hour rolling average instead of a one hour average. These are revised compliance monitoring requirements for the RTO. These monitoring conditions are necessary because the RTO controlling the Inline Cutting Process must operate properly to ensure compliance with 326 IAC 2-8 (FESOP) and 326 IAC 8-1-6 (BACT).

(c) The testing requirements applicable to this source are as follows:

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
Inline Cutting Process (EU3), Foot Slicer (FS), Panel Saw (PS)	RTO <sup>1</sup>	VOC	No later than five (5) years from the date of the latest compliance demonstration.	Once every five (5) years

<sup>1</sup>This testing requirement is an existing requirement. This testing is necessary to verify the overall VOC control efficiency of the RTO and to demonstrate compliance with 326 IAC 2-8-4 (FESOP). A performance test on the RTO was last performed on March 31, 2015, and was validated by IDEM to be in compliance.

The inline cutting process has a potential to emit 731.11 tons of PM, PM10, and PM2.5 per year. These emissions are based on mass balance calculations provided to IDEM by Johns Manville. In order to comply with the PM, PM10, and PM2.5 emission limits, the dust collector system for the inline cutting process must achieve an overall control efficiency of 92.55% or greater. Based on these factors IDEM would normally require the source to perform testing to verify compliance with the FESOP and PSD minor limits. The cyclone captures and controls the larger particles generated by the cutting process. The remaining smaller particles are then captured and controlled by the baghouse. This combination is capable of achieving an overall control efficiency greater than 99%. If the foam particles reach the RTO, it would have adverse effects on the RTO, thus decreasing VOC overall control efficiency. Therefore, based on the nature of this process and discussions with Rick Reynolds and Jarrod Fisher of IDEM's Compliance and Enforcement Branch PM, PM10, and PM2.5 testing is not necessary for this process.

There are no testing requirements for the foam head (EU1), foaming laminator (EU2), and warehouse area (EU4) because they have no controls.

No other emission units are subject to testing because the potential to emit is not substantial in comparison the overall source potential to emit.

### Recommendation

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

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

An application for the purposes of this review was received on October 5, 2015. Additional information was received on January 12, 2016; January 13, 2016; February 16, 2016; and February 18, 2016.

### Conclusion

The operation of this stationary rigid polyisocyanurate foam panel manufacturing source shall be subject to the conditions of the attached FESOP Renewal No. 099-36361-00042.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brian Williams 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) 234-5375 or toll free at 1-800-451-6027 extension 4-5375.
- (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 Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

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

**Company Name:** Johns Manville  
**Address City IN Zip:** 1215 West Dewey St., Bremen, IN 46506  
**Permit Number:** 099-36361-00042  
**Permit Reviewer:** Nancy Dollar/Brian Williams

<b>Unlimited Potential to Emit (tons/yr)</b>										
<b>Emission Unit</b>	<b>PM</b>	<b>PM10</b>	<b>PM2.5</b>	<b>SO<sub>2</sub></b>	<b>NOx</b>	<b>VOC</b>	<b>CO</b>	<b>Total HAPs</b>	<b>Single HAP</b>	
Foam Head (EU1)	0.00	0.00	0.00	0.00	0.00	23.33	0.00	0.20	0.20	MDI
Foaming Laminator (EU2)	0.00	0.00	0.00	0.00	0.00	41.34	0.00			
Inline Cutting Process (EU3)	731.11	731.11	731.11	0.00	0.00	217.97	0.00	0.01	0.01	MDI
Foot Slicer (FS)	12.79	12.79	12.79	0.00	0.00	0.59	0.00	0.00	0.00	
Panel Saw (PS)	6.39	6.39	6.39	0.00	0.00	0.59	0.00	0.00	0.00	
Warehouse Area (EU4)	0.00	0.00	0.00	0.00	0.00	2.63	0.00	0.00	0.00	
Natural Gas Combustion	0.18	0.74	0.74	0.06	9.70	0.53	8.14	0.18	0.17	Hexane
Maintenance Wire Welder #1	3.1E-04	3.1E-04	3.1E-04	0.00	0.00	0.00	0.00	1.9E-04	1.9E-04	Manganese
Aqueous Solvent Degreaser	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Storage Tanks	0.00	0.00	0.00	0.00	0.00	1.64	0.00	0.55	0.55	MDI
Abrasive Blast Cabinet	0.07	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Total</b>	<b>750.55</b>	<b>751.08</b>	<b>751.08</b>	<b>0.06</b>	<b>9.70</b>	<b>288.63</b>	<b>8.14</b>	<b>0.94</b>	<b>0.76</b>	<b>MDI</b>

<b>Limited Potential to Emit After Issuance (tons/yr)</b>										
<b>Emission Unit</b>	<b>PM</b>	<b>PM10</b>	<b>PM2.5</b>	<b>SO<sub>2</sub></b>	<b>NOx</b>	<b>VOC*</b>	<b>CO</b>	<b>Total HAPs</b>	<b>Single HAP</b>	
Foam Head (EU1)	0.00	0.00	0.00	0.00	0.00	91.51	0.00	0.20	0.20	MDI
Foaming Laminator (EU2)	0.00	0.00	0.00	0.00	0.00					
Inline Cutting Process (EU3)**	54.49	54.49	54.49	0.00	0.00		0.00	0.01	0.01	MDI
Warehouse Area (EU4)	0.00	0.00	0.00	0.00	0.00		0.00	0.00	0.00	
Foot Slicer (FS)	12.79	12.79	12.79	0.00	0.00	0.59	0.00	0.00	0.00	
Panel Saw (PS)**	2.52	2.52	2.52	0.00	0.00	0.59	0.00	0.00	0.00	
Natural Gas Combustion	0.18	0.74	0.74	0.06	9.70	0.53	8.14	0.18	0.17	Hexane
Maintenance Wire Welder #1	3.1E-04	3.1E-04	3.1E-04	0.00	0.00	0.00	0.00	1.9E-04	1.9E-04	Manganese
Aqueous Solvent Degreaser	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Storage Tanks	0.00	0.00	0.00	0.00	0.00	1.64	0.00	0.55	0.55	MDI
Abrasive Blast Cabinet	0.07	0.05	0.05	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Total</b>	<b>70.06</b>	<b>70.59</b>	<b>70.59</b>	<b>0.06</b>	<b>9.70</b>	<b>94.86</b>	<b>8.14</b>	<b>0.94</b>	<b>0.76</b>	<b>MDI</b>

negl. = negligible

\* Source has requested a combined VOC emission limit for emission units EU1 through EU4 to render 326 IAC 2-7 not applicable.

\*\*Limited PM emissions based on 326 IAC 6-3-2 allowable emissions (see Foam Panels page for detailed calculations). PM<sub>10</sub> and PM<sub>2.5</sub> emission limits equal to PM emission limits.

**Appendix A: Emission Calculations**

**Foam Panels**

**Company Name: Johns Manville**  
**Address City IN Zip: 1215 West Dewey Street, Bremen, Indiana 46506**  
**Permit Number: 099-36361-00042**  
**Permit Reviewer: Nancy Dollar/Brian Williams**

**Unrestricted Potential to Emit of the Polyisocyanurate Foam Panel Manufacturing Process**

Unit	Maximum Capacity (bd ft/hr)	Maximum Capacity (bd ft/yr)	PM Emission Factor (lb PM/bd ft)	Uncontrolled PM Emissions (ton/yr)	VOC Emission Factor (lb VOC/bd ft)	Uncontrolled VOC Emissions (ton/yr)	Limited VOC Emissions (ton/yr) <sup>3</sup>	Uncontrolled MDI Emissions (ton/yr) <sup>6</sup>
Foam Head (EU1) <sup>1</sup>	78,000	683,280,000	0	0.00	6.83E-05	23.33	91.51	0.2
Foam Laminator (EU2) <sup>1</sup>	78,000	683,280,000	0	0.00	1.21E-04	41.34		
Inline Cutting Process (EU3) <sup>*,2,4</sup>	78,000	683,280,000	2.14E-03	731.11	6.38E-04	217.97		
Warehouse Area (EU4) <sup>5</sup>	78,000	683,280,000	0	0.00	7.71E-06	2.63		0.00
Foot Slicer (FS) <sup>4</sup>	640	5,606,400	4.56E-03	12.79	2.10E-04	0.59	0.59	0
Panel Saw (PS) <sup>4</sup>	640	5,606,400	2.28E-03	6.39	2.10E-04	0.59	0.59	0
<b>Total</b>			<b>TOTAL</b>	<b>750.29</b>		<b>286.45</b>	<b>92.69</b>	<b>0.21</b>

**Controlled Potential to Emit VOCs**

Unit	Maximum Capacity (bd ft/hr)	Maximum Capacity (bd ft/yr)	Limited Capacity for BACT (bd ft/yr)	PM Emission Factor (lb PM/bd ft)	Controlled PM Emissions (ton/yr)	VOC Emission Factor <sup>(6)</sup> (lb VOC/bd ft)	Controlled VOC Emissions (ton/yr)	Controlled & Limited Capacity VOC Emissions (ton/yr)
Inline Cutting Process (EU3) RTO On <sup>2</sup>	78,000	683,280,000	678,356,560	2.14E-03	7.31	2.59E-05	5.19	5.15
Inline Cutting Process (EU3) RTO Off <sup>2,4</sup>	78,000	683,280,000	678,356,560			6.38E-04	90.17	89.52
<b>TOTAL</b>					<b>7.31</b>		<b>95.36</b>	<b>94.67</b>

**Notes:**

- (1) Emission factor not updated in this permit renewal, source AP-42, Table 11.19.2-2 (08/04).
- (2) VOC emission factors for EU3 have been updated in this permit renewal 099-36361-00042 based on a March 31, 2015 RTO destruction efficiency test. RTO is in operation for ozone season (214 days).
- (3) Pursuant to 326 IAC 2-2 and 2-8-4, the combined VOC emissions from EU1, EU2, EU3, and EU4 shall not exceed 91.51 tons per twelve (12) consecutive month period. This is a revised VOC limit (combining previous individual limits for EU1-EU4) in this permit renewal 099-36361-00042.
- (4) PM emission factors for EU3, FS, and PS have been updated in this permit renewal 099-36361-00042, based on mass balance calculations provided by source. PM Control efficiency 99%.
- (5) PM emission factor for EU4 not updated in this permit renewal, provided by source.
- (6) Potential MDI emissions from EU1, EU2, and E3 from original permit 099-8546-00042.

**Methodology:**

Uncontrolled Emissions (tons/yr) = Maximum Capacity (tons/hr) x Emission Factor (lbs/ton) x 8760 hr/yr x 1 ton/2000 lbs  
 \*Uncontrolled EU3 VOC Emissions (tons/yr) = Maximum Capacity (tons/hr) x Emission Factor (lbs/ton) x RTO Off Percentage (365-214 days/365 days) \* 8760 hr/yr x 1 ton/2000 lbs  
 Assume PM = PM10 = PM2.5

**Allowable Rate of Emissions for PM (326 IAC 6-3-2)**

Emission Unit	Process Weight Rate (lbs/hr)*	Process Weight Rate (tons/hr)*	Allowable PM Emissions (lbs/hr)	Allowable PM Emissions (tons/yr)
Inline Cutting Process (EU3)	10,485.24	5.24	12.44	54.49
Panel Saw (PS)	106.67	0.05	0.58	2.52
Foot Slicer (FS)	106.67	0.05	0.58	2.52

**Methodology**

Allowable Emissions = 4.10(Process Weight Rate in tons/yr)<sup>0.67</sup>

\* Source provided process weight rate.

**Appendix A: Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100**

**Company Name:** Johns Manville  
**Address City IN Zip:** 1215 West Dewey Street, Bremen, Indiana 46506  
**Permit Number:** 099-36361-00042  
**Permit Reviewer:** Nancy Dollar/Brian Williams

Heat Input Capacity	HHV	Potential Throughput
MMBtu/hr	mmBtu	MMCF/yr
	mmscf	
22.58	1,020	193.9

Emission Unit	No. of Units	Heat Input MMBtu/hr (ea.)	Total Heat Input MMBtu/hr
Make up Heaters	4	1.21	4.84
Thermocyclers	5	0.40	2.00
Furnaces	2	0.13	0.25
Thermocyclers	4	0.58	2.32
Make up Heaters	3	0.75	2.25
Make up Heaters	3	0.97	2.92
Process Furnaces	2	1.50	3.00
RTO	1	5.00	5.00
Total MMBTU/hr			22.58

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.18	0.74	0.74	0.06	9.70	0.53	8.14

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
 PM2.5 emission factor is filterable and condensable PM2.5 combined.  
 \*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology**

All emission factors are based on normal firing.  
 MMBtu = 1,000,000 Btu  
 MMCF = 1,000,000 Cubic Feet of Gas  
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03  
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu  
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	2.036E-04	1.163E-04	7.271E-03	1.745E-01	3.296E-04

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	4.848E-05	1.066E-04	1.357E-04	3.684E-05	2.036E-04

Methodology is the same as above.  
 The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

<b>Total HAPs:</b>	1.830E-01
--------------------	-----------

**Appendix A: Emissions Calculations**

**PM and HAPs**

**Wire Welder**

**Company Name: Johns Manville**

**Address City IN Zip: 1215 West Dewey Street, Bremen, Indiana 46506**

**Permit Number: 099-36361-00042**

**Permit Reviewer: Nancy Dollar/Brian Williams**

Process	Material Usage	Emission Factors (lb/10 <sup>3</sup> lb)					Potential to Emit (tons/yr)				
		Chromium	Cobalt	Manganese	Nickel	PM	Chromium	Cobalt	Manganese	Nickel	PM
Arc Welding	(lbs/yr)										
GMAW E70S	120	0.01	0.01	3.18	0.01	5.2	6.00E-07	6.00E-07	1.91E-04	6.00E-07	3.12E-04
						<b>Total</b>	<b>6.00E-07</b>	<b>6.00E-07</b>	<b>1.91E-04</b>	<b>6.00E-07</b>	<b>3.12E-04</b>

**Methodology**

Potential to Emit (tons/yr) = Material Usage (lbs/yr) \* Emission Factor (lb/10<sup>3</sup> lb) \* 1/2000 (ton/lbs)

Emission Factors are from AP-42, Chapter 12.19, Table 12.19-1 and 12.19-2 (01/1995)

Assume PM = PM<sub>10</sub> = PM<sub>2.5</sub>

<b>Total HAPS</b>	<b>1.93E-04</b>
-------------------	-----------------

**Appendix A: Emissions Calculations****VOC****From Aerosol Based Degreaser****Company Name: Johns Manville****Address City IN Zip: 1215 West Dewey Street, Bremen, Indiana 46506****Permit Number: 099-36361-00042****Permit Reviewer: Nancy Dollar/Brian Williams**

Process	Maximum Usage (gal/yr)	VOC Content (lb VOC/gal)	Potential VOC Emissions (tons/yr)
Aerosol Based Degreaser	100.00	0.00	0.00

The degreaser has been replaced with an aqueous solvent degreaser in this permit renewal 099-36361-00042.

**Methodology**

Potential VOC Emissions (tons/yr) = Maximum Usage (gal/yr) x VOC Content (lb VOC/gal) x 1/2,000 (ton/lb)

## Appendix A: Emissions Calculations

## Emissions from Storage Tanks

Company Name: Johns Manville  
Address City IN Zip: 1215 West Dewey Street, Bremen, Indiana 46506  
Permit Number: 099-36361-00042  
Permit Reviewer: Nancy Dollar/Brian Williams

Johns Manville Tank Volume Corrections  
Summary of TANKS 4.0 Report

Permit Section	Permit Subsection	Tank ID	Material	Actual (Gallons)	Activity	VOC (lb/day)	PTE		VOC content (lb/gal), Note	HAP content (PPM)	Annual Throughput (gallons)	Type of Tank	Height or Length (ft)	Width or Diameter (ft)
							HAP (lb/day)	Emission Factor Source						
A.3	(j)(1)	1	Polyol	10,000	Insignificant	< 1.0	< 1.0	Tank 4.0 Report - AP-42	0.109 (a)	11,000	196,339	Vertical	13.17	10.58
A.3	(j)(1)	2	Polyol	10,000	Insignificant	< 1.0	< 1.0	Tank 4.0 Report - AP-42	0.109 (a)	11,000	196,339	Vertical	13.17	10.58
A.3	(j)(2)	3	Polyol	5,000	Insignificant	< 1.0	< 1.0	Tank 4.0 Report - AP-42	0.109 (a)	11,000	196,339	Vertical	14.08	8
A.3	(j)(3)	4	Polyol	5,434	Insignificant	< 1.0	< 1.0	Tank 4.0 Report - AP-42	0.109 (a)	11,000	196,339	Horizontal	15	8
A.3	(j)(3)	5	Polyol	5,434	Insignificant	< 1.0	< 1.0	Tank 4.0 Report - AP-42	0.109 (a)	11,000	196,339	Horizontal	15	8
A.3	(j)(4)	6	MDI	10,000	Insignificant	< 1.0	< 1.0	ACC, CPI & AP-42	3.57 (b)	350,000	556,062	Vertical	14.08	8
A.3	(j)(5)	7	MDI	10,000	Insignificant	< 1.0	< 1.0	ACC, CPI & AP-42	3.57 (b)	350,000	556,062	Vertical	15	8
A.3	(j)(6)	8	MDI	5,000	Insignificant	< 1.0	< 1.0	ACC, CPI & AP-42	3.57 (b)	350,000	556,062	Vertical	15	8
A.3	(j)(7)	9	Surfactant	5,434	Trivial	0	0	NA	0	-	17,124	Horizontal	15	8
A.3	(j)(8)	10	Potassium Octoate	5,434	Insignificant	< 1.0	< 1.0	Tank 4.0 Report - AP-42	0.465 (c)	-	54,937	Horizontal	15	8
A.3	(k)	11	Pentane	30,000	Trivial	0	0	Nitrogen Blanket - not vented	5.2	-	199,342	Horizontal	30	
A.3	(j)(9)	12	Fire Retardant	30,000	Trivial	0	0	NA	0 (d)	-	135,426	Horizontal	11.5	9.66
						<b>Total VOC/HAPs (tons/year)</b>	<b>1.64</b>	<b>1.64</b>						

Tank ID, Note	Contents	Emissions (lb/day)	PTE (Tons/year)
6 (e)	MDI	1	0.1825
7 (e)	MDI	1	0.1825
8 (e)	MDI	1	0.1825
<b>Total MDI (tons/year)</b>			<b>0.5475</b>

Calculations were previously approved for permit F099-17832-00042, and have not been updated in this permit renewal F099-36361-00042.

VOC/HAPs Total based on worst case scenario Total = (1lb/day) \* (365 days/year) \* (1 ton/2000 lb) \* 9 tanks

ACC - American Chemistry Council, CPI - Center for the Polyurethane Industry

## Notes:

(a) Ethylene Glycol 1%, 1,4 Dioxane 0.1%; Specific Gravity 1.20;  $9.888 \times 0.011 = 0.109$  lb/gal VOC

(b) Assume worst case scenario: CAS 101 68-8: 4,4 Methylenebis(phenyl diisocyanate); MSDS < 25% - 35%; @ 35% Specific gravity  $1.24 - 10.2176 \times 0.35 = 3.57$  lb/gal; Manufacturer indicates insignificant emissions and does not calculate VOC content.

(c) 9.3lb/gal - 5% VOC by weight; no HAPs

(d) Primary Compound 99.5% by weight, 10.76 lb/gal; no VOCs; Tris (2-chloro-1-methylethyl) phosphate 13674-84-5, vapor pressure at 20C = 0.33mmHg

(e) Source provided MDI emissions data, based on EPA TANKS program calculating worst case emissions from three storage tanks as "<1.0 lb/day"

**Appendix A: Emission Calculations**

**Abrasive Blasting - Confined**

**Company Name:** Johns Manville  
**Address City IN Zip:** 1215 West Dewey Street, Bremen, Indiana 46506  
**Permit Number:** 099-36361-00042  
**Reviewer:** Nancy Dollar/Brian Williams

**Table 1 - Emission Factors for Abrasives**

Abrasive	Emission Factor (EF)	
	lb PM / lb abrasive	lb PM10 / lb PM
Sand	0.041	0.70
Grit	0.010	0.70
Steel Shot	0.004	0.86
Other	0.010	0.70

<b>Potential to Emit Before Control</b>			
FR = Flow rate of actual abrasive (lb/hr) =	1.5800	lb/hr	(per nozzle)
w = fraction of time of wet blasting =	0	%	
N = number of nozzles =	1		
EF = PM emission factor for actual abrasive from Table 1 =	0.010	lb PM / lb abrasive	
PM10 emission factor ratio for actual abrasive from Table 1 =	0.70	lb PM10 / lb PM	
		<b>PM</b>	<b>PM10</b>
<b>Potential to Emit (before control) =</b>	<b>1.6E-02</b>	<b>1.1E-02</b>	<b>1.1E-02</b> lb/hr
=	<b>3.8E-01</b>	<b>2.7E-01</b>	<b>2.7E-01</b> lb/day
=	<b>6.9E-02</b>	<b>4.8E-02</b>	<b>4.8E-02</b> ton/yr

<b>Potential to Emit After Control</b>			
		<b>PM</b>	<b>PM10</b>
<b>Emission Control Device Efficiency =</b>	<b>98.0%</b>	<b>98.0%</b>	<b>98.0%</b>
<b>Potential to Emit (after control) =</b>	<b>3.2E-04</b>	<b>2.2E-04</b>	<b>2.2E-04</b> lb/hr
=	<b>7.6E-03</b>	<b>5.3E-03</b>	<b>5.3E-03</b> lb/day
=	<b>1.4E-03</b>	<b>9.7E-04</b>	<b>9.7E-04</b> ton/yr

**METHODOLOGY**

PM2.5 emissions assumed equal to PM10 emissions.

Emission Factors from STAPPA/ALAPCO "Air Quality Permits", Vol. I, Section 3 "Abrasive Blasting" (1991 edition)

Potential to Emit (before control) = EF x FR x (1 - w/200) x N (where w should be entered in as a whole number (if w is 50%, enter 50))

Potential to Emit (after control) = [Potential to Emit (before control)] \* [1 - control efficiency]

Potential to Emit (tons/year) = [Potential to Emit (lbs/hour)] x [8760 hours/year] x [ton/2000 lbs]

Flow rate provided by source. (38 lbs/day of sodium bicarbonate) \* (1 day/24 hrs) = 1.58 lbs/hr

The abrasive blast cabinet is an unpermitted unit that is being incorporated in this permit renewal as an insignificant activity.



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

April 1, 2016

Steve Gorski  
Johns Manville  
1215 W Dewey Street  
Bremen, IN 46506

Re: Public Notice  
Johns Manville  
Permit Level: FESOP - Renewal  
Permit Number: 099 - 36361 - 00042

Dear Steve Gorski:

Enclosed is a copy of your draft FESOP - Renewal, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Plymouth Pilot News in Plymouth, Indiana publish the abbreviated version of the public notice no later than April 4, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Bremen Public, Library 304 N Jackson St in Bremen IN. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Brian Williams, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 4-5375 or dial (317) 234-5375.

Sincerely,

*Len Pogost*

Len Pogost  
Permits Branch  
Office of Air Quality

Enclosures  
PN Applicant Cover letter 2/17/2016



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

## **ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING**

April 1, 2016

Plymouth Pilot News  
Attn: Classifieds  
P.O. Box 220  
Plymouth, IN 46563

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Johns Manville, Marshall County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than April 6, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

**To ensure proper payment, please reference account # 100174737.**

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

*Len Pogost*

Len Pogost  
Permit Branch  
Office of Air Quality

Permit Level: FESOP - Renewal  
Permit Number: 099 - 36361 - 00042

Enclosure  
PN Newspaper.dot 6/13/2013



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
*Governor*

**Carol S. Comer**  
*Commissioner*

April 1, 2016

To: Bremen Public Library 304 N Jackson St Bremen IN

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

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

**Applicant Name: Johns Manville**  
**Permit Number: 099 - 36361 - 00042**

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures  
PN Library.dot 2/17/2016



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

## Notice of Public Comment

**April 1, 2016**  
**Johns Manville**  
**099 - 36361 - 00042**

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

**Please Note:** *If you feel you have received this Notice in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at [PPEAR@IDEM.IN.GOV](mailto:PPEAR@IDEM.IN.GOV). If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure  
PN AAA Cover.dot 2/17/2016



# Indiana Department of Environmental Management

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Michael R. Pence**  
*Governor*

**Carol S. Comer**  
*Commissioner*

## **AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD DRAFT INDIANA AIR PERMIT**

April 1, 2016

A 30-day public comment period has been initiated for:

**Permit Number: 099 - 36361 - 00042**  
**Applicant Name: Johns Manville**  
**Location: Bremen, Marshall County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:

<http://www.in.gov/ai/appfiles/idem-caats/>

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

Indiana Department of Environmental Management  
Office of Air Quality, Permits Branch  
100 North Senate Avenue  
Indianapolis, IN 46204

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at [chammack@idem.IN.gov](mailto:chammack@idem.IN.gov) or (317) 233-2414.

Affected States Notification.dot 2/17/2016

# Mail Code 61-53

IDEM Staff	LPOGOST 4/1/2016 Johns Manville 099 - 36361 - 00042 draft/		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handling Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee
											Remarks
1		Steve Gorski Johns Manville 1215 W Dewey Street Bremen IN 46506 (Source CAATS)									
2		Wayne Fletcher Plant Manager Johns Manville 1215 W Dewey Street Bremen IN 46506 (RO CAATS)									
3		Bremen Public Library 304 N Jackson St Bremen IN 46506-1130 (Library)									
4		Marshall County Commissioners 112 West Jefferson Street Plymouth IN 46563 (Local Official)									
5		Bremen Town Council and Town Manager 111 South Center Street Bremen IN 46506 (Local Official)									
6		Marshall County Health Department 112 W Jefferson Street, Suite 103 Plymouth IN 46563-1764 (Health Department)									
7		LaPaz Town Council PO Box 0820 LaPaz IN 46537 (Local Official)									
8		Ms. Julie Grzesiak 139 N. Michigan St. Argos IN 46501 (Affected Party)									
9		John Nuckels Cornerstone Environmental 2330 Victory Parkway Cincinnati OH 45206 (Consultant)									
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
---	--	--	--