



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 15, 2012

RE: Carpenter Co. / 039 - 31756 - 00086

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

Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

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

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

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

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

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

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

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

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



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

**Carpenter Co.
195 County Road 15 South
Elkhart, Indiana 46516**

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

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

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70, Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

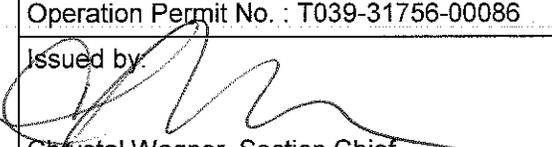
Operation Permit No. : T039-31756-00086	
Issued by:  Chrystal Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 15, 2012 Expiration Date: November 15, 2017

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PART 70 QUARTERLY REPORT

PART 70 QUARTERLY REPORT

PART 70 QUARTERLY REPORT

QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

**Attachment A - National Emissions Standards for Hazardous Air Pollutants for Flexible
Polyurethane Foam Production and Fabrication Area Source [40 CFR Part 63, Subpart OOOOOO]**

SECTION A

SOURCE SUMMARY

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

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

The Permittee owns and operates a polyurethane foam production source.

Source Address:	195 County Road 15 South, Elkhart, IN 46516
General Source Phone Number:	574-522-2800
SIC Code:	3086, 2899, 2297
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) One (1) foam pouring line, identified as EU-01A/B, constructed in 1982, consisting of a mixer, tunnel, foam block cut, and slab room, exhausting through Vents 14, 15 and 16 and Vents b through i, using TDI or MDI.
- (b) Four (4) loop slitting process lines, identified as EU-02B, constructed in 1998, including three (3) adhesive stations used to coat polyurethane foam, equipped with high volume low pressure (HVLP) spray applicators and exhausting to Stacks 22 and 22a, capacity: 0.148 gallons of adhesive per set-up with a maximum set-up rate of 30 set-ups per 8 hours, total. This process also includes two (2) ink stamping lines, identified as EU-6.1 and EU-6.2, installed in 2005.
- (c) One (1) natural gas-fired boiler, identified as EU-03, constructed in 1992, exhausting to Stack V6, rated at 12.55 million British thermal units per hour.
- (d) One (1) bonded foam line, identified as EU-04, constructed in 1990 and modified in 2000, exhausting to Stacks S17 and S18, capacity: 25,000 pounds per hour, consisting of the following equipment:
 - (1) One (1) foam shredding operation;
 - (2) One (1) pneumatic conveyer system;
 - (3) Various storage bins;
 - (4) One (1) foam dry mixer;
 - (5) One (1) wet mixer;

- (6) One (1) molding unit; and
- (7) Various storage operations.
- (e) Two (2) closed mold polyurethane foam turnstile production operations, identified as EU-5.1 and EU-5.2, constructed in March 1998, equipped with a total of two (2) robotic high volume low pressure (HVLP) spray applicators, exhausting to Vents V27, V28, V29, V34 and V35, capacity:
 - (1) EU-5.1 and EU-5.2 with solvent based mold release: 37.0 pounds of release agent per hour, 808.30 pounds of Isocyanate and 1,550 pounds of polyols per hour.
 - (2) EU-5.1 with water based mold release: 9.8 pounds of release agent per hour, 216 units per hour.
- (f) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.3, approved for construction in 2004, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V36.
- (g) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.4, approved for construction in 2005, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V37.
- (h) The following tanks are grouped into four (4) general categories - Primary Pour Tanks (EU-01), Rebond Tanks, Chemical Blending Tanks, and Mold Tanks (EU-05):

Primary Pour Tanks EU-01

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual throughput (gallons)
P1	12,500	10.5	19.5	250	POLYOL	0.00	200,000
P2	12,500	10.5	19.5	3,500	POLYOL	0.00	300,000
P3	12,500	10.5	19.5	3,000	POLYOL	0.00	800,000
P4	12,500	10.5	19.5	3,000	POLYL	0.00	800,000
P5*CA	12,500	10.5	19.5	360	MDI	0.010	800,000
P6*CA	12,500	10.5	19.5	360	MDI	0.00	800,000
P7*CV	12,500	10.5	19.5	6000	PrePoly	0.00	250,000
P8	4,890	8.00	15.0	174	ISO PP	0.010	500,000
P9	12,500	10.5	19.5	5,000	POLYOL	0.00	200,000
P10	12,500	10.5	19.5	5,000	POLYOL	0.00	115,000
P11	12,500	10.5	19.5	6,500	POLYOL	0.00	150,000
P12	12,500	10.5	19.5	6,500	POLYOL	0.00	150,000
P13	11,500	10.5	18.0	410	FR	N/A	120,000
P14	12,000	10.5	18.0	410	FR	0.020	200,000
P15	12,000	10.5	18.0	6,500	POLYOL	0.00	150,000
P16	12,000	10.5	18.0	5,000	POLYOL	0.00	100,000
P17	12,000	10.5	18.0	5,000	POLYOL	0.00	115,000
P18	12,000	10.5	18.0	5,000	POLYOL	0.00	200,000
P19***	12,000	10.5	18.0	174	ISO PP	0.010	700,000
P20	12,000	10.5	18.0	6000	PrePoly	0.00	250,000
P21*CA	12,000	10.5	18.0	174	ISO	0.010	550,000
P22*CA	12,000	10.5	18.0	174	ISO	0.010	550,000

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual throughput (gallons)
P23	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P24	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P25	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P26	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P26A	3,000	8.00	8.00	3,500	POLYOL	0.00	200,000
P27	50,000	24	16	174	ISO	0.010	700,000
P28	50,000	24	16	174	ISO	0.010	700,000
P29	50,000	24	16	174	ISO	0.010	700,000
P30	50,000	24	16	174	ISO	0.010	700,000

Notes: * Emission Control Device: conservation vents (CV), Nitrogen Blanket (N2) or Carbon Adsorption bed filters (CA)
** Closed System

Rebond Tank

Fixed Roof Cone Storage Tank	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
R2***	4,000	8.00	10.0	174	ISO-PP	0.010	700,000***

Notes: * Emission control device, CV, N2, or CA
** Closed System
ISO-PP - Isocyanate Prepolymer
*** P19 and R2 cascade from one tank to the next for a TOTAL throughput of 700,000 gallons.

Chemical Blending Tanks

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
C1	11,500	8.00	30.5	5,000	POLYOL	0.00	20,000
C2	28,500	12.0	34.0	6,500	POLYOL	0.00	900,000
C3	11,500	8.00	30.5	285	FR	0.200	40,000
C4	11,500	8.00	30.5	410	FR	0.200	40,000
C5	11,500	8.00	30.5	N/A	EMPTY	N/A	0.00
C6	11,500	8.00	30.5	575	POLYOL	0.00	10,000
C7	11,500	8.00	30.5	575	POLYOL	0.00	10,000
C8	11,500	8.00	30.5	700	POLYOL	0.00	20,000
C9	11,500	8.00	30.5	700	POLYOL	0.00	100,000
C10	11,500	8.00	30.5	575	POLYOL	0.00	100,000
C11	28,500	12.0	34.0	360	POLYOL	0.00	150,000
C12	11,500	8.00	30.5	575	POLYOL	0.00	25,000
C13**	11,500	8.00	30.5	5,000	POLYOL	0.00	50,000
C14	11,500	8.00	30.5	5,000	POLYOL	0.00	50,000
C15	11,500	8.00	30.5	5,000	POLYOL	0.00	50,000
C16	11,500	8.00	30.5	575	POLYOL	0.00	100,000 gallons total for C16, C17 and C18 combined
C17	11,500	8.00	30.5	575	POLYOL	0.00	
C18	11,500	8.00	30.5	575	POLYOL	0.00	
C19	28,500	12.0	34.0	360	MDI	0.00	150,000
C20	11,500	8.00	30.5	5,000	POLYOL	0.00	80,000
C21	11,500	8.00	30.5	360	MDI	0.00	200,000
C22	11,500	8.00	30.5	360	MDI	0.00	400,000
C23 externally vented	11,500	8.00	30.5	174	ISO	0.010	120,000
C24	11,500	8.00	30.5	N/A	POLYOL	N/A	60,000

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
C25 externally vented	28,500	12.0	34.0	500	EXTENDER	0.100	800,000
C26	11,500	8.00	30.5	5,000	POLYOL	0.00	60,000
C27	11,500	8.00	30.5	3,000	POLYOL	0.00	130,000
C28	11,500	8.00	30.5	360	MDI	0.00	30,000
C29	11,500	8.00	30.5	174	A-PP	0.00	200,000
C30	11,500	8.00	30.5	538	BPOLYOL	0.00	470,000
C31	11,500	8.00	30.5	538	BPOLYOL	0.00	200,000
C32	11,500	8.00	30.5	174	A-PP	0.00	500,000
C33	11,500	8.00	30.5	174	A-PP	0.00	500,000
C34	11,500	8.00	30.5	538	BPOLYOL	0.00	500,000
C35	11,500	8.00	30.5	N/A	EMPTY	N/A	0.00
C36	11,500	8.00	30.5	538	BPOLYOL	0.00	500,000
C37	28,500	12.0	34.0	360	MDI	0.00	150,000
C38**	12,000	9.00	41.0	120.8	ABA	0.00	40,000

Notes: Forane(R) 134, a hydrofluorocarbon, is used as an aerosol propellant in the chemical blending operation.

* Emission control device: conservation vent (CV), Nitrogen blanket (N2), or carbon adsorption bed filters (CA)

** Closed system

Mold Tanks EU-05

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
MLD1	8,200	10.0	14.0	195	ISO BLEND	0.010	131,549
MLD2	8,200	10.0	14.0	5,000	BPOLY	0.00	200,000
MLD3	8,200	10.0	14.0	5,000	BPOLY	0.00	100,000
MLD4	7,500	10.0	13.0	5,000	BPOLY	0.00	200,000

Notes: * Emission control device, CV, N2, or CA

** System

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: One (1) boiler, identified as B1, constructed in 1982, exhausting to Stack V5, rated at 8.36 million British thermal units per hour. [326 IAC 6-2-3]
- (b) The following activities with potential uncontrolled particulate emissions less than five (5) pounds per hour or twenty-five (25) pounds per day: One (1) Non-Woven Fiber Line, identified as IS-3, constructed in 2003, equipped with dry filters for particulate control, capacity: 2,500 pounds of fibers per hour. [326 IAC 6-3-2]

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

- (a) This permit, T039-31756-00086, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

B.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

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

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

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

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

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

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

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

- (a) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:
- (1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and
 - (2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) A "responsible official" is defined at 326 IAC 2-7-1(34).

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

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

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

and

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

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
- (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and

- (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

- (a) 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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, 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 2-7-5(3)(C)(ii) and must contain the following:

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

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

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.
- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to T039-31756-00086 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

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

B.16 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.18 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)][326 IAC 2-7-12(b)(2)]

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

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2). The Permittee shall make such records available, upon reasonable request, for public review.

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.22 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.23 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (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 twenty percent (20%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

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

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

C.6 Fugitive Particulate Matter Emissions [326 IAC 6.8-10-3]

Pursuant to 326 IAC 6.8-10-3 (formerly 326 IAC 6-1-11.1) (Lake County Fugitive Particulate Matter Control Requirements), the particulate matter emissions from source wide activities shall meet the following requirements:

- (a) The average instantaneous opacity of fugitive particulate emissions from a paved road shall not exceed ten percent (10%).
- (b) The average instantaneous opacity of fugitive particulate emissions from an unpaved road shall not exceed ten percent (10%).

- (c) The opacity of fugitive particulate emissions from exposed areas shall not exceed ten percent (10%) on a six (6) minute average.
- (d) The opacity of fugitive particulate emissions from continuous transfer of material onto and out of storage piles shall not exceed ten percent (10%) on a three (3) minute average.
- (e) The opacity of fugitive particulate emissions from storage piles shall not exceed ten percent (10%) on a six (6) minute average.
- (f) There shall be a zero (0) percent frequency of visible emission observations of a material during the inplant transportation of material by truck or rail at any time.
- (g) The opacity of fugitive particulate emissions from the inplant transportation of material by front end loaders and skip hoists shall not exceed ten percent (10%).
- (h) Material processing facilities shall include the following:
 - (1) There shall be a zero (0) percent frequency of visible emission observations from a building enclosing all or part of the material processing equipment, except from a vent in the building.
 - (2) The PM₁₀ emissions from building vents shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
 - (3) The PM₁₀ stack emissions from a material processing facility shall not exceed twenty-two thousandths (0.022) grains per dry standard cubic foot and ten percent (10%) opacity.
 - (4) The opacity of fugitive particulate emissions from the material processing facilities, except a crusher at which a capture system is not used, shall not exceed ten percent (10%) opacity.
 - (5) The opacity of fugitive particulate emissions from a crusher at which a capture system is not used shall not exceed fifteen percent (15%).
- (i) The opacity of particulate emissions from dust handling equipment shall not exceed ten percent (10%).
- (j) Material transfer limits shall be as follows:
 - (1) The average instantaneous opacity of fugitive particulate emissions from batch transfer shall not exceed ten percent (10%).
 - (2) Where adequate wetting of the material for fugitive particulate emissions control is prohibitive to further processing or reuse of the material, the opacity shall not exceed ten percent (10%), three (3) minute average.
 - (3) Slag and kish handling activities at integrated iron and steel plants shall comply with the following particulate emissions limits:
 - (A) The opacity of fugitive particulate emissions from transfer from pots and trucks into pits shall not exceed twenty percent (20%) on a six (6) minute average.

- (B) The opacity of fugitive particulate emissions from transfer from pits into front end loaders and from transfer from front end loaders into trucks shall comply with the fugitive particulate emission limits in 326 IAC 6.8-10-3(9).
- (k) Any facility or operation not specified in 326 IAC 6.8-10-3 shall meet a twenty percent (20%), three (3) minute average opacity standard.

The Permittee shall achieve these limits by controlling fugitive particulate matter emissions according to the attached Fugitive Dust Control Plan.

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

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

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

C.9 Performance Testing [326 IAC 3-6]

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.10 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or of initial start-up, whichever is later, to begin such monitoring. If due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance or the date of initial startup, whichever is later, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

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

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

- (a) The Permittee shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

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

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

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

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.16 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ

that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), the Permittee shall submit by July 1 an emission statement covering the previous calendar year as follows:
- (1) starting in 2004 and every three (3) years thereafter, and
 - (2) any year not already required under (1) if the source emits volatile organic compounds or oxides of nitrogen into the ambient air at levels equal to or greater than twenty-five (25) tons during the previous calendar year.
- (b) The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

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

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

- (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:
- (AA) All calibration and maintenance records.
 - (BB) All original strip chart recordings for continuous monitoring instrumentation.
 - (CC) Copies of all reports required by the.

Records of required monitoring information include the following:

- (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.19 General Reporting Requirements [326 IAC 2-7-5(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 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.
- (b) The address for report submittal is:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) 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.20 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) foam pouring line, identified as EU-01A/B, constructed in 1982, consisting of a mixer, tunnel, foam block cut, and slab room, exhausting through Vents 14, 15 and 16 and Vents b through i, using TDI or MDI.
- (b) Four (4) loop slitting process lines, identified as EU-02B, constructed in 1998, including three (3) adhesive stations used to coat polyurethane foam, equipped with high volume low pressure (HVLP) spray applicators and exhausting to Stacks 22 and 22a, capacity: 0.148 gallons of adhesive per set-up with a maximum set-up rate of 30 set-ups per 8 hours, total. This process also includes two (2) ink stamping lines, identified as EU-6.1 and EU-6.2, installed in 2005.

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

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

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New facilities; General reduction requirements), BACT for the one (1) foam pouring line, identified as EU-01A/B, has been determined to be:

- (a) The total VOC emissions from the one (1) foam pouring line, including pentane used as a blowing agent, shall be limited to less than 38.6 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The continued development of non-emitting amine catalysts for replacement of existing emitting catalysts where feasible.
- (c) The listed work practice as follows:

Storage containers used to store VOC and/or HAP containing materials shall be kept covered when not in use.

Compliance Determination Requirements

D.1.2 Volatile Organic Compounds (VOC)

- (a) Compliance with the VOC emission limitation contained in Condition D.1.1(a) shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) To comply with Condition D.1.1, the VOC limitation is determined by the following equation:

$$\text{VOC Emissions (tons/year)} = \text{VOC Usage (Blowing Agent) (tons)} + (\text{Catalyst Usage (tons)} \times \text{Flash Off (\%)}) + (\text{TDI Usage (tons)} \times \text{Flash Off (\%)}) + (\text{MDI Usage (tons)} \times \text{Flash Off (\%)})$$

Where: The flash off shall not exceed seventy (70) percent for the catalyst usage in the foam pouring line, identified as EU-01A/B.

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

D.1.3 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1(a), the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limit established in Condition D.1.1(a). Records necessary to demonstrate compliance shall be available within thirty (30) days of the end of each compliance period.
- (1) The amount of raw material used on a monthly basis. Records shall include inline flow meter readings of raw material usages and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (2) The total VOC usage for each month; and
 - (3) The weight of VOC emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.4 Reporting Requirements

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

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Boiler EU-03

- (c) One (1) natural gas-fired boiler, identified as EU-03, constructed in 1992, exhausting to Stack V6, rated at 12.55 million British thermal units per hour.

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

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

D.2.1 Particulate Emission Limitations for Sources of Indirect Heating [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating: Emission limitations for facilities specified in 326 IAC 6-2-1(d)), the particulate emissions from EU-03 shall not exceed 0.494 pounds per million British thermal units heat input (lb/MMBtu). This limitation was calculated using the following equation:

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

For this unit, Q = 20.91 million British thermal units per hour.

SECTION D.3 FACILITY OPERATION CONDITIONS

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

- (d) One (1) bonded foam line, identified as EU-04, constructed in 1990 and modified in 2000, exhausting to Stacks S17 and S18, capacity: 25,000 pounds per hour, consisting of the following equipment:
 - (1) One (1) foam shredding operation;
 - (2) One (1) pneumatic conveyer system;
 - (3) Various storage bins;
 - (4) One (1) foam dry mixer;
 - (5) One (1) wet mixer;
 - (6) One (1) molding unit; and
 - (7) Various storage operations.
- (e) Two (2) closed mold polyurethane foam turnstile production operations, identified as EU-5.1 and EU-5.2, constructed in March 1998, equipped with a total of two (2) robotic high volume low pressure (HVLP) spray applicators, exhausting to Vents V27, V28, V29, V34 and V35, capacity:
 - (1) EU-5.1 and EU-5.2 with solvent based mold release: 37.0 pounds of release agent per hour, 808.30 pounds of Isocyanate and 1,550 pounds of polyols per hour.
 - (2) EU-5.1 with water based mold release: 9.8 pounds of release agent per hour, 216 units per hour.
- (f) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.3, approved for construction in 2004, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V36.
- (g) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.4, approved for construction in 2005, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V37.

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

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

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

Pursuant to 326 IAC 6-3-2, the particulate emission rate from the one (1) bonded foam line, identified as EU-04, shall not exceed 22.27 pounds per hour when operating at a process weight rate of 25,000 pounds per hour.

The pounds 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:

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

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (New facilities; General reduction requirements), BACT for the foam turnstile production operations, identified as EU-5.1 and EU-5.2, has been determined to be as follows:

- (a) High volume low pressure (HVLV) spray application shall be used at all times when the two (2) closed mold polyurethane turnstile production units identified as EU-5.1 and EU-5.2 are in operation.

High volume low pressure (HVLV) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (b) The volatile organic compound (VOC) usage in the mold release compound shall not exceed 2.71 tons per month for each of the two (2) closed mold polyurethane turnstile production units identified as EU-5.1 and EU-5.2.

D.3.3 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) The input of volatile organic compounds (VOC) associated with mold release agents, including clean-up solvents, delivered to the applicators of the closed mold polyurethane foam turnstile production operation, identified as EU-5.3, shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of month. Compliance with this limit shall render the requirements of 326 IAC 8-1-6 (BACT) not applicable to EU-5.3.

- (b) The input of volatile organic compounds (VOC) associated with mold release agents, including clean-up solvents, delivered to the applicators of the closed mold polyurethane foam turnstile production operation, identified as EU-5.4, shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of month. Compliance with this limit shall render the requirements of 326 IAC 8-1-6 (BACT) not applicable to EU-5.4.

Compliance Determination Requirements

D.3.4 Volatile Organic Compounds (VOC)

Compliance with the usage limitations contained in Conditions D.3.2(b) and D.3.3 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

D.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.2(b), the Permittee shall maintain records in accordance with (1) and (2) below. Records maintained for (1) and (2) shall be complete

and sufficient to establish compliance with the content and usage limits established in Condition D.3.2(b).

- (1) The VOC content of each mold release agent used.
 - (2) The amount of mold release agent used on a monthly basis. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
- (b) To document compliance with Condition D.3.3, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the content and usage limits established in Condition D.3.3.
- (1) The amount and VOC content by weight of each mold release agent and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to mold release agents and those used as cleanup solvents;
 - (2) A log of the dates of use;
 - (3) The cleanup solvent usage for each month;
 - (4) The total VOC usage for each month; and
 - (5) The weight of VOCs emitted for each compliance period.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.6 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.2(b) and D.3.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.4

FACILITY OPERATION CONDITIONS

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour: One (1) boiler, identified as B1, constructed in 1982, exhausting to Stack V5, rated at 8.36 million British thermal units per hour. [326 IAC 6-2-3]
- (b) The following activities with potential uncontrolled particulate emissions less than five (5) pounds per hour or twenty-five (25) pounds per day: One (1) Non-Woven Fiber Line, identified as IS-3, constructed in 2003, equipped with dry filters for particulate control, capacity: 2,500 pounds of fibers per hour. [326 IAC 6-3-2]

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

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

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

Pursuant to 326 IAC 6-2-3(d) (Particulate Emission Limitations for Sources of Indirect Heating: emission limitations for facilities specified in 326 IAC 6-2-1 (b)), particulate emissions from boiler B1 shall not exceed eight-tenths (0.8) pounds of particulate matter per million British thermal units heat input.

D.4.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 the particulate emission rate from the insignificant Non-Woven Fiber Line, identified as IS-3, shall not exceed 4.76 pounds per hour when operating at a process weight rate of 2,500 pounds per hour.

The pounds 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:

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

SECTION E.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) foam pouring line, identified as EU-01A/B, constructed in 1982, consisting of a mixer, tunnel, foam block cut, and slab room, exhausting through Vents 14, 15 and 16 and Vents b through i, using TDI or MDI.
- (b) Four (4) loop slitting process lines, identified as EU-02B, constructed in 1998, including three (3) adhesive stations used to coat polyurethane foam, equipped with high volume low pressure (HVLP) spray applicators and exhausting to Stacks 22 and 22a, capacity: 0.148 gallons of adhesive per set-up with a maximum set-up rate of 30 set-ups per 8 hours, total. This process also includes two (2) ink stamping lines, identified as EU-6.1 and EU-6.2, installed in 2005.
- (d) One (1) bonded foam line, identified as EU-04, constructed in 1990 and modified in 2000, exhausting to Stacks S17 and S18, capacity: 25,000 pounds per hour, consisting of the following equipment:
 - (1) One (1) foam shredding operation;
 - (2) One (1) pneumatic conveyer system;
 - (3) Various storage bins;
 - (4) One (1) foam dry mixer;
 - (5) One (1) wet mixer;
 - (6) One (1) molding unit; and
 - (7) Various storage operations.
- (e) Two (2) closed mold polyurethane foam turnstile production operations, identified as EU-5.1 and EU-5.2, constructed in March 1998, equipped with a total of two (2) robotic high volume low pressure (HVLP) spray applicators, exhausting to Vents V27, V28, V29, V34 and V35, capacity:
 - (1) EU-5.1 and EU-5.2 with solvent based mold release: 37.0 pounds of release agent per hour, 808.30 pounds of Isocyanate and 1,550 pounds of polyols per hour.
 - (2) EU-5.1 with water based mold release: 9.8 pounds of release agent per hour, 216 units per hour.
- (f) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.3, approved for construction in 2004, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V36.
- (g) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.4, approved for construction in 2005, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V37.

Under NESHAP for Flexible Polyurethane Foam Production and Fabrication Area Sources (40 CFR 63, Subpart OOOOOO) these facilities are considered as the affected source because these facilities emits hazardous air pollutants (HAPs) and are located at an area source of hazardous air pollutants (HAPs).

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

National Emission Standards for Hazardous Air Pollutants Requirements [326 IAC 2-7-5(1)]

E.1.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.11419, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions as specified in Table 1 of 40 CFR Part 63, Subpart OOOOOO.

(b) Pursuant to 40 CFR 63.11417, the Permittee shall submit all required notifications and reports to:

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

E.1.2 National Emissions Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Source [40 CFR Part 63, Subpart OOOOOO]

Pursuant to 40 CFR Part 63, Subpart OOOOOO, the Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart OOOOOO (included as Attachment A):

- (1) 40 CFR 63.11414(a), (b) and (c)
- (2) 40 CFR 63.11415(a), (b) and (c)
- (3) 40 CFR 63.11416
- (4) 40 CFR 63.11417
- (5) 40 CFR 63.11418
- (6) 40 CFR 63.11419
- (8) 40 CFR 63.11420
- (9) Table 1 to Subpart OOOOOO of Part 63

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION**

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Part 70 Permit No.: T 039-31756-00086

<p>This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.</p> <p>Please check what document is being certified:</p> <p><input type="checkbox"/> Annual Compliance Certification Letter</p> <p><input type="checkbox"/> Test Result (specify) _____</p> <p><input type="checkbox"/> Report (specify) _____</p> <p><input type="checkbox"/> Notification (specify) _____</p> <p><input type="checkbox"/> Affidavit (specify) _____</p> <p><input type="checkbox"/> Other (specify) _____</p>
--

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

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

**PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT**

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Part 70 Permit No.: T 039-31756-00086

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Part 70 Permit No.: T 039-31756-00086
Facility: EU-01A/B
Parameter: VOC Emissions
Limit: Less than 38.6 tons per twelve (12) consecutive month period, with compliance determined at the end of each month based on the following equation:

$$\text{VOC Emissions (tons)} = \text{VOC Usage (Blowing Agent) (tons)} + (\text{Catalyst Usage (tons)} \times \text{Flash Off (\%)}) + (\text{TDI Usage (tons)} \times \text{Flash Off (\%)}) + (\text{MDI Usage (tons)} \times \text{Flash Off (\%)})$$

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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Part 70 Permit No.: T 039-31756-00086
Facility: EU-5.1
Parameter: VOC Emissions
Limit: Less than a total of 2.71 tons per month, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	VOC Usage (tons)	VOC Usage (tons)	VOC Usage (tons)
	Month 1	Month 2	Month 3

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Part 70 Permit No.: T 039-31756-00086
Facility: EU-5.2
Parameter: VOC Emissions
Limit: Less than a total of 2.71 tons per month, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	VOC Usage (tons)	VOC Usage (tons)	VOC Usage (tons)
	Month 1	Month 2	Month 3

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Permit Modification No.: T 039-31756-00086
Facility: EU-5.3
Parameter: VOC emissions from application of mold release agents, including associated clean-up solvents.
Limit: Less than twenty-five (25) tons per twelve (12) consecutive month period.

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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Permit Modification No.: T 039-31756-00086
Facility: EU-5.4
Parameter: VOC emissions from application of mold release agents, including associated clean-up solvents.
Limit: Less than twenty-five (25) tons per twelve (12) consecutive month period.

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: _____

Attach a signed certification to complete this report.

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

Source Name: Carpenter Co.
Source Address: 195 County Road 15 South, Elkhart, IN 46516
Part 70 Permit No.: T 039-31756-00086

Months: _____ **to** _____ **Year:** _____

Page 1 of 2

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

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

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Attachment A

Source Name: Carpenter Co.
Source Location: 195 County Road 15 South, Elkhart, Indiana 46516
County: Elkhart
SIC Code: 3086, 2899, 2297
Permit Renewal No.: T 039-31756-00086

Title 40: Protection of Environment

PART 63—NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS FOR SOURCE CATEGORIES

Subpart OOOOOO—National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Production and Fabrication Area Sources

Source: 72 FR 38910, July 16, 2007, unless otherwise noted.

Applicability and Compliance Dates

§ 63.11414 Am I subject to this subpart?

(a) You are subject to this subpart if you own or operate an area source of hazardous air pollutant (HAP) emissions that meets the criteria in paragraph (a)(1) or (2) of this section.

(1) You own or operate a plant that produces flexible polyurethane foam or rebond foam as defined in §63.1292 of subpart III.

(2) You own or operate a flexible polyurethane foam fabrication facility, as defined in §63.11419.

(b) The provisions of this subpart apply to each new and existing affected source that meets the criteria listed in paragraphs (b)(1) through (4) of this section.

(1) A slabstock flexible polyurethane foam production affected source is the collection of all equipment and activities necessary to produce slabstock flexible polyurethane foam.

(2) A molded flexible polyurethane foam production affected source is the collection of all equipment and activities necessary to produce molded foam.

(3) A rebond foam production affected source is the collection of all equipment and activities necessary to produce rebond foam.

(4) A flexible polyurethane foam fabrication affected source is the collection of all equipment and activities at a flexible polyurethane foam fabrication facility where adhesives are used to bond foam to foam or other substrates. Equipment and activities at flexible polyurethane foam fabrication facilities which do not use adhesives to bond foam to foam or other substrates are not flexible polyurethane foam fabrication affected sources.

(c) An affected source is existing if you commenced construction or reconstruction of the affected source on or before April 4, 2007.

(d) An affected source is new if you commenced construction or reconstruction of the affected source after April 4, 2007.

(e) This subpart does not apply to research and development facilities, as defined in section 112(c)(7) of the Clean Air Act (CAA).

(f) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.

§ 63.11415 What are my compliance dates?

(a) If you own or operate an existing slabstock flexible polyurethane foam production affected source, you must achieve compliance with the applicable provisions in this subpart by July 16, 2008.

(b) If you own or operate an existing molded flexible polyurethane foam affected source, an existing rebond foam production affected sources, or an existing flexible polyurethane foam fabrication affected source, you must achieve compliance with the applicable provisions in this subpart by July 16, 2007.

(c) If you startup a new affected source on or before July 16, 2007, you must achieve compliance with the applicable provisions in this subpart not later than July 16, 2007.

(d) If you startup a new affected source after July 16, 2007, you must achieve compliance with the provisions in this subpart upon startup of your affected source.

Standards and Compliance Requirements

§ 63.11416 What are the standards for new and existing sources?

(a) If you own or operate a slabstock flexible polyurethane foam production affected source, you must meet the requirements in paragraph (b) of this section. If you own or operate a molded foam affected source, you must meet the requirements in paragraph (c) of this section. If you own or operate a rebond foam affected source, you must meet the requirements in paragraph (d) of this section. If you own or operate a flexible polyurethane foam fabrication affected source, you must meet the requirements in paragraph (e) of this section.

(b) If you own or operate a new or existing slabstock polyurethane foam production affected source, you must comply with the requirements in either paragraph (b)(1) or (2) of this section.

(1) Comply with §63.1293(a) or (b) of subpart III, except that you must use Equation 1 of this section to determine the HAP auxiliary blowing agent (ABA) formulation limit for each foam grade instead of Equation 3 of §63.1297 of subpart III. You must use zero as the formulation limitation for any grade of foam where the result of the formulation equation (using Equation 1 of this section) is negative (i.e., less than zero):

$$ABA_{\text{limit}} = -0.2(\text{IFD}) - 19.1\left(\frac{1}{\text{IFD}}\right) - 15.3(\text{DEN}) - 6.8\left(\frac{1}{\text{DEN}}\right) + 36.5 \quad (\text{Equation 1})$$

Where:

ABA_{limit} = HAP ABA formulation limitation, parts methylene chloride ABA allowed per hundred parts polyol (pph).

IFD = Indentation force deflection, pounds.

DEN = Density, pounds per cubic foot.

(2) Use no material containing methylene chloride for any purpose in any slabstock flexible foam production process.

(c) If you own or operate a new or existing molded foam affected source, you must comply with the requirements in paragraphs (c)(1) and (2) of this section.

(1) You must not use a material containing methylene chloride as an equipment cleaner to flush the mixhead or use a material containing methylene chloride elsewhere as an equipment cleaner in a molded flexible polyurethane foam process.

(2) You must not use a mold release agent containing methylene chloride in a molded flexible polyurethane foam process.

(d) If you own or operate a new or existing rebond foam affected source, you must comply with the requirements in paragraphs (d)(1) and (2) of this section.

(1) You must not use a material containing methylene chloride as an equipment cleaner in a rebond foam process.

(2) You must not use a mold release agent containing methylene chloride in a rebond foam process.

(e) If you own or operate a new or existing flexible polyurethane foam fabrication affected source, you must not use any adhesive containing methylene chloride in a flexible polyurethane foam fabrication process.

(f) You may demonstrate compliance with the requirements in paragraphs (b)(2) and (c) through (e) of this section using adhesive usage records, Material Safety Data Sheets, and engineering calculations.

[72 FR 38910, July 16, 2007, as amended at 73 FR 15928, Mar. 23, 2008]

§ 63.11417 What are the compliance requirements for new and existing sources?

(a) If you own or operate a slabstock flexible polyurethane foam production affected source, you must comply with the requirements in paragraph (b) of this section. If you own or operate a molded foam affected source, rebond foam affected source, or a loop slitter at a flexible polyurethane foam fabrication affected source you must comply with the requirements in paragraphs (c) and (d) of this section.

(b) Each owner or operator of a new or existing slabstock flexible polyurethane foam production affected source who chooses to comply with §63.11416(b)(1) must comply with paragraph (b)(1) of this section. Each owner or operator of a new or existing slabstock flexible polyurethane foam production affected source who chooses to comply with §63.11416(b)(2) must comply with paragraphs (b)(2) and (3) of this section.

(1) You must comply with paragraphs (b)(1)(i) through (v) of this section.

(i) The monitoring requirements in §63.1303 of subpart III.

(ii) The testing requirements in §63.1304 or §63.1305 of subpart III.

(iii) The reporting requirements in §63.1306 of subpart III, with the exception of the reporting requirements in §63.1306(d)(1), (2), (4), and (5) of subpart III.

(iv) The recordkeeping requirements in §63.1307 of subpart III, with the exception of the recordkeeping requirements in §63.1307(a)(1), (b)(1)(i), and (b)(2).

(v) The compliance demonstration requirements in §63.1308(a), (c), and (d) of subpart III.

(2) You must submit a notification of compliance status report no later than 180 days after your compliance date. The report must contain this certification of compliance, signed by a responsible official, for the standards in §63.11416(b)(2): "This facility uses no material containing methylene chloride for any purpose on any slabstock flexible foam process."

(3) You must maintain records of the information used to demonstrate compliance, as required in §63.11416(f). You must maintain the records for 5 years, with the last 2 years of data retained on site. The remaining 3 years of data may be maintained off site.

(c) You must have a compliance certification on file by the compliance date. This certification must contain the statements in paragraph (c)(1), (2), or (3) of this section, as applicable, and must be signed by a responsible official.

(1) For a molded foam affected source:

(i) "This facility does not use any equipment cleaner to flush the mixhead which contains methylene chloride, or any other equipment cleaner containing methylene chloride in a molded flexible polyurethane foam process in accordance with §63.11416(c)(1)."

(ii) "This facility does not use any mold release agent containing methylene chloride in a molded flexible polyurethane foam process in accordance with §63.11416(c)(2)."

(2) For a rebond foam affected source:

(i) "This facility does not use any equipment cleaner which contains methylene chloride in a rebond flexible polyurethane foam process in accordance with §63.11416(d)(1)."

(ii) "This facility does not use any mold release agent containing methylene chloride in a rebond flexible polyurethane foam process in accordance with §63.11416(d)(2)."

(3) For a flexible polyurethane foam fabrication affected source containing a loop slitter: "This facility does not use any adhesive containing methylene chloride on a loop slitter process in accordance with §63.11416(e)."

(d) For molded foam affected sources, rebond foam affected sources, and flexible polyurethane foam fabrication affected sources containing a loop slitter, you must maintain records of the information used to demonstrate compliance, as required in §63.11416(f). You must maintain the records for 5 years, with the last 2 years of data retained on site. The remaining 3 years of data may be maintained off site.

[72 FR 38910, July 16, 2007, as amended at 73 FR 15929, Mar. 26, 2008]

Other Requirements and Information

§ 63.11418 What General Provisions apply to this subpart?

The provisions in 40 CFR part 63, subpart A, applicable to sources subject to §63.11416(b)(1) are specified in Table 1 of this subpart.

§ 63.11419 What definitions apply to this subpart?

The terms used in this subpart are defined in the CAA; §63.1292 of subpart III; §63.8830 of subpart M; §63.2 of subpart A; and in this section as follows:

Flexible polyurethane foam fabrication facility means a facility where pieces of flexible polyurethane foam are cut, bonded, and/or laminated together or to other substrates.

§ 63.11420 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by the U.S. EPA or a delegated authority such as a State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to a State, local, or tribal agency pursuant to 40 CFR part 63, subpart E, then that Agency has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to a State, local, or tribal agency within your State.

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the approval authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(1) Approval of an alternative non-opacity emissions standard under §63.6(g).

(2) Approval of a major change to test methods under §63.7(e)(2)(ii) and (f). A “major change to test method” is defined in §63.90.

(3) Approval of a major change to monitoring under §63.8(f). A “major change to monitoring” is defined in §63.90.

(4) Approval of a major change to recordkeeping/reporting under §63.10(f). A “major change to recordkeeping/reporting” is defined in §63.90.

[72 FR 38910, July 16, 2007, as amended at 73 FR 15929, Mar. 26, 2008]

Table 1 to Subpart OOOOOO of Part 63—Applicability of General Provisions to Subpart OOOOOO

As required in §63.11418, sources subject to §63.11416(b)(1) must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) as shown in the following table.

Subpart A reference	Applies to Subpart OOOOOO?	Comment
§63.1	Yes	
§63.2	Yes	Definitions are modified and supplemented by §63.11419.
§63.3	Yes	
§63.4	Yes	
§63.5	Yes	

Subpart A reference	Applies to Subpart OOOOOO?	Comment
§63.6(a)–(d)	Yes	
§63.6(e)(1)–(2)	Yes	
§63.6(e)(3)	No	Owners and operators of subpart OOOOOO affected sources are not required to develop and implement a startup, shutdown, and malfunction plan.
§63.6 (f)–(g)	Yes	
§63.6(h)	No	Subpart OOOOOO does not require opacity and visible emissions standards.
§63.6 (i)–(j)	Yes	
§63.7	No	Performance tests not required by subpart OOOOOO.
§63.8	No	Continuous monitoring, as defined in subpart A, is not required by subpart OOOOOO.
§63.9(a)–(d)	Yes	
§63.9(e)–(g)	No	
§63.9(h)	No	Subpart OOOOOO specifies Notification of Compliance Status requirements.
§63.9 (i)–(j)	Yes	
§63.10(a)–(b)	Yes	Except that the records specified in §63.10(b)(2) are not required.
§63.10(c)	No	
§63.10(d)(1)	Yes	
§63.10(d)(2)–(3)	No	
§63.10(d)(4)	Yes	
§63.10(d)(5)	No	
§63.10(e)	No	
§63.10(f)	Yes	
§63.11	No	
§63.12	Yes	
§63.13	Yes	
§63.14	Yes	
§63.15	Yes	
§63.16	Yes	

[72 FR 38910, July 16, 2007, as amended at 73 FR 15929, Mar. 26, 2008]

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Carpenter Co.
Source Location:	195 County Road 15 South, Elkhart, Indiana 46516
County:	Elkhart
SIC Code:	3086, 2899, 2297
Permit Renewal No.:	T 039-31756-00086
Permit Reviewer:	Madhurima Moulik

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Carpenter Co. relating to the operation of a polyurethane foam production company. On April 18, 2012, Carpenter Co. submitted an application to the OAQ requesting to renew its operating permit. Carpenter Co. was issued its first Part 70 Operating Permit Renewal T 039-17988-00086 on February 28, 2008.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

- (a) One (1) foam pouring line, identified as EU-01A/B, constructed in 1982, consisting of a mixer, tunnel, foam block cut, and slab room, exhausting through Vents 14, 15 and 16 and Vents b through i, using TDI or MDI.
- (b) Four (4) loop slitting process lines, identified as EU-02B, constructed in 1998, including three (3) adhesive stations used to coat polyurethane foam, equipped with high volume low pressure (HVLP) spray applicators and exhausting to Stacks 22 and 22a, capacity: 0.148 gallons of adhesive per set-up with a maximum set-up rate of 30 set-ups per 8 hours, total. This process also includes two (2) ink stamping lines, identified as EU-6.1 and EU-6.2, installed in 2005.
- (c) One (1) natural gas-fired boiler, identified as EU-03, constructed in 1992, exhausting to Stack V6, rated at 12.55 million British thermal units per hour.
- (d) One (1) bonded foam line, identified as EU-04, constructed in 1990 and modified in 2000, exhausting to Stacks S17 and S18, capacity: 25,000 pounds per hour, consisting of the following equipment:
 - (1) One (1) foam shredding operation;
 - (2) One (1) pneumatic conveyer system;
 - (3) Various storage bins;
 - (4) One (1) foam dry mixer;
 - (5) One (1) wet mixer;
 - (6) One (1) molding unit; and
 - (7) Various storage operations.

- (e) Two (2) closed mold polyurethane foam turnstile production operations, identified as EU-5.1 and EU-5.2, constructed in March 1998, equipped with a total of two (2) robotic high volume low pressure (HVLP) spray applicators, exhausting to Vents V27, V28, V29, V34 and V35, capacity:
 - (1) EU-5.1 and EU-5.2 with solvent based mold release: 37.0 pounds of release agent per hour, 808.30 pounds of Isocyanate and 1,550 pounds of polyols per hour.
 - (2) EU-5.1 with water based mold release: 9.8 pounds of release agent per hour, 216 units per hour.
- (f) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.3, approved for construction in 2004, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V36.
- (g) One (1) closed mold polyurethane foam turnstile production operation, identified as EU-5.4, approved for construction in 2005, equipped with one (1) robotic high volume low pressure (HVLP) spray applicator, with all emissions exhausting to Vent V37.
- (h) The following tanks are grouped into four (4) general categories - Primary Pour Tanks (EU-01), Rebond Tanks, Chemical Blending Tanks, and Mold Tanks (EU-05):

Primary Pour Tanks EU-01

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual throughput (gallons)
P1	12,500	10.5	19.5	250	POLYOL	0.00	200,000
P2	12,500	10.5	19.5	3,500	POLYOL	0.00	300,000
P3	12,500	10.5	19.5	3,000	POLYOL	0.00	800,000
P4	12,500	10.5	19.5	3,000	POLYL	0.00	800,000
P5*CA	12,500	10.5	19.5	360	MDI	0.010	800,000
P6*CA	12,500	10.5	19.5	360	MDI	0.00	800,000
P7*CV	12,500	10.5	19.5	6000	PrePoly	0.00	250,000
P8	4,890	8.00	15.0	174	ISO PP	0.010	500,000
P9	12,500	10.5	19.5	5,000	POLYOL	0.00	200,000
P10	12,500	10.5	19.5	5,000	POLYOL	0.00	115,000
P11	12,500	10.5	19.5	6,500	POLYOL	0.00	150,000
P12	12,500	10.5	19.5	6,500	POLYOL	0.00	150,000
P13	11,500	10.5	18.0	410	FR	N/A	120,000
P14	12,000	10.5	18.0	410	FR	0.020	200,000
P15	12,000	10.5	18.0	6,500	POLYOL	0.00	150,000
P16	12,000	10.5	18.0	5,000	POLYOL	0.00	100,000
P17	12,000	10.5	18.0	5,000	POLYOL	0.00	115,000
P18	12,000	10.5	18.0	5,000	POLYOL	0.00	200,000
P19***	12,000	10.5	18.0	174	ISO PP	0.010	700,000
P20	12,000	10.5	18.0	6000	PrePoly	0.00	250,000
P21*CA	12,000	10.5	18.0	174	ISO	0.010	550,000
P22*CA	12,000	10.5	18.0	174	ISO	0.010	550,000
P23	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P24	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P25	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P26	12,000	10.5	18.0	3,500	POLYOL	0.00	800,000
P26A	3,000	8.00	8.00	3,500	POLYOL	0.00	200,000

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual throughput (gallons)
P27	50,000	24	16	174	ISO	0.010	700,000
P28	50,000	24	16	174	ISO	0.010	700,000
P29	50,000	24	16	174	ISO	0.010	700,000
P30	50,000	24	16	174	ISO	0.010	700,000

Notes: * Emission Control Device: conservation vents (CV), Nitrogen Blanket (N2) or Carbon Adsorption bed filters (CA)
** Closed System

Rebond Tank

Fixed Roof Cone Storage Tank	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
R2**	4,000	8.00	10.0	174	ISO-PP	0.010	700,000***

Notes: * Emission control device, CV, N2, or CA
** Closed System
ISO-PP - Isocyanate Prepolymer
*** P19 and R2 cascade from one tank to the next for a TOTAL throughput of 700,000 gallons.

Chemical Blending Tanks

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
C1	11,500	8.00	30.5	5,000	POLYOL	0.00	20,000
C2	28,500	12.0	34.0	6,500	POLYOL	0.00	900,000
C3	11,500	8.00	30.5	285	FR	0.200	40,000
C4	11,500	8.00	30.5	410	FR	0.200	40,000
C5	11,500	8.00	30.5	N/A	EMPTY	N/A	0.00
C6	11,500	8.00	30.5	575	POLYOL	0.00	10,000
C7	11,500	8.00	30.5	575	POLYOL	0.00	10,000
C8	11,500	8.00	30.5	700	POLYOL	0.00	20,000
C9	11,500	8.00	30.5	700	POLYOL	0.00	100,000
C10	11,500	8.00	30.5	575	POLYOL	0.00	100,000
C11	28,500	12.0	34.0	360	POLYOL	0.00	150,000
C12	11,500	8.00	30.5	575	POLYOL	0.00	25,000
C13**	11,500	8.00	30.5	5,000	POLYOL	0.00	50,000
C14	11,500	8.00	30.5	5,000	POLYOL	0.00	50,000
C15	11,500	8.00	30.5	5,000	POLYOL	0.00	50,000
C16	11,500	8.00	30.5	575	POLYOL	0.00	100,000 gallons total for C16, C17 and C18 combined
C17	11,500	8.00	30.5	575	POLYOL	0.00	
C18	11,500	8.00	30.5	575	POLYOL	0.00	
C19	28,500	12.0	34.0	360	MDI	0.00	150,000
C20	11,500	8.00	30.5	5,000	POLYOL	0.00	80,000
C21	11,500	8.00	30.5	360	MDI	0.00	200,000
C22	11,500	8.00	30.5	360	MDI	0.00	400,000
C23 externally vented	11,500	8.00	30.5	174	ISO	0.010	120,000
C24	11,500	8.00	30.5	N/A	POLYOL	N/A	60,000
C25 externally vented	28,500	12.0	34.0	500	EXTENDER	0.100	800,000
C26	11,500	8.00	30.5	5,000	POLYOL	0.00	60,000
C27	11,500	8.00	30.5	3,000	POLYOL	0.00	130,000
C28	11,500	8.00	30.5	360	MDI	0.00	30,000
C29	11,500	8.00	30.5	174	A-PP	0.00	200,000
C30	11,500	8.00	30.5	538	BPOLYOL	0.00	470,000

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
C31	11,500	8.00	30.5	538	BPOLYOL	0.00	200,000
C32	11,500	8.00	30.5	174	A-PP	0.00	500,000
C33	11,500	8.00	30.5	174	A-PP	0.00	500,000
C34	11,500	8.00	30.5	538	BPOLYOL	0.00	500,000
C35	11,500	8.00	30.5	N/A	EMPTY	N/A	0.00
C36	11,500	8.00	30.5	538	BPOLYOL	0.00	500,000
C37	28,500	12.0	34.0	360	MDI	0.00	150,000
C38**	12,000	9.00	41.0	120.8	ABA	0.00	40,000

Notes: Forane(R) 134, a hydrofluorocarbon, is used as an aerosol propellant in the chemical blending operation.

* Emission control device: conservation vent (CV), Nitrogen blanket (N2), or carbon adsorption bed filters (CA)

** Closed system

Mold Tanks EU-05

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
MLD1	8,200	10.0	14.0	195	ISO BLEND	0.010	131,549
MLD2	8,200	10.0	14.0	5,000	BPOLY	0.00	200,000
MLD3	8,200	10.0	14.0	5,000	BPOLY	0.00	100,000
MLD4	7,500	10.0	13.0	5,000	BPOLY	0.00	200,000

Notes: * Emission control device, CV, N2, or CA

** System

Insignificant Activities

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, consisting of:
 - (1) One (1) boiler, identified as B1, constructed in 1982, exhausting to Stack V5, rated at 8.36 million British thermal units per hour. [326 IAC 6-2-3]
 - (2) One (1) oven, identified as O1, used in the one (1) Non-Woven Fiber Line, exhausting to Stack V5, constructed in 2003, rated at six (6) million British thermal units per hour.
 - (3) Fifteen (15) radiant heaters, constructed between 1999 and 2003, rated at 0.2 million British thermal units per hour, each.
 - (4) Three (3) radiant heaters, constructed between 1999 and 2003, rated at 0.15 million British thermal units per hour, each.
- (b) Fuel oil-fired combustion sources with heat input equal to or less than two million (2,000,000) British thermal units per hour and firing fuel containing less than five-tenths (0.5) percent sulfur by weight.
- (c) A petroleum fuel, other than gasoline, dispensing facility having a storage capacity less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.

- (d) The following VOC and HAP storage containers:
Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) Closed loop heating and cooling systems.
- (f) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (g) Noncontact cooling tower systems with either of the following:
Forced and induced draft cooling tower system not regulated under a NESHAP.
- (h) Paved and unpaved roads and parking lots with public access.
- (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) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.
- (k) Other emergency equipment as follows:
Stationary fire pumps.
- (l) Purge double block and bleed valves.
- (m) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C).
- (n) A laboratory as defined in 326 IAC 2-7-1(21)(H).
- (o) The following activities with potential uncontrolled VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day:
 - (1) One (1) blending operation, potential VOC emissions: 0.15 tons per year.
 - (2) Four (4) twenty-four (24) feet diameter by sixteen (16) feet tall, TDI storage tanks, identified as TDI Tanks 1 through 4, approved for installation in 2007, each with a storage capacity of fifty thousand (50,000) gallons.
- (p) The following activities with potential uncontrolled particulate emissions less than five (5) pounds per hour or twenty-five (25) pounds per day:
 - (1) One (1) Non-Woven Fiber Line, identified as IS-3, constructed in 2003, equipped with dry filters for particulate control, capacity: 2,500 pounds of fibers per hour. [326 IAC 6-3-2]
 - (2) One (1) closed mold polyurethane foam turnstile production process, identified as EU-5.3, with all emissions exhausted through Stack V36.
 - (3) One (1) closed mold polyurethane foam turnstile production process, identified as EU-5.4, using products containing no VOC and no HAPs.

- (4) One (1) closed mold polyurethane foam turnstile production process, identified as EU-5.5, using products containing no VOC and no HAPs.

Existing Approvals

Since the issuance of the Part 70 Operating Permit (Renewal) T 039-17988-00086 on February 28, 2008, the source has constructed or has been operating under the following additional approvals:

- (a) Administrative Amendment No. 039-26646-00086 issued on June 20, 2008;
- (b) Administrative Amendment No. 039-27308-00086 issued on January 16, 2009;
- (c) Administrative Amendment No. 039-27353-00086 issued on May 7, 2009;
- (d) Significant Permit Modification No. 039-27852-00086 issued on July 20, 2009;
- (e) Significant Permit Modification No. 039-27979-00086 issued on September 25, 2009;
- (f) Minor Permit Modification No. 039-29578-00086 issued on November 16, 2010; and
- (g) Administrative Amendment No. 039-30712-00086 issued on September 1, 2011.

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 Elkhart County.

Pollutant	Designation
O ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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_x emissions are considered when evaluating the rule applicability relating to ozone. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (b) **PM_{2.5}**
Elkhart County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
- (c) **Other Criteria Pollutants**
Elkhart 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

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

Emission calculations for EU-01A/B and EU-04 have been determined to be confidential in prior approvals because the data is considered a trade secret. Therefore, only emissions totals have been presented for these units:

- (a) Emissions calculations for the foam pouring line, identified as EU-01A/B, are based on confidential trade secret information. The foam pouring line is a batch operation. Total foam production is based on a twenty-four (24) hour production cycle with actual foam pouring operating up to nine (9) hours per day (3,285 hours per year). Potential to emit calculations for the foam pouring line are therefore based on 3,285 hours of pouring and 8,760 hours of operation.

The potential to emit VOC for the foam pouring line, identified as EU-01A/B, is 133 tons per year with no particulate matter emissions. HAP emissions are less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs.

- (b) Based on applicant-supplied confidential emission factors and material throughput rates, the potential emissions of the bonded foam line, identified as EU-04, have been verified to be:

Pollutant	Potential Emissions (pounds/hour)	Potential Emissions (tons/year)
PM	3.33	14.58
VOC	1.15	5.05

Particulate matter emitted by this process are greater than ten microns in diameter, therefore no PM₁₀ is emitted.

(c) VOC and HAP emissions from the U.S. EPA Tanks 4.0 program were submitted by the Permittee. The only tanks which emit calculable amounts of VOC emissions are the TDI (ISO) storage tanks (P5, P6, P8, P19, P21, P22, P27, P28, P29, P30, R2, C23, MLD1, TDI Tank #1, TDI Tank #2, TDI Tank #3 and TDI Tank #4). The potential to emit of VOC and HAP (TDI) from these tanks are as follows:

Tank ID	Working losses (lbs/yr)	Breathing losses (lbs/yr)	Total losses (lbs/yr)	Total losses (tons/yr)
P5	0.13	0.00	0.14	0.00007
P6	0.13	0.00	0.14	0.00007
P8	0.08	0.00	0.08	0.00004
P19	0.13	0.00	0.14	0.00007
P21	0.12	0.01	0.13	0.000065
P22	0.12	0.01	0.13	0.000065
P27	0.23	0.08	0.31	0.000155
P28	0.23	0.08	0.31	0.000155
P29	0.23	0.08	0.31	0.000155
P30	0.23	0.08	0.31	0.000155
R2	0.06	0.00	0.06	0.00003
C23	0.03	0.03	0.06	0.00003
MLD1	0.04	0.01	0.05	0.000025
TDI #1	0.23	0.08	0.31	0.000155
TDI #2	0.23	0.08	0.31	0.000155
TDI #3	0.23	0.08	0.31	0.000155
TDI #4	0.23	0.08	0.31	0.000155
Total			3.41	0.001705

This table reflects the unrestricted potential emissions of the source.

Unrestricted Potential Emissions	
Pollutant	Tons/year
PM	24.98
PM ₁₀	11.10
PM _{2.5}	10.51
SO ₂	4.54
VOC	216.64
CO	11.51
NO _x	14.55
GHGs as CO ₂ e	17405.0

HAPs	tons/year
TDI	8.12
MDI	12.99 ^(a)
Chromium	0.151

HAPs	tons/year
Benzene	0.0003
Dichlorbenzene	0.0002
Formaldehyde	0.010
Hexane	0.239
Toluene	0.0005
Lead	0.0001
Cadmium	0.0001
Manganese	0.0002
Nickel	0.0003
Diethanolamine	0.001
Total	13.39

- (a) The worst case potential to emit of MDI assumes that all processes that normally use TDI substitute MDI. This is the worst-case situation that could arise due to TDI supply shortages. The total HAPs potential would remain 13.39 tons per year, it would not increase due to the substitution.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of VOC is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7 and will be issued a Part 70 Operating Permit Renewal.

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

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

Potential to Emit After Issuance

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

Process/Emission Unit	Potential to Emit (tons/year)							CO2e
	PM	PM ₁₀ / PM _{2.5}	SO ₂	VOC	CO	NO _x	HAP	
EU-01A/B	-	-	-	Less than 38.6 ⁽¹⁾	-	-	2.98 (TDI)	Natural Gas Combustion (total) 16054
EU-02B	-	-	-	9.73	-	-	4.87 (MDI)	
EU-6.1 and EU-6.2	-	-	-	3.19	-	-	0.149	
Natural Gas Boiler EU-03	0.104	0.418	0.033	0.302	4.62	5.50	0.104	
EU-04	14.58	-	-	5.05	-	-	5.05 (TDI)	
EU-5.1 and 5.2	0.589	0.589/0.0	-	Less than 65.0	-	-	0.088 (0.087 is TDI)	
All ISO Storage Tanks	-	-	-	0.0017	-	-	0.0017 (TDI)	
INSIGNIFICANT:								
Boiler B1	0.070	0.278	0.022	0.201	3.08	3.66	0.069	
Non woven fiber line	3.38	3.38	-	-	-	-	-	
Natural Gas Combustion	0.079	0.315	0.025	0.228	3.48	4.14	0.078	
EU 5.3	2.00	2.00	-	-	-	-	-	
EU 5.4	2.00	2.00	-	-	-	-	-	
EU 5.5	2.00	2.00	-	-	-	-	-	
Blending	-	-	-	0.150	-	-	-	
Diesel combustion	0.1	0.1	4.9	0.0	0.3	1.5	0.0	1351
Total	24.98	11.1/10.5	5.0	Less than 122.47	11.51	14.55	8.12 (TDI)⁽²⁾ 13.39 (Total)	<100,000
Major Source Threshold	250	250	250	250	250	250	<10/25	100,000

⁽¹⁾ The VOC emissions are limited by the requirements of 326 IAC 8-1-6.

⁽²⁾ Although the potential emissions of the worst case single HAP (TDI) are calculated to be less than ten (10) tons per year, the applicant has stated that supply shortages of TDI could result in increased usage of MDI. While the potential to emit of combined HAPs would not change, it is possible that the increased MDI usage could reach ten (10) tons per year. Therefore, the single and combined HAPs emissions from this source have been limited to less than ten (10) and twenty-five (25) tons per year, respectively, by limiting MDI emissions to less than ten (10) tons per year. This will ensure that this source remains a minor source for HAPs.

(a) This existing stationary source is not major for PSD because the emissions of each regulated pollutant, excluding GHGs, are less than two hundred fifty (<250) tons per year, emissions of GHGs are less than one hundred thousand (<100,000) tons of CO₂

equivalent emissions (CO₂e) per year, and it is not in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

None of the emission units at this source meet all three of the above criteria. The only emission unit with the potential to emit greater than the major source threshold is EU-01A/B (greater than one hundred (100) tons per year of VOC). However, EU-01A/B is not equipped with add-on control equipment. Therefore, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 Permit Renewal.

- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (c) The requirements of the New Source Performance Standard, 40 CFR Part 60.110b, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels, apply to tanks with a storage capacity greater than 75 cubic meters (19,812.9 gallons) and that store a liquid with a maximum true vapor pressure greater than 3.5 kilopascals (26.25 millimeters of mercury). The only tanks at this source with storage capacities greater than 75 cubic meters are P27, P28, P29, P30, C2, C11, C19, C25, C37, TDI Tank #1, TDI Tank #2, TDI Tank #3 and TDI Tank #4. However, these tanks do not store a liquid with a maximum true vapor pressure greater than 3.5 kilopascals. Therefore, the requirements of the NSPS, 40 CFR 60, Subpart Kb, are not included in the permit for this source.
- (d) The polyurethane foam production units at this source are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Flexible Polyurethane Foam Production and Fabrication Area Sources (40 CFR 63, Subpart OOOOOO).

Nonapplicable portions of the NESHAP will not be included in the permit. The polyurethane foam production units are subject to the following:

- (1) 40 CFR 63.11414(a), (b) and (c)
- (2) 40 CFR 63.11415(a), (b) and (c)
- (3) 40 CFR 63.11416
- (4) 40 CFR 63.11417
- (5) 40 CFR 63.11418
- (6) 40 CFR 63.11419
- (8) 40 CFR 63.11420
- (9) Table 1 to Subpart OOOOOO of Part 63

The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart OOOOOO.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source is subject to 326 IAC 1-6-3.

326 IAC 2-6 (Emission Reporting)

This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM10 is less than 250 tons per year; and the potential to emit of CO, NOx, and SO2 is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2013 and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

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

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.

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 8-1-6 (New facilities; General reduction requirements), BACT for the one (1) foam pouring line, identified as EU-01A/B, has been determined to be:

- (a) The total VOC emissions from the one (1) foam pouring line, including pentane used as a blowing agent, shall be limited to less than 38.6 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (b) The continued development of non-emitting amine catalysts for replacement of existing emitting catalysts where feasible.
- (c) The listed work practice as follows:

Storage containers used to store VOC and/or HAP containing materials shall be kept covered when not in use.

On March 26, 2012, Carpenter Company submitted a permit modification application for its polyurethane foam manufacturing facility. Carpenter Company operates two (2) closed mold polyurethane foam production operations, identified as EU-5.1 and EU-5.2. These units are subject to VOC Best Available Control Technology (BACT) reduction requirements under 326 IAC 8-1-6. The Permittee requested a modification to the BACT requirements as included in Condition D.3.2 of the Part 70 permit. The BACT requirement, as included in the issued Part 70 permit no.

T039-17988-00086 altered the language included in the original BACT analysis included in CP 039-9044-00086 (issued on March 4, 1998). The Permittee has requested to change the BACT requirement language to match the language determined in the original BACT. IDEM has determined that a BACT reopening is not necessary to process the requested change.

Pursuant to 326 IAC 8-1-6 (New facilities; General reduction requirements), BACT for the foam turnstile production operations, identified as EU-5.1 and EU-5.2, has been determined to be as follows (deleted language is shown as ~~strike through~~ and added language is shown as **bold**):

- (a) High volume low pressure (HVLP) spray application shall be used at all times when the two (2) closed mold polyurethane turnstile production units identified as EU-5.1 and EU-5.2 are in operation.

High volume low pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (b) ~~The weight percentage solid content and maximum usage of mold release at the two (2) closed polyurethane turnstile production units identified as EU-5.1 and EU-5.2, with a combined maximum capacity of 400 units per hour, shall be no less than 7% and no more than 0.003 gallons per unit when using solvent based mold release agents. This shall be equivalent to or less than a total of 65.0 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month. This is equivalent to 7% solid content by weight in the mold release compound, based on the 0.003 gallon of the mold release use per unit.~~ **The volatile organic compound (VOC) usage in the mold release compound shall not exceed 2.71 tons per month for each of the two (2) closed mold polyurethane turnstile production units identified as EU-5.1 and EU-5.2.**

Pursuant to 326 IAC 8-1-6, the following requirements are applicable to emissions units EU-5.3 and EU-5.4:

- (a) The input of volatile organic compounds (VOC) associated with mold release agents, including clean-up solvents, delivered to the applicators of the closed mold polyurethane foam turnstile production operation, identified as EU-5.3, shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of month. Compliance with this limit shall render the requirements of 326 IAC 8-1-6 (BACT) not applicable to EU-5.3.
- (b) The input of volatile organic compounds (VOC) associated with mold release agents, including clean-up solvents, delivered to the applicators of the closed mold polyurethane foam turnstile production operation, identified as EU-5.4, shall be less than twenty-five (25) tons per twelve (12) consecutive month period with compliance determined at the end of month. Compliance with this limit shall render the requirements of 326 IAC 8-1-6 (BACT) not applicable to EU-5.4.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

Although the potential emissions of the worst case single HAP (TDI) from the polyurethane foam production source are calculated to be less than ten (10) tons per year, the applicant has stated that supply shortages of TDI could result in increased usage of MDI. While the potential to emit of combined HAPs would not change, it is possible that the increased MDI usage could potentially exceed ten (10) tons per year before limits. Therefore, the single HAP emissions from this source have been limited to less than ten (10) tons per year. This will ensure that this source remains a minor source under 326 IAC 2-4.1. Therefore, 326 IAC 2-4.1 does not apply. The emission limitation is as follows:

- (a) The MDI emissions from the one (1) foam pouring line, identified as EU-01A/B, four (4) loop slitting process lines, identified as EU-02B, one (1) bonded foam line, identified as EU-04, and two (2) closed mold polyurethane foam turnstile production operations, identified as EU-5.1 and EU-5.2, shall be limited to less than 9.8 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limitation is based on the following equation:

$$\text{Total MDI Emissions (tons)} = (\text{MDI Usage at EU-01A/B (tons)} \times \text{Flash Off (\%)}) + (\text{MDI Usage at EU-02B (tons)}) + (\text{MDI Usage at EU-04 (tons)} \times \text{Flash Off (\%)}) + (\text{MDI Usage at EU-5.1 and EU-5.2 (tons)} \times \text{Flash Off (\%)})$$

- (b) The flash off factor shall be seventy percent (70%) for EU-01A/B, EU-04, EU-5.1 and EU-5.2 and one hundred percent (100%) for EU-02B.

326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating)

The one (1) natural gas-fired boiler, identified as EU-03, rated at 12.55 million British thermal units per hour, was installed in 1992. Therefore, pursuant to 326 IAC 6-2-1(d), the particulate emissions from the boiler shall be limited by the following equation given in 326 IAC 6-2-4(a):

$$Pt = 1.09/Q^{0.26}$$

where:

Pt = Pounds of particulate emitted per million British thermal units (lb/mmBtu) heat input

Q = Total source maximum operating capacity rating in million British thermal units per hour (mmBtu/hr) heat input. The maximum operating capacity rating is defined as the maximum capacity at which the facility is operated or the nameplate capacity, whichever is specified in the facility's permit application, except when some lower capacity is contained in the facility's operation permit; in which case, the capacity specified in the operation permit shall be used.

The total boiler heat input capacity for the source is 20.91 million British thermal units per hour.

$$Pt = 1.09/(20.91)^{0.26} = 0.494 \text{ lb/mmBtu heat input}$$

Based on Appendix A, the potential particulate emission rate before controls from the boiler (EU-03) is:

$$0.104 \text{ ton/yr} \times (2000 \text{ lbs/ton} / 8760 \text{ hrs/yr}) = 0.024 \text{ lb/hr}$$
$$(0.024 \text{ lb/hr} / 12.55 \text{ mmBtu/hr}) = 0.002 \text{ lb PM per mmBtu}$$

The particulate emissions from the boiler (EU-03) are 0.002 pounds per million British thermal units, which is less than the allowable of 0.024 pounds per million British thermal units. Therefore, the boiler (EU-03) can comply with this rule.

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

- (a) The spray application of the release agent at the two (2) closed mold polyurethane foam turnstile production operations (EU-5.1 and EU-5.2) are exempt from the requirements of 326 IAC 6-3-2, because they each have potential particulate emissions less than 0.551 pounds per hour.

- (b) The requirements of 326 IAC 6-3-2 are not applicable to the adhesive stations at the loop slitting process (EU-02B), because the adhesive used at the stations does not produce particulate emissions.
- (c) Pursuant to 326 IAC 6-3-2 the particulate emission rate from the one (1) bonded foam line, identified as EU-04, shall not exceed 22.27 pounds per hour when operating at a process weight rate of 25,000 pounds per hour.

The pounds 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 applicant-supplied confidential emission factors and material throughput rates, the potential particulate emissions from EU-04 are 3.33 pounds per hour. Therefore, the bonded foam line (EU-04) can comply with this rule.

326 IAC 7-1.1 Sulfur Dioxide Emission Limitations

This emission unit is not subject to 326 IAC 326 IAC 7-1.1 because its SO₂ PTE is less than 25 tons/year or 10 pounds/hour.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

- (a) The foam pouring line EU-01A/B is subject to VOC (BACT) emission limitation under 326 IAC 8-1-6. Compliance with this limit shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) The VOC limitation for EU-01A/B shall be determined by the following equation:

$$\text{VOC Emissions (tons/year)} = \text{VOC Usage (Blowing Agent) (tons)} + \text{Catalyst Usage (tons)} \times \text{Flash Off (\%)} + \text{TDI Usage (tons)} \times \text{Flash Off (\%)} + \text{MDI Usage (tons)} \times \text{Flash Off (\%)}$$

Off (%)) where the flash off shall not exceed seventy (70) percent for the catalyst usage in EU-01A/B.

- (c) The foam turnstile production operations, identified as EU-5.1 and EU-5.2 are subject to VOC (BACT) emission limitations under 326 IAC 8-1-6. In addition, the foam turnstile production operations EU-5.3 and EU-5.4 are subject to VOC limitations in order to render 326 IAC 8-1-6 not applicable to these units. Compliance with these VOC limitations shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

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

There are no specific compliance monitoring requirements for this facility.

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit 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 April 18, 2012.

Conclusion

The operation of this polyurethane foam production plant shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. T 039-31756-00086.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Madhurima Moulik at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-0868 or toll free at 1-800-451-6027 extension 3-0868.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

**Appendix A: Emissions Calculations
PTE Summary**

Company Name: Carpenter Co.
Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012

Emission Unit	Potential to Emit (tons/year)									
	PM	PM-10	PM2.5	SO2	VOC	NOx	CO	Single HAP	Combined HAP	CO2e
EU-01A/B*	0.0	0.0	0.0	0.0	133.0	0.0	0.0	<10	<25	0.0
EU-02B	0.0	0.0	0.0	0.0	9.7	0.0	0.0	4.9	4.9	0.0
EU-04*	14.6	0.0	0.0	0.0	5.1	0.0	0.0	<10	<25	0.0
EU6.1 and EU6.2	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.2	0.2	0.0
Combustion	0.3	1.0	1.0	0.1	0.7	13.3	11.2	0.0	0.0	16054.0
EU5.1 and EU5.2	0.6	0.6	0.0	0.0	64.9	0.0	0.0	0.1	0.1	0.0
Fuel Oil Combustion	0.1	0.1	0.1	4.9	0.0	1.3	0.3	0.0	0.0	1351.0
Fiber Line IS-3	3.4	3.4	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EU-5.3, EU-5.4, EU5.5	6.0	6.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total (tons/yr) =	24.98	11.10	10.51	5.00	216.64	14.55	11.51	<10	<25	17405.00

* The emissions calculations are based on confidential trade secret information

Methodology

EU-04 particulates are all larger than 10 microns

**Appendix A: Emissions Calculations
VOC, HAP and Particulate
From EU-02B Adhesive Stations**

**Company Name: Carpenter Co.
Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
Slabond 523-C (Acetone based)	7.0	75.000%	75.0%	0.0%	0.0%	0.00%	0.14800	3.750	0.00	0.00	0.00	0.00	0.00	NA	100%
Richadh 2354	10.0	40.000%	0.0%	40.0%	0.0%	0.00%	0.14800	3.750	4.00	4.00	2.22	9.73	0.00	NA	100%

PM Control Efficiency: 0.00%

Total = Worst Case Adhesive

**Uncontrolled 2.22 9.73 0.00
Controlled 2.22 9.73 0.00**

The adhesive has no particulate emissions (100% transfer efficiency).

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hrs/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

HAPs emissions

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % MDI	MDI Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Richadh 2354	10.0	0.14800	3.750	20.00%	4.87	4.87

4.87 4.87

METHODOLOGY

Slabond 523-C contains no HAPs

HAPs emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emissions Calculations
VOC, HAP and Particulate
From Ink Stamping Lines EU-6.1 and EU-6.2**

**Company Name: Carpenter Co.
Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
EU-6.1															
Ink 1	6.91	100.00%	0.00%	100.0%	0.00%	0.00%	0.0410	1.00	6.91	6.91	0.28	1.24	0.00	N/A	100%
Ink 2	6.71	100.00%	0.00%	100.0%	0.00%	0.00%	0.0120	1.00	6.71	6.71	0.08	0.35	0.00	N/A	100%
EU-6.2															
Ink 1	6.91	100.00%	0.00%	100.0%	0.00%	0.00%	0.0410	1.00	6.91	6.91	0.28	1.24	0.00	N/A	100%
Ink 2	6.71	100.00%	0.00%	100.0%	0.00%	0.00%	0.0120	1.00	6.71	6.71	0.08	0.35	0.00	N/A	100%

PM Control Efficiency: 0.00%

Total = Sum of all inks

Uncontrolled: 0.73 3.19 0.00
Controlled: 0.73 3.19 0.00

METHODOLOGY

- Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
- Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
- Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
- Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) *
- Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) *
- Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1
- Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Chromium	Chromium Emissions (ton/yr)
EU-6.1					
Ink 1	6.91	0.041000	1.00	6.00%	0.074
Ink 2	6.71	0.012000	1.00	0.00%	0.000
EU-6.2					
Ink 1	6.91	0.041000	1.00	6.00%	0.074
Ink 2	6.71	0.012000	1.00	0.00%	0.000

0.149

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Company Name: Carpenter Co.

Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516

Permit Number: T 039-31756-00086

Reviewer: Madhurima Moulik

Date: July 25, 2012

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
30.4	1000	266.0

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons	0.3	1.0	1.0	0.1	13.3	0.7	11.2

*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

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

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MI

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

HAPs Emissions

Company Name: Carpenter Co.

Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516

Permit Number: T 039-31756-00086

Reviewer: Madhurima Moulik

Date: July 25, 2012

HAPs - Organics					
Emission Factor in lb/MMc	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons	2.793E-04	1.596E-04	9.973E-03	2.394E-01	4.521E-04

HAPs - Metals					
Emission Factor in lb/MMc	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons	6.649E-05	1.463E-04	1.862E-04	5.053E-05	2.793E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

See Page 3 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations

Natural Gas Combustion Only

MM BTU/HR <100

Greenhouse Gas Emissions

Company Name: Carpenter Co.

Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516

Permit Number: T 039-31756-00086

Reviewer: Madhurima Moulik

Date: July 25, 2012

Emission Factor in lb/MMc	Greenhouse Gas		
	CO2	CH4	N2O
120,000	2.3	2.2	
Potential Emission in tons	15,957	0.3	0.3
Summed Potential Emissions in tons/yr	15,958		
CO2e Total in tons/yr	16,054		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP

updated 7/11

VOC and Particulate
From Closed Mold Polyurethane Foam Operations EU-5.1 and EU-5.2

Company Name: Carpenter Co.
Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Flash Off %	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (lb/hour)	Potential VOC (ton/year)	Particulate Potential (ton/year)	lb VOC/gal solids	Transfer Efficiency
Release Agent RCT - B1208	6.40	96.5%	0.00%	96.5%	0.00%	7.00%	100%	0.006	400	6.18	6.18	14.8	64.9	0.589	88.2	75.0%
Part A Blend																
Isocyanate NPU 586203	10.0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00002%	0.031	400	0.00	0.00	0.00	0.00	0.00	N/A	100%
Isocyanate	10.16	0.00%	0.00%	0.00%	0.00%	0.00%	0.005%	0.121	400	0.00	0.00	0.00	0.00	0.00	N/A	100%
Fire Retardant	12.7	0.010%	0.00%	0.010%	0.00%	0.00%	0.00%	0.011	400	0.00	0.00	0.00	0.00	0.00	N/A	100%
Part B Blend																
Carpol GP 5015	8.50	0.050%	0.050%	0.00%	0.00%	0.00%	0.00%	0.249	400	0.00	0.00	0.00	0.00	0.00	N/A	100%
Arcol E-519	8.83	0.040%	0.040%	0.00%	0.040%	28.0%	0.00%	0.113	400	0.00	0.00	0.00	0.00	0.00	0.00	100%
Surfactant	8.39	0.300%	0.00%	0.300%	2.70%	0.00%	0.00%	0.004	400	0.026	0.025	0.00	0.00	0.00	N/A	100%
Cross-Linker	9.00	100%	15.5%	84.5%	16.7%	0.00%	0.001%	0.006	400	9.13	7.61	0.00	0.00	0.00	N/A	100%
Catalyst	8.66	100%	0.00%	100%	0.00%	0.00%	0.00%	0.001	400	8.66	8.66	0.00	0.00	0.00	N/A	100%
Catalyst	8.66	100%	2.70%	97.3%	2.80%	0.00%	0.00%	0.002	400	8.67	8.43	0.00	0.00	0.00	N/A	100%
Catalyst	9.50	0.200%	0.200%	0.00%	0.200%	0.00%	0.00%	0.00	400	0.00	0.00	0.00	0.00	0.00	N/A	100%

PM Control Efficiency: 0.00%

Uncontrolled 14.8 64.9 0.589
Controlled 14.8 64.9 0.589

Calculations are based on the worst case potential to emit catalyst and TDI-80 mixtures.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Flash Off (%) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Flash Off (%) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Flash Off (%) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

HAP Emissions

From Closed Mold Polyurethane Foam Operations EU-5.1 and EU-5.2

Company Name: Carpenter Co.

Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516

Permit Number: T 039-31756-00086

Reviewer: Madhurima Moulik

Date: July 25, 2012

Toluene Diisocyanate (TDI):

Polyurethane foam industry TDI emission factor = 50 lbs TDI / 1,000,000 lbs = 0.00005

Density of Isocyanate (lb/gal)	Weight % TDI	Gal of Mat (gal/unit)	Maximum (unit/hr)	Potential HAP Emissions (tons/yr)
10.16	0.810	0.121	400	0.087

Diethanolamine (DEOA):

Polyurethane foam industry DEOA emission factor = 10 lbs TDI / 1,000,000 lbs = 0.00001

Density of Cross-Linker (lb/gal)	Weight % DEOA	Gal of Mat (gal/unit)	Maximum (unit/hr)	Potential HAP Emissions (tons/yr)
10.16	0.870	0.006	400	0.001

4-4 Methylenediphenyl Diisocyanate (MDI):

MDI Vapor Pressure (mm Hg)	Barometric Pressure (mm Hg)	Number of Molds	Mold Volume (ft ³)	Saturated Vapor Pressure (SVC)ppm	Saturated Vapor Pressure (SVC)lbs/ft ³	Total Volume of Mold ft ³ /mold	Total MDI Released per Mold (lbs/mold)	Total MDI Released per Year (tons/yr)
1400	760.00	2	2	1.84	0.000001	4.00	0.000005	0.0002

Emission Factors taken from "MDI / Polymeric MDI Reporting Guidelines for the Polyurethane Industry: for Section 313 of EPCRA and State Reporting (Completing EPA's Form R)"

METHODOLOGY

Potential HAP Emissions (tons/yr) = Density (lb/gal) x Weight % HAP x Gallons of Material (gal/unit) x Maximum (unit/hr) x Emission Factor x (8760 hrs / year) x (ton / 2000 lbs)

Saturated Vapor Pressure (SVC)ppm = HAP Vapor Pressure (mm Hg) / Barometric Pressure (mm Hg)

Saturated Vapor Pressure (SVC)lbs/ft³ = Saturated Vapor Pressure (SVC)ppm x (10.2mg / M³ MDI / 1 part per million) x (2.2lb/1,000,000mg) x (1M³ / 35.31ft³)

Total Volume of Mold (ft³/mold) = Number of Molds x Mold Volume (ft³)

Total MDI Released per Mold (lbs/mold) = Saturated Vapor Pressure (SVC)lbs/ft³ x Total Volume of Mold (ft³/mold)

Total MDI Release per Year (tons/yr) = Total MDI Released per Mold (lbs/mold) x (1 mold / 8.13 min) x (60 min/hr) x (8760 hrs/yr) (1 ton / 2,000 lbs)

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
Insignificant Activities

Company Name: Carpenter Co.
Address, City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012

Heat Input Capacity Potential Throughput S = Weight % Sulfur
MMBtu/hr kgals/year 0.5

2 125.14

Emission Factor in lb/kgal	Pollutant						
	PM*	PM10	direct PM2.5	SO2	NOx	VOC	CO
	2.0	2.3	1.6	78.5 (157S)	24.0	0.20	5.0
Potential Emission in tons/yr	0.1	0.1	0.1	4.9	1.5	0.0	0.3

Methodology

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
Insignificant Activities

Company Name: Carpenter Co.
Address, City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012

HAPs - Metals					
Emission Factor in lb/mmBtu	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	3.50E-05	2.63E-05	2.63E-05	2.63E-05	7.88E-05

HAPs - Metals (continued)				
Emission Factor in lb/mmBtu	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	2.63E-05	5.26E-05	2.63E-05	1.31E-04

Methodology

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)*Emission Factor (lb/mmBtu)*8,760 hrs/yr / 2,000 lb/ton

See Page 3 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)
#1 and #2 Fuel Oil
Insignificant Activities

Company Name: Carpenter Co.
Address, City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012

	Greenhouse Gas		
	CO2	CH4	N2O
Emission Factor in lb/kgal	21,500	0.216	0.26
Potential Emission in tons/yr	1,345	0.0	0.0
Summed Potential Emissions in tons/yr	1,345		
CO2e Total in tons/yr	1,351		

Methodology

The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.

Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Emission (tons/yr) = Throughput (kgals/ yr) x Emission Factor (lb/kgal)/2,000 lb/ton

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

fo1&2ind.xls 9/95

updated 7/11

Appendix A: Emissions Calculations
Particulate Emissions
From Insignificant Non-Woven Fiber Line (IS-3)

Company Name: Carpenter Co.
Address City IN Zip: 195 County Road 15 South, Elkhart, Indiana 46516
Permit Number: T 039-31756-00086
Reviewer: Madhurima Moulik
Date: July 25, 2012

Run Time (minutes)	60.0
Pounds of Matted Fiber Produced on the Run Time	2500
Production Rate (lbs/hr)	2500
Dust Collected During Production Run (lbs)	1.74
Total Pounds of Dust Generated During Production Run (lbs)	1.78
Filter Efficiency	98.0%
Pounds of Dust Generated per Hour (lbs/hr)	1.78
Pounds of Dust Generated per Pound of Material Produced (lb/lb)	0.071%
% PM Greater than 100 Microns	43.4%
Uncontrolled PM Potential to Emit (tons/yr)	3.38
Controlled PM Potential to Emit (tons/yr)	0.068

METHODOLOGY

Production Rate (lbs/hr) = (Pounds of Matted Fiber Produced on the Run Time / Production Rate (lbs/hr)) x Run Time (minutes)

Total Pounds of Dust Generated During Production Run = Dust Collected During Production Run (lbs) / Filter Efficiency

Pounds of Dust Generated per Hour (lbs/hr) = Total Pounds of Dust Generated During Production Run (lbs) x Run Time (min) / (60 minutes/hr)

Pounds of Dust Generated per Pound of Material Produced (lb/lb) = Production Rate (lbs/hr) / Pounds of Dust Generated per Hour (lbs/hr)

% PM Greater than 100 Microns determined through a sieve analysis

Uncontrolled PM Potential to Emit (tons/yr) = Total Pounds of Dust Generated During Production Run (lbs) x % of PM Greater than 100 Microns x (8760 hrs/yr) x (1 ton / 2000 lbs)

Controlled PM Potential to Emit (tons/yr) = Uncontrolled PM Potential to Emit (tons/yr) x (1-Filter Efficiency)

**Appendix A: Emissions Calculations
VOC and Particulate**

From Insignificant Closed Mold Polyurethane Foam Turnstile Production Processes

Company Name: **Carpenter Co.**
 Address City IN Zip: **195 County Road 15 South, Elkhart, Indiana 46516**
 Permit Number: **T 039-31756-00086**
 Reviewer: **Madhurima Moulik**
 Date: **July 25, 2012**

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
EU-5.3																
Release agent PURA 11180W	8.26	85.45%	85.45%	0.0%	84.70%	14.55%	0.0117	216	0.00	0.00	0.00	0.00	0.00	2.00	0.00	85%

There are no VOC or HAPs in this water based material.

PM Control Efficiency: 0.00%

Uncontrolled 0.00 0.00 0.00 2.00
Controlled 0.00 0.00 0.00 2.00

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
EU-5.4																
Release agent PURA 11180W	8.26	85.45%	85.45%	0.0%	84.70%	14.55%	0.0117	216	0.00	0.00	0.00	0.00	0.00	2.00	0.00	85%

There are no VOC or HAPs in this water based material.

PM Control Efficiency: 0.00%

Uncontrolled 0.00 0.00 0.00 2.00
Controlled 0.00 0.00 0.00 2.00

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
EU-5.5																
Release agent PURA 11180W	8.26	85.45%	85.45%	0.0%	84.70%	14.55%	0.0117	216	0.00	0.00	0.00	0.00	0.00	2.00	0.00	85%

There are no VOC or HAPs in this water based material.

PM Control Efficiency: 0.00%

Uncontrolled 0.00 0.00 0.00 2.00
Controlled 0.00 0.00 0.00 2.00

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Jen Holmes
Carpenter Co.
195 CR 15 S
Elkhart, IN 46516

DATE: November 15, 2012

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

SUBJECT: Final Decision
Title V - Renewal
039 - 31756 - 00086

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Jacob Fife, Division Mgr
Jim Heim Bruce Carter Associates
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

November 15, 2012

TO: Elkhart Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Carpenter Co.
Permit Number: 039 - 31756 - 00086

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 11/15/2012 Carpenter Co. 039 - 31756 - 00086 final)		Type of Mail: CERTIFICATE OF MAILING ONLY	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	Handing 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		Jen Holmes Carpenter Co. 195 CR 15 S Elkhart IN 46516 (Source CAATS) Via confirmed delivery									
2		Jacob Fife Division Mgr Carpenter Co. 195 CR 15 S Elkhart IN 46516 (RO CAATS)									
3		Elkhart City Council and Mayors Office 229 South Second Street Elkhart IN 46516 (Local Official)									
4		Elkhart Public Library 300 S 2nd St Elkhart IN 46516-3184 (Library)									
5		Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 (Health Department)									
6		Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 (Local Official)									
7		Jim Heim Bruce Carter Associates 616 South 4th Street Elkhart IN 46516 (Consultant)									
8											
9											
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14											
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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 Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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