



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

October 13, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant
RE: Carpenter Company / 039-19327-00086
FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days from the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-AM.dot 9/16/03

October 13, 2004

Jay Miller
Carpenter Co.
P.O. Box 2386
Elkhart IN 46515-2386

Re: 039-19327-00086
Sixth Administrative Amendment to
Part 70 Permit 039-6059-00086

Dear Mr. Miller:

Carpenter Co. was issued a Part 70 operation permit on June 11, 1999 for a block foam manufacturing plant located at 195 County Road 15, Elkhart IN 46515-9785. A letter requesting a change was received on June 30, 2004.

Specifically, Carpenter Company has submitted an application to add one (1) closed mold polyurethane foam turnstile production process, identified as EU-5.3, with all emissions exhausted through Stack V36.

The proposed changes will not cause an increase in production or emissions from any existing emission units. Therefore, the emissions generated due to the proposed changes are the emissions from the proposed foam production process.

The emissions generated by the proposed process are PM and PM10 emissions generated by applying mold release. There are no particulate matter, volatile organic compound (VOC) or hazardous air pollutant (HAP) emissions associated with the other raw materials or final product.

The unrestricted potential PM and PM10 emissions are estimated to be 1.56 tons/yr each which are less than the 326 IAC 2-7-10.5(d)(4)(A) Minor Source Modification low end applicable level of 5 tons/yr.

Therefore, the source is not required to obtain a Minor Source Modification pursuant to 326 IAC 2-7-10.5(d) or a Significant Source Modification pursuant to 326 IAC 2-7-10.5(f).

Further, there are no new applicable requirements that are triggered and there are no changes to any existing requirements that are necessary. However, the source has requested that the proposed process be included in the permit. Therefore, the applicable unit description, Condition A.3, shall be changed from "Specifically Regulated Insignificant Activities" to simply "Insignificant Activities" with the proposed process added to the condition.

This proposed change is an administrative change. Therefore, the proposed line shall be incorporated into the permit via an administrative amendment pursuant to 326 IAC 2-7-11(a)(7) which states that changes which revise descriptive information where the revision will not trigger a new applicable requirement or violate a permit term may be incorporated into an existing Part 70 via an administrative amendment.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Scott Fulton, at (800) 451-6027, press 0 and ask for Scott Fulton or extension (3-5691), or dial (317) 233-5691.

Sincerely,

Original Signed by
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
SDF

cc: File - Elkhart County
U.S. EPA, Region V
Elkhart County Health Department
IDEM - Northern Regional Office
Air Compliance Section Inspector - Paul Karkiewicz
Compliance Data Section
Administrative and Development
Technical Support and Modeling - Michele Boner

PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

**Carpenter Co.
195 County Road 15 South
Elkhart, Indiana 46515**

(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.

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 and 326 IAC 2-1-3.2 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.: T039-6059-00086	Date Issued: June 11, 1999 Expiration Date: June 11, 2004
Issued by: Janet G. McCabe, Assistant Commissioner, Office of Air Quality	

1 st Significant Permit Modification: 039-14225-00086	Date Issued: August 14, 2001
1 st Administrative Amendment: 039-15274-00086	Date Issued: March 5, 2002
2 nd Administrative Amendment: 039-17257-00086	Date Issued: April 23, 2003
3 rd Administrative Amendment: 039-17761-00086	Date Issued: June 16, 2003
4 th Administrative Amendment: 039-17845-00086	Date Issued: January 21, 2004
2 nd Significant Permit Modification: 039-17958-00086	Date Issued: April 12, 2004
5 th Administrative Amendment: 039-18875-00086	Date Issued: April 27, 2004

6 th Administrative Amendment 039-19327-00086	Affected Pages: 2, 5 - 10
Issued by: Original Signed by Paul Dubenetzky, Branch Chief Office of Air Quality	Date Issued: October 13, 2004

TABLE OF CONTENTS

A SOURCE SUMMARY

- A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
- A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B GENERAL CONDITIONS

- B.1 Permit No Defense [326 IAC 2-1-10] [IC 13]
- B.2 Definitions [326 IAC 2-7-1]
- B.3 Permit Term [326 IAC 2-7-5(2)]
- B.4 Enforceability [326 IAC 2-7-7(a)]
- B.5 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
- B.6 Severability [326 IAC 2-7-5(5)]
- B.7 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.8 Duty to Supplement and Provide Information [326 IAC 2-7-4(b)] [326 IAC 2-7-5(6)(E)]
- B.9 Compliance with Permit Conditions [326 IAC 2-7-5(6)(A)] [326 IAC 2-7-5(6)(B)]
- B.10 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)]
- B.11 Annual Compliance Certification [326 IAC 2-7-6(5)]
- B.12 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)]
- B.13 Emergency Provisions [326 IAC 2-7-16]
- B.14 Permit Shield [326 IAC 2-7-15]
- B.15 Multiple Exceedances [326 IAC 2-7-5(1)(E)]
- B.16 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination
- B.18 Permit Renewal [326 IAC 2-7-4]
- B.19 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.20 Permit Revision Under Economic Incentives and Other Programs
- B.21 Changes Under Section 502(b)(10) of the Clean Air Act [326 IAC 2-7-20(b)]
- B.22 Operational Flexibility [326 IAC 2-7-20]
- B.23 Construction Permit Requirement [326 IAC 2]
- B.24 Inspection and Entry [326 IAC 2-7-6(2)]
- B.25 Transfer of Ownership or Operation [326 IAC 2-1-6] [326 IAC 2-7-11]
- B.26 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)]

C SOURCE OPERATION CONDITIONS

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

- C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]
- C.2 Particulate Matter Emission Limitations For Processes with Process Weight Rates
- C.3 Opacity [326 IAC 5-1]
- C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.6 Fugitive Dust Emissions [326 IAC 6-4]
- C.7 Operation of Equipment [326 IAC 2-7-6(6)]
- C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

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

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

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)]

The Permittee owns and operates a stationary source that produces soft block foam, chemical blending for customers, and cushion blocks.

Responsible Official: Tommy Stinson
Source Address: 195 Elkhart, IN 46515
Mailing Address: P.O. Box 2386, Elkhart, IN 46515
SIC Code: 3086, 2899
County Location: Elkhart
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Major Source, Section 112 of the Clean Air Act

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, consisting of a mixer, tunnel, foam block cut, and slab room, maximum production is 60,000 lbs of foam per hour exhausting through vents 14, 15, 16 and vent b through k.
- (b) One (1) laminate line, identified as EU-02A, for water based adhesive lamination of plastic and urethane foam, type of application is roll coating, emissions vented to Stack V32.
- (c) Three (3) adhesive stations with four (4) loop slitting process lines, identified as EU-02B, EU-02B:AOS-No.1 will include the use of UPACO Slabond 523 acetone based adhesive and EU-02B: AOS-No.2 will utilize UPACO 3694, an acetone and heptane based adhesive, coating Polyurethane foam, type of application is HVLP, having general ventilation emissions.
- (d) One (1) boiler, identified as EU-03, fueled by natural gas, rated at 12.55 MMBtu per hour, exhausting to stack identified as V6.
- (e) One (1) bonded foam line, identified as EU-04, consisting of the following equipment:
 - 1. grinding operation,
 - 2. pneumatic conveyor system,
 - 3. storage bins,
 - 4. foam dry mixer,
 - 5. wet mixer,
 - 6. molding unit, and
 - 7. storage operations.

- (f) Two (2) closed mold polyurethane foam turnstile production operation, identified as EU-5.1 and EU-5.2, with total of two (2) robotic high volume low pressure (HVLP) spray application, with maximum capacity of 37.0 lbs. release agent per hour, 808.30 pounds of Isocyanate and 1,550 pounds of polyols per hour, exhausting to stack V-34.
- (g) One (1) fixed roof above ground storage tank identified as MLD-1, for storage of Isocyanate, has the diameter, height and annual throughput as: 10 feet, 14 feet and 131,549 gallons per year respectively.
- (h) One (1) fixed roof above ground storage tank identified as MLD-2, for storage of Polyols-soft, has the diameter, height and annual throughput as: 10 feet, 14 feet, and 323,546 gallons per year respectively.
- (i) One (1) fixed roof above ground storage tank identified as MLD-3, for storage of Polyols-hard, has the diameter, height and annual throughput as: 10 feet, 14 feet, and 310,408 gallons per year respectively.
- (j) The following tanks are grouped into four general categories - Primary pour, Rebond pour, Molding, and Chemical Blending:

Facility Description [326 IAC 2-7-5(15)] : 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	3000	POLYOL	0	600,000
P2	12,500	10.5	19.5	3000	POLYOL	0	600,000
P3	12,500	10.5	19.5	3500	POLYOL	0	115,000
P4	12,500	10.5	19.5	3500	POLYOL	0	115,000
P5* CA	12,500	10.5	19.5	174	ISO	0.01	410,000
P6* CA	12,500	10.5	19.5	174	ISO	0.01	410,000
P7* CV	12,500	10.5	19.5	NA	EMPTY	NA	0
P8	4,890	8	15	NA	EMPTY	NA	0
P9	12,500	10.5	19.5	3000	POLYOL	0	130,000
P10	12,500	10.5	19.5	5000	POLYOL	0	115,000
P11	12,500	10.5	19.5	6500	POLYOL	0	150,000
P12	12,500	10.5	19.5	6500	POLYOL	0	150,000
P13	11,500	10.5	18	410	FR	NA	150,000
P14	12,000	10.5	18	NA	EMPTY	NA	0
P15	12,000	10.5	18	NA	EMPTY	NA	0
P16	12,000	10.5	18	NA	EMPTY	NA	0

P17	12,000	10.5	18	5000	POLYOL	0	115,000
P18	12,000	10.5	18	3000	POLYOL	0	130,000
P19	12,000	10.5	18	NA	EMPTY	NA	0
P20	12,000	10.5	18	NA	EMPTY	NA	0
P21* CA	12,000	10.5	18	174	ISO	0	410,000
P22* CA	12,000	10.5	18	174	ISO	0	410,000
P23	12,000	10.5	18	3500	POLYOL	0	115,000
P24	12,000	10.5	18	3500	POLYOL	0	115,000
P25	12,000	10.5	18	3000	POLYOL	0	600,000
P26	12,000	10.5	8	3000	POLYOL	0	600,000
P26A	3,000	8	8	3500	POLYOL	0	100,000

Notes: * Emission control device: conservation vents (CV), Nitrogen Blanket (N2), or Carbon Absorption bed filters (CA)
** Closed system

Facility Description [326 IAC 2-7-5(15)] : 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	30.5	5000	POLYOL	0	20,000
C2	28,500	12	34	6500	POLYOL	0	250,000
C3	11,500	8	30.5	285	FR	0.2	20,000
C4	11,500	8	30.5	575	EMPTY	NA	0
C5	11,500	8	30.5	575	POLYOL	0	5,000
C6	11,500	8	30.5	575	POLYOL	0	10,000
C7	11,500	8	30.5	575	POLYOL	0	10,000
C8	11,500	8	30.5	700	POLYOL	0	10,000
C9	11,500	8	30.5	5000	POLYOL	0	10,000
C10	11,500	8	30.5	575	POLYOL	0	5,000
C11	28,500	12	34	360	POLYOL	0	150,000
C12	11,500	8	30.5	575	POLYOL	0	5,000
C13**	11,500	8	30.5	116.8	ABA	132.9	50,000
C14	11,500	8	30.5	5000	POLYOL	0	50,000
C15	11,500	8	30.5	5000	POLYOL	0	5,000

C16	11,500	8	30.5	575	POLYOL	0	tanks combined C16 +C17 +
C17	11,500	8	30.5	575	POLYOL	0	C18
C18	11,500	8	30.5	575	POLYOL	0	100,000
C19	28,500	12	34	360	MDI	0	150,000
C20	11,500	8	30.5	NA	EMPTY	NA	Future polyol
C21	11,500	8	30.5	360	MDI	0	20,000
C22	11,500	8	30.5	360	MDI	0	20,000
C23 externally vented	11,500	8	30.5	174	ISO	0.01	30,000
C24	11,500	8	30.5	NA	EMPTY	NA	Future polyol
C25 externally vented	28,500	12	34	500	EXTENDE R	0.1	600,000
C26	11,500	8	30.5	5000	POLYOL	0	25,000
C27	11,500	8	30.5	NA	EMPTY	NA	Future polyol
C28	11,500	8	30.5	360	MDI	0	30,000
C29	11,500	8	30.5	538	BPOLYOL	0	10,000
C30	11,500	8	30.5	538	BPOLYOL	0	50,000
C31	11,500	8	30.5	538	BPOLYOL	0	10,000
C32	11,500	8	30.5	538	BPOLYOL	0	10,000
C33	11,500	8	30.5	174	A-PP	0	500,000
C34	11,500	8	30.5	2000	BPOLYOL	0	500,000
C35	11,500	8	30.5	538	BPOLYOL	0	Future polyol
C36	11,500	8	30.5	538	BPOLYOL	0	Future polyol
C37	28,500	12	34	360	MDI	0	150,000
C38**	12,000	9	41	120.8	ABA	0	10,000

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

** Closed system

Facility Description [326 IAC 2-7-5(15)] : Rebond tanks EU-4

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
R1	6,500	8	17.3	174	ISO-PP	0.01	500,000***
R2	4,000	8	10	174	ISO-PP	0.01	500,000***

Notes: * Emission control device, CV, N2, or CA
 ** Closed System
 ISO-PP - Isocyanate Prepolymer
 *** R1 and R2 cascade from one tank to the next for a TOTAL throughput of 500,000 gallons.
 These tanks are vented through only one (1) vent.

Facility Description [326 IAC 2-7-5(15)] : Mold Tanks EU-05

Fixed Roof Cone Storage Tanks	Storage Capacity (gallons)	Diameter (feet)	Height (feet)	Vapor MW	Containing	VP (mmHg)	Annual Throughput gallons
MLD 1	8,200	10	14	195	B POLY	0.01	131,549
MLD2	8,200	10	14	5000	BPOLY	0	323,546
MLD3	8,200	10	14	5000	ISO	0	310,408

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

A.3 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 Btu/hr.
 One (1) boiler, fueled by natural gas, rated at 8.36 MMBtu per hour, exhausting to a stack.
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (c) One (1) Non-Woven Fiber Line with a capacity of 2500 pounds per hour. This line mechanically processes purchased fibers to produce a fiber web. These fibers are specially designed to soften at a certain temperature to “thermo bond” the fibers together which is accomplished by running the “crossed lapped” batt through 6.0 million British thermal units per hour (mmBtu/hr) natural gas fired oven.
- (d) One (1) closed mold polyurethane foam turnstile production process, identified as EU-5.3, with all emissions exhausted through Stack V36.

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).

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for an Administrative Amendment to an Existing Part 70 Permit

Source Background and Description

Source Name:	Carpenter Company
Source Location:	195 County Road 15 South, Elkhart, Indiana 46515
County:	Elkhart
SIC Code:	3086
Part 70 Permit No.:	039-6059-00086
Date Issued:	June 11, 1999
Administrative Amendment No.:	039-19327-00086
Permit Reviewer:	SDF

The Office of Air Quality (OAQ) has reviewed an application from Carpenter Company relating to the operation of their existing soft block foam, chemical blend, and cushion block manufacturing operation.

Request

Specifically, on June 30, 2004, Carpenter Company submitted an application to add one (1) closed mold polyurethane foam turnstile production process, identified as EU-5.3, with all emissions exhausted through Stack V36.

The proposed changes will not cause an increase in production or emissions from any existing emission units. Therefore, the emissions generated due to the proposed changes are the emissions from the proposed foam production process.

The emissions generated by the proposed process are PM and PM10 emissions generated by applying mold release. There are no particulate matter, volatile organic compound (VOC) or hazardous air pollutant (HAP) emissions associated with the other raw materials or final product.

The unrestricted potential PM and PM10 emissions are estimated to be 1.56 tons/yr each which are less than the 326 IAC 2-7-10.5(d)(4)(A) Minor Source Modification low end applicable level of 5 tons/yr.

Therefore, the source is not required to obtain a Minor Source Modification pursuant to 326 IAC 2-7-10.5(d) or a Significant Source Modification pursuant to 326 IAC 2-7-10.5(f).

Further, there are no new applicable requirements that are triggered and there are no changes to any existing requirements that are necessary. However, the source has requested that the proposed process be included in the permit. Therefore, the applicable unit description, Condition A.3, shall be changed from "Specifically Regulated Insignificant Activities" to simply "Insignificant Activities" with the proposed process added to the condition.

This proposed change is an administrative change. Therefore, the proposed line shall be incorporated into the permit via an administrative amendment pursuant to 326 IAC 2-7-11(a)(7) which states that changes which revise descriptive information where the revision will not trigger a new applicable requirement or violate a permit term may be incorporated into an existing Part 70 via an administrative amendment.

Existing Approvals

Carpenter Company has been operating under Part 70 permit 039-6059-00086, issued on June 11, 1999, and the following subsequent approvals:

(a) First Minor Source Modification	039-12641-00086	Date Issued:	October 16, 2000
(b) First Significant Permit Modification	039-14225-00086	Date Issued:	August 14, 2001
(c) First Reopening	039-13216-00086	Date Issued:	November 26, 2001
(d) Second Minor Source Modification	039-13216-00086	Date Issued:	November 26, 2001
(e) First Administrative Amendment	039-15274-00086	Date Issued:	March 5, 2002
(f) Second Administrative Amendment	039-17257-00086	Date Issued:	April 23, 2003
(g) Third Administrative Amendment	039-17761-00086	Date Issued:	June 16, 2003
(h) Fourth Administrative Amendment	039-17845-00086	Date Issued:	January 21, 2004
(i) Second Significant Permit Modification	039-17958-00086	Date Issued:	April 12, 2004
(j) Fifth Administrative Amendment	039-18875-00086	Date Issued:	April 27, 2004

Recommendation

The staff recommends to the Commissioner that the administrative amendment 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.

Emission Calculations

The proposed foam production process is an independent process. Therefore, the emissions generated by the proposed modification are the proposed foam production process emissions.

The following calculations determine the unrestricted potential emissions and the estimated emissions after controls.

Unrestricted Potential Emissions:

The following calculations determine the unrestricted potential PM and PM10 emissions based on a release agent density of 8 lb/gal, maximum weight percent volatile content of 75%, maximum release agent application rate of 1.19 gal/hr, a transfer efficiency of 85%, emissions before controls, and 8760 hours of operation.

$$\text{lb/gal} * \text{gal/hr} * (1 - \text{wt\% volatiles}) * (1 - \text{transfer efficiency}) * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb} = \text{tons PM/yr}$$

$$8 \text{ lb/gal} * 1.19 \text{ gal/hr} * (1 - 0.75) * (1 - 0.85) * 8760 \text{ hr/yr} * 1/2000 \text{ ton/lb} = 1.56 \text{ tons PM/yr}^*$$

* PM10 is determined to be equal to PM in this case.

Emissions After Controls:

The proposed foam production process emissions are uncontrolled. Therefore, the emissions after controls are equal to the estimated emissions before controls.

Unrestricted Potential Emissions Due to the Proposed Changes

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

This table reflects the PTE due to the proposed changes before controls, limits, and standards. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	1.56
PM ₁₀	1.56
SO ₂	-
VOC	-
CO	-
NO _x	-

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
Worst Case Single HAP	-
Combined HAPs	-

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
1-hour Ozone	attainment
8-hour Ozone	nonattainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as nonattainment for the 8-hour ozone standard.

Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for nonattainment new source review.

- (b) Elkhart County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Existing Source Emissions

Existing source emissions (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited), as obtained from the Technical Support Documents (TSD) of the existing source Part 70 permit and all subsequent issued approvals:

Permit	Permit #	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
TV	6059	17.4	14.4	0.0	11.4	142.0	0.0	>10	>25
APM	14225	0.07	0.09	neg.	2.6	0.1	2.2	neg.	neg.
AA	15274	-	-	-	-	-	-	-	-
AA	17257	-	-	-	-	-	-	-	-
AA	17761	-	-	-	-	-	-	-	-
AA	17845	-	-	-	-	-	-	-	-
SPM	17958	-	-	-	-	38.6	-	<10	<25
AA	18875	-	-	-	-	-	-	-	-
Total		17.5	14.5	neg.	14.0	180.7	2.2	>10	>25

PSD Major Levels	250	250	250	250	100	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

- (a) The above emissions have been obtained from the technical support documents of all active issued approvals. Due to the limited information provided in these technical support documents, it is noted that the listed emissions are the best estimate of the existing source emissions which in this case are only used to define the source status and source status after the proposed changes and that the pending Part 70 renewal (039-17988-00086) should be used to obtain a more accurate assessment of the source emissions.
- (b) The existing source is a major PSD stationary source because the source VOC emissions are, after all applicable limits and standards, greater than the major source applicable level of 100 tons per year.
- (c) This source is a Title V major stationary source because the VOC emissions exceed the applicable level of 100 tons/yr and the single and combined HAP emissions exceed their respective applicable levels of 10 and 25 tons per year.

Emissions After the Proposed Changes

Source emissions after the proposed changes (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Unit	PM (tons/yr)	PM10 (tons/yr)	SO2 (tons/yr)	NOx (tons/yr)	VOC (tons/yr)	CO (tons/yr)	Worst Case Single HAP (tons/yr)	Comb. HAPs (tons/yr)
Source	17.5	14.5	neg.	14.0	180.7	2.2	>10	>25
Changes	1.56	1.56	-	-	-	-	-	-
	19.1	16.1	neg.	14.0	180.7	2.2	>10	>25
PSD Major Levels	250	250	250	250	100	250	-	-
Part 70 Major Levels	-	100	100	100	100	100	10	25

- (a) This source after the proposed modification is still a major PSD stationary source because the source VOC emissions are still greater than the major source level of 100 tons per year.
- (b) The source after the proposed modification is still a Title V major stationary source because the VOC emissions still exceed the applicable level of 100 tons/yr and the single and combined HAP emissions still exceed their respective applicable levels of 10 and 25 tons per year.

Federal Rule Applicability

The proposed changes do not trigger any new applicable federal rules and do not affect any of the existing applicable federal requirements.

State Rule Applicability - Entire Source

The proposed changes do not trigger any new entire source state rules and do not affect any of the existing entire source state rules.

State Rule Applicability - Individual Facilities

The proposed changes do not affect any of the existing individual facility state rules. The only new individual facility state rule that may apply is 326 IAC 6-3-2.

326 IAC 6-3-2:

The proposed foam production process is not subject to the requirements of 326 IAC 6-3-2 because the process hourly PM emission rate 0.36 lb/hr, is less than the 326 IAC 6-3-1(b)(14) applicable exempt level of 0.551 lb PM/hr.

$$1.56 \text{ tons PM/yr} * 1/8760 \text{ yr/hr} * 2000 \text{ lb PM/ton PM} = 0.36 \text{ lb PM/hr}$$

Changes to the Permit

The header of Condition A.3 shall be changed from “Specifically Regulated Insignificant Activities” to simply “Insignificant Activities” so that the proposed process (which doesn’t have any applicable requirements) can be added to the insignificant activities list.

In addition, the proposed process shall be added to the list.

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 Btu/hr.

One (1) boiler, fueled by natural gas, rated at 8.36 MMBtu per hour, exhausting to a stack.

(b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.

(c) One (1) Non-Woven Fiber Line with a capacity of 2500 pounds per hour. This line mechanically processes purchased fibers to produce a fiber web. These fibers are specially designed to soften at a certain temperature to "thermo bond" the fibers together which is accomplished by running the "crossed lapped" batt through 6.0 million British thermal units per hour (mmBtu/hr) natural as fired oven.

(d) One (1) closed mold polyurethane foam turnstile production process, identified as EU-5.3, with all emissions exhausted through Stack V36.

Conclusion

The owner or operator shall construct and operate the proposed production process according to the applicable requirements of the existing source Part 70 permit, the other existing active source approvals, and Administrative Amendment 039-19327-00086.