



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant
DATE: October 23, 2007
RE: Elixir Industries / 039-24247-00660
FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

Notice of Decision – Approval

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

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

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

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

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

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

Enclosures
FNPER-AM.dot 03/23/06



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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October 23, 2007

Mr. Chaney Newland
Elixir Industries
640 Collins Road
Elkhart, IN 46516

Re: Exempt Operation Status,
039-24247-00660

Dear Mr. Chaney Newland:

The application from Elixir Industries, received on January 24, 2007, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following manufacturer of butyl tapes and roof coatings, located at 640 Collins Road, Elkhart, Indiana, is classified as exempt from air pollution permit requirements:

- (a) Two (2) natural gas-fired boilers (identified as B1 and B2), constructed in 1979, each with a maximum heat input capacity of 2.35 MMBtu per hour and exhausting to stacks S1 and S2.
- (b) Three (3) sigma blade putty mixers (identified as PM1, PM2, and PM3), constructed in 1995, 1995, and 1996 respectively, each with a maximum capacity of 1,500 pounds per hour, and exhausting to stack S3 through one (1) dust collector identified as DC1. The dust collector was installed in 1981.
- (c) Two (2) roof coating singer blade mixers (identified as RC1 and RC2), constructed in 1979, each with maximum capacity of 4,450 pounds per hour, and exhausting to stack S4 through one (1) dust collector identified as DC2. The dust collector was installed in 1985.
- (d) One (1) roof coating paddle mixer (identified as RC3), constructed in 1979, with a maximum capacity of 4,100 pounds per hour.
- (e) Three (3) storage tanks (identified as ST1, ST2, and ST3), constructed in 1993, 1993, and 1994 respectively, with maximum capacities of 1,200, 1,200, and 6,500 gallons respectively. These tanks contain polybutane, alkyd resin, and tex-I-acryl.

The following conditions shall be applicable:

- (1) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following:
 - (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.
- (2) Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the owner/operator 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).
- (3) Pursuant to 326 IAC 6-2 (Particulate Emission Limitations for Sources of Indirect Heating) the allowable particulate emission rate from each boiler (identified as B1 and B2) shall not exceed 0.8 lb/MMBtu when each are operating at a maximum heat input capacity of 2.35 MMBtu.

This exemption is the first air approval issued to this source.

An application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Bryan Lange, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7854 to speak directly to Mr. Lange. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 or call (800) 451-6027, ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original document signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

ERG/BL

cc: File - Elkhart County
Elkhart County Health Department
Air Compliance
IDEM - Northern Regional Office
Permit Tracking
Compliance Data Section
Program Planning and Policy
Billing, Licensing, and Training Section

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

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	Elixir Industries
Source Location:	640 Collins Road, Elkhart, IN 46516
County:	Elkhart
SIC Code:	2952
Exemption No.:	E039-24247-00660
Permit Reviewer:	ERG/BL

The Office of Air Quality (OAQ) has reviewed an application from Elixir Industries relating to the operation of a plant manufacturing butyl tapes and roof coatings.

Emission Units and Pollution Control Equipment

The source consists of the following emission units:

- (a) Two (2) natural gas-fired boilers (identified as B1 and B2), constructed in 1979, each with a maximum heat input capacity of 2.35 MMBtu per hour and exhausting to stacks S1 and S2.
- (b) Three (3) sigma blade putty mixers (identified as PM1, PM2, and PM3), constructed in 1995, 1995, and 1996 respectively, each with a maximum capacity of 1,500 pounds per hour, and exhausting to stack S3 through one (1) dust collector identified as DC1. The dust collector was installed in 1981.
- (c) Two (2) roof coating singer blade mixers (identified as RC1 and RC2), constructed in 1979, each with maximum capacity of 4,450 pounds per hour, and exhausting to stack S4 through one (1) dust collector identified as DC2. The dust collector was installed in 1985.
- (d) One (1) roof coating paddle mixer (identified as RC3), constructed in 1979, with a maximum capacity of 4,100 pounds per hour.
- (e) Three (3) storage tanks (identified as ST1, ST2, and ST3), constructed in 1993, 1993, and 1994 respectively, with maximum capacities of 1,200, 1,200, and 6,500 gallons respectively. These tanks contain polybutane, alkyd resin, and tex-I-acryl.

Existing Approvals

This exemption will be the first issued to this source.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the operation 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.

A complete application for the purposes of this review was received on January 24, 2007.

Emission Calculations

See Appendix A of this document for detailed emission calculations in Appendix A, pages 1 and 5.

Potential to Emit Before Controls

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

Pollutant	Potential to Emit (tons/yr)
PM	1.18
PM-10	0.59
SO ₂	0.01
VOC	0.96
CO	1.70
NO _x	2.02

HAPs	Potential to Emit (tons/yr)
Hexane	0.04
Total Combined HAPs	0.04

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM, PM-10, SO₂, VOC, CO, and NO_x are less than the thresholds in 326 IAC 2-1.1-3(e). Therefore this source is subject to the provisions of 326 IAC 2-1.1-3.
- (b) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Status
PM-10	Attainment
PM 2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

Note: On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.

- (a) Elkhart County has been classified as attainment for PM_{2.5}. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM_{2.5} emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} emissions. See the State Rule Applicability - Entire Source section.
- (b) 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 the ozone standards. Elkhart County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3. See the State Rule Applicability - Entire Source section.
- (c) Elkhart County has been classified as attainment or unclassifiable in Indiana for PM-10, SO₂, NO₂, CO, and Lead. Therefore, these 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.
- (d) Fugitive Emissions
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 or 2-3 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	1.18
PM-10	0.59
SO ₂	0.01
VOC	0.96
CO	1.70
NO _x	2.02
Hexane	0.04
Combination HAPs	0.04

- (a) This existing source is not a major stationary source under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) This existing source is not a major stationary source under 326 IAC 2-3 (Emission Offset) because no nonattainment pollutant is emitted at a rate of 100 tons per year or greater.
- (c) These emissions were based on the application submitted by the company.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons per year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in this exemption.
- (b) The requirements of the NSPS, 40 CFR Part 60, Subpart D, Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971 (326 IAC 12) are not included in this exemption because the heat input of each boiler (2.35 MMBtu/hr each) is less than 250 MMBtu/hr.
- (c) The requirements of the NSPS, 40 CFR Part 60, Subpart Dc, Small Industrial-Commercial-Institutional Steam Generating Units (326 IAC 12) are not included in this exemption because the maximum design input capacity of each boiler is less than 10 MMBtu/hr. Both boilers were constructed prior to the applicability date of June 9, 1989.
- (d) The requirements of the NSPS, 40 CFR Part 60, Subpart Kb for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, (326 IAC 12), are not included in this exemption for the two (3) VOC storage tanks because these volatile organic liquid storage vessels have a capacity less than 75 cubic meters (19,813 gallons).

- (e) The requirements of the NSPS, 40 CFR Part 60, Subpart UU for Asphalt Processing and Asphalt Roofing Manufacture (326 IAC 12), are not included in this exemption. Elixir Industries does not meet the definition of an asphalt roofing plant provided in 40 CFR 60.471, and does not operate an asphalt storage tank.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this exemption.
- (g) The requirements of the NESHAP, 40 CFR Part 63, Subpart LLLLL for Asphalt Processing and Asphalt Roofing Manufacturing (326 IAC 20-31) are not included in this exemption. This source is not a major source of HAPs.
- (h) The requirements of the NESHAP, 40 CFR Part 63, Subpart U for Group I Polymers and Resins (326 IAC 20-31) are not included in this exemption. This source is not a major source of HAPs.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration), 326 IAC 2-3 (Emission Offset), and 326 IAC 2-1.1-5 (Nonattainment Area New Source Review)

This source was constructed in 1979 and is not one of the 28 listed source categories. This source is located in Elkhart County, which is currently in attainment for PM₁₀, SO₂, NO₂, CO, and Pb, and nonattainment for the 8-hour ozone standard. This source is not subject to 326 IAC 2-2, 326 IAC 2-3 or 326 IAC 2-1.1-5 because it is a minor source with emissions below the following thresholds:

- (a) The potential to emit CO, NO₂, and SO₂, are each less than 250 tons per year; and
- (b) The potential to emit VOC, and NO_x are each less than 100 tons per year.

326 IAC 2-4.1 (New Source Toxics Control)

The operation of Elixir Industries will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-6 (Emission Reporting)

This source is located in Elkhart County, is not required to operate under a Part 70 Permit, and does not have the potential to emit greater than or equal to five (5) tons per year of lead. Therefore, this source is subject only to the additional information requests under 326 IAC 2-6-5.

326 IAC 5-1 (Visible Emissions 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 6-4 (Fugitive Dust Emissions)

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 6-5 (Fugitive Particulate Matter Emission Limitations)

The source is located in Elkhart County and was constructed prior to December 13, 1985 and did not require a permit. Therefore, 326 IAC 6-5-1 does not apply.

State Rule Applicability – Boilers

326 IAC 7-1.1-1 (Sulfur Dioxide emission limitations)

The potential to emit of sulfur dioxide from each of the boilers is less than twenty-five (25) tons per year and ten (10) pounds per hour. Therefore, 326 IAC 7-1.1-1 does not apply to these units.

326 IAC 10-1-3 (Nitrogen Oxide requirements)

The source does not have a potential to emit equal to or more than one-hundred (100) tons of NO_x per year. Therefore, 326 IAC 10-1-3 does not apply to the boilers.

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

This source is subject to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating) because these sources of indirect heating (identified as B1 and B2) were constructed before the applicability date of September 21, 1983 for Section 4 of this rule. Therefore, Section 3 is applicable. Pursuant to 326 IAC 6-2-3(a), the particulate limit shall be calculated for all facilities in operation before September 21, 1983. Pursuant to 326 IAC 6-2-3(d), the particulate limit shall be the lesser of 0.8 lb/MMBtu and value using the equation below:

$$Pt = (C \times a \times h) / (76.5 \times Q^{0.75} \times N^{0.25}) = 2.88 \text{ lb/MMBtu}$$

Where C = 50 u/m³

Pt = pounds of particulate matter emitted per million Btu heat input (lb/MMBtu)

Q = total source maximum operating capacity rating (MMBtu/hr) (4.70 MMBtu/hr)

N = number of stacks (2 stacks)

a = plume rise factor (0.67)

h = stack height (ft) (25-feet each)

Pursuant to 326 IAC 6-2-3(d) the particulate limit shall be 0.8 lb/MMBtu for boilers B1 and B2.

State Rule Applicability – Mixers and Storage Tanks

326 IAC 8-1-6 (New facilities; general reduction requirements)

This source does not have potential VOC emissions equal to or greater than twenty five (25) tons per year, therefore this source is not subject to the provisions of 326 IAC 8-1-6.

Conclusion

The operation of this butyl tapes and roof coatings manufacturing plant shall be subject to the conditions of the Exemption 039-24247-00660.

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

Company Name: Elixir Industries
Address: 640 Collins Road, Elkhart, IN 46516
Exemption: 039-24247-00660
Reviewer: ERG/BL
Date: February 22, 2007

Heat Input Capacity *
MMBtu/hr
4.70

Potential Throughput
MMSCF/yr
40.4

Pollutant

	PM**	PM10**	SO ₂	NO _x ***	VOC	CO
Emission Factor (lb/MMSCF)	1.90	7.60	0.60	100	5.50	84.0
Potential to Emit (tons/yr)	0.04	0.15	0.01	2.02	0.11	1.70

*Two (2) 2.35 MMBtu/hr natural gas boilers

**PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM combined.

***Emission factor for NO_x (Uncontrolled) = 100 lb/MMSCF

Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July 1998).

All emission factors are based on normal firing.

Methodology

Potential Throughput (MMSCF/yr) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMSCF/1,020 MMBtu

Potential to Emit (tons/yr) = Potential Throughput (MMSCF/yr) x Emission Factor (lb/MMSCF) x 1 ton/2,000 lbs

**Appendix A: Emission Calculations
HAPs Emissions from Natural Gas Combustion
MM BTU/HR <100
Insignificant Combustion**

Company Name: Elixir Industries
Address: 640 Collins Road, Elkhart, IN 46516
Exemption: 039-24247-00660
Reviewer: ERG/BL
Date: February 22, 2007

HAPs - Organics

Emission Factor (lb/MMSCF)	Benzene 2.10E-03	Dichlorobenzene 1.20E-03	Formaldehyde 7.50E-02	Hexane 1.80E+00	Toluene 3.40E-03
Potential to Emit (tons/yr)	4.24E-05	2.42E-05	1.51E-03	0.04	6.86E-05

HAPs - Metals

Emission Factor (lb/MMSCF)	Lead 5.00E-04	Cadmium 1.10E-03	Chromium 1.40E-03	Manganese 3.80E-04	Nickel 2.10E-03
Potential to Emit (tons/yr)	1.01E-05	2.22E-05	2.83E-05	7.67E-06	4.24E-05

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors provided above are from AP-42, Chapter 1.4, Table 1.4-2, 1.4-3 and 1.4-4 (July, 1998). Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Appendix A: Emission Calculations
Product Mixing, VOC and PM**

Company Name: Elixir Industries
Address: 640 Collins Road, Elkhart, IN 46516
Exemption: 039-24247-00660
Reviewer: ERG/BL
Date: February 22, 2007

	Control Device	Max Capacity (lbs/hr)	Potential Throughput (tons/yr)	PM Emission Factor (lb/ton)	PM10 Emission Factor (lb/ton)	PTE of PM (tons/yr)	PTE of PM10 (tons/yr)
Putty mixer (PM1)	Dust collector (DC1)	1,500	6,570	0.039	0.015	0.128	0.049
Putty mixer (PM2)	Dust collector (DC1)	1,500	6,570	0.039	0.015	0.128	0.049
Putty mixer (PM3)	Dust collector (DC1)	1,500	6,570	0.039	0.015	0.128	0.049
Roof coating mixer (RC1)	Dust collector (DC2)	4,450	19,491	0.039	0.015	0.380	0.146
Roof coating mixer (RC2)	Dust collector (DC2)	4,450	19,491	0.039	0.015	0.380	0.146

Total

1.14

0.44

Some of the ingredients are a fine particulate, emissions were estimated from AP-42, Chapter 11.19.2 Crushed Stone Processing and Pulverized Mineral Processing, Table 11.19.2-2, Uncontrolled Fines Crushing (SCC 3-05-020-05).

Methodology

Potential Throughput (tons/yr) = Max. Capacity (lbs/hr) x 8,760 hrs/yr x 1 ton/2,000 lbs

Potential to Emit (tons/yr) = Potential Throughput (tons/yr) x Emission Factor (lb/ton) x 1 ton/2,000 lbs

**Appendix A: Emission Calculations
Storage Tanks**

Company Name: Elixir Industries
Address: 640 Collins Road, Elkhart, IN 46516
Exemption: 039-24247-00660
Reviewer: ERG/BL
Date: February 22, 2007

	Contains	Max Capacity (gallons)	Annual Througput (gallons)	PTE VOC * (tons/yr)
Storage tank (ST1)	polybutane	1,200	65,000	0.23
Storage tank (ST2)	alkyd resin	1,200	65,000	0.23
Storage tank (ST3)	tex-l-acryl	6,500	18,000	0.39
Total				0.85

* VOC emission were estimated using EPA's TANKS version 4.09D. To constitute a realistic maximum VOC emissions IDEM has used gasoline (RVP 10) because its vapor pressure is much greater than the vapor pressure of the actual liquids stored.

**Appendix A: Emission Calculations
Emissions Summary**

Company Name: Elixir Industries
Address: 640 Collins Road, Elkhart, IN 46516
Exemption: 039-24247-00660
Reviewer: ERG/BL
Date: February 22, 2007

Process/emission unit	Potential To Emit (tons/year)							
	PM	PM-10	SO ₂	VOC	CO	NOx	HAPs	Hexane
Natural Gas Combustion	0.04	0.15	0.01	0.11	1.70	2.02	0.04	0.04
Product Mixing	1.14	0.44	-	-	-	-	-	-
Storage Tanks	-	-	-	0.85	-	-	-	-
Total	1.18	0.59	0.01	0.96	1.70	2.02	0.04	0.04