



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: March 22, 2007  
RE: Huggy Bear Sunoco / 069-24329-00075  
FROM: Nisha Sizemore  
Chief, Permits Branch  
Office of Air Quality

### Notice of Decision: Approval - Registration

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 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

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 of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FN-REGIS.dot 03/23/06



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Indianapolis, Indiana 46204-2251  
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Mr. Gene Daggett  
Huggy Bear Sunoco  
904 Etna Avenue  
Huntington, Indiana 46750

March 22, 2007

Re: Registered Construction and Operation Status,  
069-24329-00075

Dear Mr. Daggett:

The application from Huggy Bear Sunoco received on February 9, 2007 has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-5.5, it has been determined that the following emission unit at a gas station, located at 904 Etna Avenue, Huntington, Indiana, 46750 is classified as registered:

One (1) multiple phase extraction system, identified as MPE-1, approved for construction in 2007, controlled by an electric catalytic oxidizer, which exhausts to stack MPE-1.

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 and /or operator of this source shall not generate fugitive dust to the extent that some portion of the material escapes 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).

This registration is the first air approval issued to this source. The source may operate according to 326 IAC 2-5.5.

An authorized individual shall provide an annual notice to the Office of Air Quality that the source is in operation and in compliance with this registration pursuant to 326 IAC 2-5.5-4(a)(3). The annual notice shall be submitted to:

**Compliance Data Section  
Office of Air Quality  
100 North Senate Avenue  
Indianapolis, IN 46204-2251**

no later than March 1 of each year, with the annual notice being submitted in the format attached.

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 Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 386-1024 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027, and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by  
Nisha Sizemore, Chief  
Permits Branch  
Office of Air Quality

ERG/YC

cc: File - Huntington County  
Huntington County Health Department  
Air Compliance Section Inspector - Ryan Hillman  
Compliance Data Section  
Administrative and Development  
Technical Support and Modeling - Michele Boner  
Billing, Licensing, and Training Section - Dan Stamatkin

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a Registration

### Source Background and Description

Source Name: Huggy Bear Sunoco  
Location: 904 Etna Avenue, Huntington, Indiana 46750  
County: Huntington  
SIC Code: 5172  
Registration No.: 069-24329-00075  
Permit Reviewer: ERG/YC

The Office of Air Quality (OAQ) has reviewed an application from Huggy Bear Sunoco relating to the construction and operation of a soil and water remediation system at a gas station.

### Permitted Emission Units and Pollution Control Equipment

There are no permitted emission units operating at this time.

### Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted emission units operating at this source during this review process.

### New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

One (1) multiple phase extraction system, identified as MPE-1, approved for construction in 2007, controlled by an electric catalytic oxidizer, which exhausts to stack MPE-1.

### Existing Approvals

There are no air approvals issued to this source.

### Enforcement Issue

There are no enforcement actions pending.

### Recommendation

The staff recommends to the Commissioner that the construction and 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.

An application for the purposes of this review was received on February 9, 2007. Additional information was received on February 28, 2007.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 and 2).

### Potential to Emit of the Source 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/year)
PM	--
PM10	--
SO <sub>2</sub>	--
VOC	10.0
CO	--
NO <sub>x</sub>	--

HAPs	Potential to Emit (tons/yr)
Xylene	1.51
Toluene	1.51
1,2,4-trimethylbenzene	0.50
Ethylbenzene	0.30
Benzene	0.35
Other HAPs	0.50
Total	4.67

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants is less than 100 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (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 (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.
- (c) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of all criteria pollutants is less than 25 tons per year. Therefore, the source is not subject to the provisions of 326 IAC 2-6.1(MSOP).
- (d) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of VOC is greater than or equal to 10 tons per year, the potential to emit of a single HAP is greater than 1.0 ton per year and the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of a combination of HAPs is greater than 2.5 tons per year year. Therefore, the source is not subject to the provisions of 326 IAC 2-1.1-3 (Exemptions).
- (e) Fugitive Emissions  
Since this type of operation is not in 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.

**County Attainment Status**

The source is located in Huntington County.

Pollutant	Status
PM10	Attainment
PM2.5	Attainment
SO <sub>2</sub>	Attainment
NO <sub>2</sub>	Attainment
8-hour Ozone	Attainment
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. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Huntington County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) Huntington County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.
- (c) Huntington County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Source Status**

New 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/year)
PM	--
PM10	--
SO <sub>2</sub>	--
VOC	10.0
CO	--
NO <sub>x</sub>	--

- (a) This new source is not a PSD major stationary source because no attainment regulated 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, the requirements of PSD do not apply.
- (b) These emissions are based on the potential to emit of this source (see Appendix A).

**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 registration.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in this registration.
- (c) This source does not have any equipment in benzene service, which is defined as a piece of equipment that either contains or is in contact with a fluid (liquid or gas) that is at least 10 percent benzene by weight. Therefore, the requirements of the National Emission Standard for Equipment Leaks (Fugitive Emission Sources) of Benzene (326 IAC 14, 40 CFR Part 61.110-112, Subpart J) are not applicable to this source.
- (d) Since this source is not subject to the requirements of 40 CFR 61, Subpart J, it is not subject to the requirements of the National Emission Standard for Equipment Leaks (326 IAC 14, 40 CFR Part 61.240-61.247, Subpart V).
- (e) This source is not a major source for HAPs. Therefore, the requirements of the National Emission Standard for Hazardous Air Pollutants: Site Remediation (326 IAC 20, 40 CFR Part 63.7880 – 63.7957, Subpart GGGGG) are not applicable.

### **State Rule Applicability – Entire Source**

#### **326 IAC 2-2 (Prevention of Significant Deterioration (PSD))**

The source will be constructed in 2007. This source will not be in 1 of 28 source categories and the potential to emit of PM and all criteria pollutants is less than 250 tons per year before control. Therefore, this source will be a PSD minor source and the requirements of 326 IAC 2-2 (PSD) are not applicable.

#### **326 IAC 2-4.1 (New Sources of Hazardous Air Pollutants)**

The source will be constructed in 2007. The potential to emit HAP from the entire source is less than 10 tons per year for a single HAP and less than 25 tons per year for total HAPs. Therefore, the requirements of 326 IAC 2-4.1 (MACT) are not applicable.

#### **326 IAC 2-6 (Emission Reporting)**

This source is located in Huntington County, is not required to operate under a Part 70 permit, and has potential lead emissions that are less than five (5) tons per year. Therefore, pursuant to 326 IAC 2-6-1(b), the source is only subject to additional information requests as provided in 326 IAC 2-6-5.

#### **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.

### **State Rule Applicability – Multiple Phase Extraction System (MPE-1)**

#### **326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)**

The potential VOC emissions from the proposed multiple phase extraction system are less than 25 tons per year. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

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

There are no particulate emissions from the proposed phase extraction system. Therefore, the requirements of 326 IAC 6-3-2 are not applicable.

#### **326 IAC 6-4 (Fugitive Dust Emissions)**

Pursuant to 326 IAC 6-4, the owner and /or operator of this source shall not generate fugitive dust to the extent that some portion of the material escapes 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 Emissions Limitations)**

Although constructed after December 13, 1985, the provisions of 326 IAC 6-5 do not apply to this source because the only source of fugitive dust is from paved roads.

### **Conclusion**

The construction and operation of this soil and water remediation system at a gas station shall be subject to the conditions of the Registration No.: 069-24329-00075.

**Appendix A: Emission Calculations**  
**VOC Emissions**  
**From the Multiple Phase Extraction (MPE) System**

**Company Name: Huggy Bear Sunoco**  
**Address: 904 Etna Ave., Huntington, IN 46750**  
**Registration: 069-24329-00075**  
**Reviewer: ERG/YC**  
**Date: March 9, 2007**

**1. Potential to emit (PTE) of VOC from the floating leaked gasoline:**

Max. Free Gasoline Collected: 2,842 gal/yr (estimated by the source)  
 Gasoline Density: 6.80 lbs/gal

$$\text{PTE of VOC (tons/yr)} = 2,842 \text{ gal/yr} \times 6.8 \text{ lbs/gal} \times 1 \text{ ton}/2000 \text{ lbs} = \mathbf{9.66 \text{ tons/yr}}$$

**2. Potential to emit (PTE) of VOC from the groundwater treated:**

Max. Contaminated Water: 2,438,400 gal/yr (estimated by the source)  
 Max. VOC Concentration: 37.2 ppm (provided by the source based on the results of groundwater analysis conducted on 11/06/06)  
 Water Density: 8.34 lbs/gal

$$\text{PTE of VOC (tons/yr)} = 2,438,400 \text{ gal/yr} \times 8.34 \text{ lbs/gal} \times 37.2 \text{ ppm}/1,000,000 \times 1 \text{ ton}/2000 \text{ lbs} = \mathbf{0.38 \text{ tons/yr}}$$

**3. Potential to emit (PTE) of VOC from the contaminated soil:**

Max. Gasoline Absorbed in the Soil: 1.37 gal/yr (estimated by the source)  
 Gasoline Density: 6.80 lbs/gal

$$\text{PTE of VOC (tons/yr)} = 1.37 \text{ gal/yr} \times 6.80 \text{ lbs/gal} \times 1 \text{ ton}/2000 \text{ lbs} = \mathbf{4.66E-03 \text{ tons/yr}}$$

**4. Total PTE of VOC for the MPE System before Control :**

$$\text{PTE of VOC for the MPE (tons/yr)} = 9.66 \text{ tons/yr} + 0.38 \text{ tons/yr} + 0.005 \text{ tons/yr} = \mathbf{10.0 \text{ tons/yr}}$$

**Appendix A: Emission Calculations  
HAP Emissions  
From the Multiple Phase Extraction System (MPE)**

**Company Name: Huggy Bear Sunoco  
Address: 904 Etna Ave., Huntington, IN 46750  
Registration: 069-24329-00075  
Reviewer: ERG/YC  
Date: March 9, 2007**

**Potential to Emit VOC = 10.0 tons/yr (from page 1 of Appendix A)**

HAP	Weight %	PTE of HAP (tons/yr)
Xylene	15.0%	1.51
Toluene	15.0%	1.51
1,2,4-trimethylbenzene	5.00%	0.50
Ethylbenzene	3.00%	0.30
Benzene	3.50%	0.35
Other HAPs	5.00%	0.50
<b>Total</b>		<b>4.67</b>

**METHODOLOGY**

PTE of HAP (tons/yr) = PTE of VOC (tons/yr) x Weight % of HAP