



TO: Interested Parties / Applicant

RE: Admiral Petroleum - former Clark Station 1958  
097-23637-00594

FROM: Felicia A. Robinson  
Administrator  
City of Indianapolis  
Office of Environmental Services

## 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 Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
[indygov.org/dpw](http://indygov.org/dpw)

CERTIFIED MAIL 7000 0600 0023 5187 0571

November 8, 2006

Mr. Dennis Lemmen  
Admiral Petroleum  
P.O. Box 198  
13 Randall Street  
Coopersville, MI 49404



RE: Exempt Construction and Operation Status  
097-23637-00594

Dear Mr. Lemmen:

The application from Admiral Petroleum - Former Clark Station 1958, received by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis, Office of Environmental Services (OES) on September 7, 2006, 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: dual phase vacuum extraction site remediation operation, located at 8755 Crawfordsville Road, Indianapolis, Indiana, 46234, is classified as exempt from air pollution permit requirements.

The source consists of the following processes / equipment:

- (1) Soil Vapor / Vacuum Extraction System, manufactured by Dekker Vacuum Technologies, Inc. (Model #VMX0303 / KAI-20 & S/N F17754) identified as Emitting Unit #1, with a maximum rated capacity of 300 cubic feet per minute of air, with emissions exhausted through Stack S-1. This unit was constructed in August, 2004.
- (2) Groundwater / Air Stripper System, manufactured by Product Recovery Management, (Model #AST-233 & S/N WO-649) identified as Emitting Unit #2, with a maximum rated capacity 24 gallons of water per minute and 300 cubic feet per minute of air, with emissions exhausted through Stack S-2. This unit was constructed in August, 2004.

The following conditions shall be applicable:

- (1) Volatile Organic Compounds (VOCs) [326 IAC 8-1-6]  
The VOC potential emissions from the soil vapor vacuum extraction system and groundwater air stripper system are less than 25 tons per year. Therefore, the Best Available Control Technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply. Any change or modification which may increase soil vapor extraction (SVE) VOC potential emissions to 25 tons per year or more shall obtain OAQ approval before such change may occur.
- (2) Hazardous Air Pollutants (HAPs) [326 IAC 2-4.1-1]  
The single HAP and combined HAPs potential emissions from the soil vapor vacuum extraction system and groundwater air stripper system are less than 10 tons per year and 25 tons per year respectively. Therefore, 326 IAC 2-4.1-1 (New Source Toxics Control) does not apply. Any change or modification which may increase each single HAP or combined HAPs emissions to 10 tons per year or more or 25 tons per year or more from the soil vapor vacuum extraction system and groundwater air stripper system shall obtain OAQ approval before such change may occur.



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- (3) Pursuant to 326 IAC 5-1-2 (Opacity Limitations) except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitation), opacity shall meet the following:
- (a) Opacity shall not exceed an average of thirty percent (30%) 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.

An application or notification shall be submitted, in accordance with 326 IAC 2, to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source. If you have any questions, please feel free to contact Jeffrey Hege at 317-327-2279.

Sincerely,

ORIGINAL SIGNED BY

Felicia A. Robinson  
Administrator  
Office of Environmental Services

FAR/jsh

cc: File  
Air Compliance – Matt Mosier  
IDEM, OAQ – Mindy Hahn  
Marion County Health Department

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City Of Indianapolis Office of Environmental Services**

Technical Support Document (TSD) for an Exemption

**Source Background and Description**

<b>Source Name:</b>	Admiral Petroleum - former Clark Station 1958
<b>Source Location:</b>	8755 Crawfordsville Road
<b>County:</b>	Marion
<b>SIC Code:</b>	5541
<b>Exemption No.:</b>	097-23637-00594
<b>Permit Reviewer:</b>	Jeffrey Hege

The Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) have reviewed an application from Admiral Petroleum - former Clark Station 1958 relating to the dual phase vacuum extraction site remediation operation.

**Exempt Emission Units and Pollution Control Equipment**

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

- (1) Soil Vapor / Vacuum Extraction System, manufactured by Dekker Vacuum Technologies, Inc. (Model #VMX0303 / KAI-20 & S/N F17754) identified as Emitting Unit #1, with a maximum rated capacity of 300 cubic feet per minute of air, with emissions exhausted through Stack S-1. This unit was constructed in August, 2004.
- (2) Groundwater / Air Stripper System, manufactured by Product Recovery Management, (Model #AST-233 & S/N WO-649) identified as Emitting Unit #2, with a maximum rated capacity 24 gallons of water per minute and 300 cubic feet per minute of air, with emissions exhausted through Stack S-2. This unit was constructed in August, 2004.

**Existing Approvals**

The source has no existing approvals.

**Enforcement Issues**

There are no enforcement actions pending. Pursuant to 326 IAC 2-1.1-3(e)(1)(D) & (H), this source is exempt from permitting requirements.

**Recommendation**

The staff recommends to the Administrator that an exemption from air pollution permitting requirements be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the source's application received on September 7, 2006.

**Emission Calculations**

See Appendix A of this document for detailed emission calculations.

### 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/yr)
PM	Negligible
PM-10	Negligible
SO <sub>2</sub>	Negligible
VOC	0.95
CO	Negligible
NO <sub>x</sub>	Negligible

HAPs	Potential to Emit (tons/yr)
Highest single HAP	0.05 (Xylene)
Combination of HAPs	0.086

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3. An exemption will be issued.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) 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.

### County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-10	Unclassifiable
PM2.5	Nonattainment
SO <sub>2</sub>	Maintenance attainment
NO <sub>x</sub>	Attainment
8-hour Ozone	Basic nonattainment
CO	Attainment
Lead	unclassifiable

- (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 the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions, pursuant to the Non-attainment New Source Review requirements.

- (c) 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.
- (d) Marion 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.
- (e) 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

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/yr)
PM	Negligible
PM-10	Negligible
SO <sub>2</sub>	Negligible
VOC	0.95
CO	Negligible
NO <sub>x</sub>	Negligible
Single HAP	0.05
Combination HAPs	0.086

- (a) This new source is **not** a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater, no nonattainment pollutant is emitted at a rate of 100 tons per year or greater, and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2 and 2-3, the PSD and Emission Offset requirements do not apply.

### 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 for this source.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included for this source.
- (c) NESHAP 40 CFR Part 63, Subpart GGGGG (National Emission Standards for Hazardous Air Pollutants for Site Remediation) is not included for this source since the source is not a major source of HAP emissions (PTE of any single HAP is less than ten (10) tons per year and/or PTE of a combination of HAPs is less than twenty-five (25) tons per year).

### **State Rule Applicability - Entire Source**

#### **326 IAC 2-1.1-3 (Exemptions)**

Pursuant to 326 IAC 2-1.1-3(e)(1)(D) & (H), the Soil Vapor / Vacuum Extraction System and the Groundwater / Air Stripper System are exempt from permitting requirements because the potential to emit VOCs is less than 25 ton/yr, the potential to emit any single HAP is less than 10 ton/yr and the potential to emit the combination of all HAPs is less than 25 ton/yr.

#### **326 IAC 2-4.1-1 (New Source Toxics Control)**

This source is not a major source of hazardous air pollutants (HAPs). Therefore, 326 IAC 2-4.1-1 does not apply.

#### **326 IAC 2-1.1-5 (Non-attainment New Source Review)**

This source is not major under nonattainment NSR because it has the potential to emit less than 100 tons of PM10 (as a surrogate for PM2.5). Therefore, the Non-attainment New Source Review requirements are not applicable.

#### **326 IAC 5-1 (Opacity Limitations)**

This source is located in Marion County. Therefore, 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 this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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 (Particulate Emissions)**

Particulate emissions from this source are negligible, therefore 326 IAC 6 does not apply to this source.

#### **326 IAC 8 (Volatile Organic Sources)**

This source does not fit any of the source categories in 326 IAC 8. Therefore, none of the rules in Article 8 are applicable.

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

The VOC potential emission from this source is less than 25 tons per year. Therefore, 326 IAC 8-1-6 does not apply.

### **Conclusion**

The construction and operation of this dual phase vacuum extraction site remediation operation shall be subject to the conditions of this Exemption No.: 097-23637-00594.

**Site Remediation****Initial phase vacuum extraction operation**

**Company Name:** Admiral Petroleum - former Clark Station #1958  
**Address City IN Zip:** 8755 Crawfordsville Road, Indianapolis, IN 46234  
**Permit Number:** 097-23637-00594  
**Plt ID:** 097-00594  
**Reviewer:** Jeffrey S. Hege  
**Date:** 10/10/2006

**TOTAL HYDROCARBON**

- Area contaminated above 1000 mg/kg
  - The average adsorbed petroleum hydrocarbon concentration is assumed to be 1500 mg/kg (from analysis performed on samples collected at the site).
  - Volume of contaminated soil:  
 $[ 1200 \text{ sq.ft.} ] \times [ 6 \text{ ft.} ] \times [ ( 1 \text{ cu.yd.} ) / ( 27 \text{ cu.ft.} ) ] = 267 \text{ cu.yd.}$
  - Mass of Contaminants:  
  
 $= [ 267 \text{ cu.yd.} ] [ 1.36 \text{ ton} / \text{cu.yd.} ] [ 2000 \text{ lb} / \text{ton} ] [ 1 \text{ kg} / 2.2 \text{ lb} ] [ 1500 \text{ mg} / \text{kg} ] [ 1 \text{ g} / 1000 \text{ mg} ] [ 1 \text{ lb} / 453.59 \text{ g} ]$   
 $= 1090 \text{ lbs}$
- Area contaminated above 100 mg/kg
  - The average adsorbed petroleum hydrocarbon concentration is assumed to be 500 mg/kg (from analysis performed on samples collected at the site).
  - Volume of contaminated soil:  
 $[ 2700 \text{ sq.ft.} ] \times [ 6 \text{ ft.} ] \times [ ( 1 \text{ cu.yd.} ) / ( 27 \text{ cu.ft.} ) ] = 600 \text{ cu.yd.}$
  - Mass of Contaminants:  
  
 $= [ 600 \text{ cu.yd.} ] [ 1.36 \text{ ton} / \text{cu.yd.} ] [ 2000 \text{ lb} / \text{ton} ] [ 1 \text{ kg} / 2.2 \text{ lb} ] [ 500 \text{ mg} / \text{kg} ] [ 1 \text{ g} / 1000 \text{ mg} ] [ 1 \text{ lb} / 453.59 \text{ g} ]$   
 $= 818 \text{ lbs}$
- Total mass of adsorbed petroleum hydrocarbon (VOCs)  
 $[ 818 \text{ lb} ] + [ 1090 \text{ lb} ] \times [ 1 \text{ ton} / 2000 \text{ lb} ] = 0.95 \text{ ton}$

Table 5  
**Summary of System Air Analytical Results**  
 Admiral Petroleum - Former Clark 1958  
 8755 Crawfordsville Road  
 Indianapolis, Indiana  
 IDEM Facility I.D. No. 002949  
 IDEM Incident No. 200102502  
 ATC Project No. 86.28648.0005

Sample Collection Date	Remediation System Air Results											
	Sampling Port #1 - Pump Effluent						Sampling Port #2 - Air Stripper Effluent					
	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TPH	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE	TPH
09/28/05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
10/24/05	<0.30	0.9	1.1	3.7	<0.74	910	<0.30	<0.74	<0.74	<2.2	<0.74	190
03/15/06	<0.30	<0.74	<0.74	<2.2	<0.74	<149	<0.30	<0.74	<0.74	<2.2	<0.74	<149
04/13/06	<0.15	<0.37	<0.37	2.5	<0.37	210	<0.15	<0.37	<0.37	<1.1	<0.37	<74
05/10/06	<0.28	1.1	<0.70	6.8	<0.70	1400	<0.14	0.36	<0.35	4.8	<0.35	190
06/08/06	<0.30	<0.75	<0.75	<2.2	<0.75	170	<0.30	<0.75	<0.75	<2.2	<0.75	<150
07/10/06	<0.15	<0.37	<0.37	<1.1	<0.37	<74	<0.15	<0.37	<0.37	<1.1	<0.37	<74
08/18/06	<0.15	<0.37	<0.37	<1.1	<0.37	<74	<0.15	<0.37	<0.37	<1.1	<0.37	<74

Notes:

- The high-vacuum dual-phase remediation system began operation September 28, 2005.
- All results presented in µg/L or parts per billion (ppb).
- MTBE: methyl tertiary butyl ether.
- NS = Not Sampled.
- ND = No Discharge.
- Bold-blocked data denotes the separation of quarters.