

September 3, 2004

Certified Mail: 7000 0600 0023 5188 1676

Mr. James M. Janoch  
Troy Risk, Inc.  
8673 Bash Street  
Indianapolis, IN 46256

Re: Maplehurst Remediation, 097-19415-00541

Dear Mr. Janoch:

The application from Maplehurst Remediation, received on July 27, 2004, 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 operation of a soil vapor extraction system, located at 2929 South Holt Road, Indianapolis, Indiana 46241, is classified as exempt from air pollution permit requirements:

One (1) LUST remediation cabinet, identified as LRC, constructed in 2004, with a maximum flow rate of three hundred fifty (350) cubic feet per minute (ft<sup>3</sup>/min), using no control, and exhausting to stacks LRC-1, LRC-2, and LRC-3.

The following condition shall be applicable:

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:

- (1) 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.
- (2) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period 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.

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 Environmental Services (OES) and Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) 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 Angelique Oligier at 327-2846 or aoliger@indygov.org.

Sincerely,

John B. Chavez  
Administrator

aco

cc: OES Files - 2 copies  
Compliance - Matt Mosier  
USEPA - R5  
Marion County Health Dept.  
IDEM, Mindy Hahn

**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**

**Source Name:** Maplehurst Remediation  
**Source Location:** 2929 South Holt Road, Indianapolis, Indiana 46241  
**County:** Marion  
**SIC Code:** 7513  
**Operation Permit No.:** 097-19415-00541  
**Permit Reviewer:** Angelique Oliger

The Office of Environmental Services (OES) has reviewed an application from Maplehurst Remediation relating to the operation of the following:

One (1) LUST remediation cabinet, identified as LRC, constructed in 2004, with a maximum flow rate of three hundred fifty (350) cubic feet per minute (ft<sup>3</sup>/min), using no control, and exhausting to stacks LRC-1, LRC-2, and LRC-3.

**Stack Summary**

<b>Stack ID</b>	<b>Operation</b>	<b>Height (ft)</b>	<b>Diameter (ft)</b>	<b>Flow Rate (acfm)</b>	<b>Temperature (°F)</b>
LRC-1	LRC	10	0.33	350	65
LRC-2	LRC	10	0.33	5	65
LRC-3	LRC	10	0.33	<1	65

**Enforcement Issue**

There are no enforcement actions pending.

**Recommendation**

The staff recommends to the Administrator 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.

A complete application for the purposes of this review was received on July 27, 2004.

**Emission Calculations**

See Appendix A (one page) of this document for detailed emissions calculations.

**Potential To Emit**

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	negligible
PM-10	negligible
SO <sub>2</sub>	negligible
VOC	0.89
CO	negligible
NO <sub>x</sub>	negligible
Bis (2-ethylhexyl) phthalate	0.41
Dibenzofuran	0.35
Napthalene	0.13
Total HAPs	0.89

- (a) The potential to emit (as defined in 326 IAC 2-7-1 (29)) of the 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.
- (b) 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.

**Actual Emissions**

No previous emission data has been received from the source.

**County Attainment Status**

The source is located in Marion County.

Pollutant	Status
PM-10	attainment
SO <sub>2</sub>	maintenance attainment
NO <sub>2</sub>	attainment
8-hour Ozone	maintenance attainment
1-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 nonattainment new source review.

- (b) Marion County has been classified as attainment or unclassifiable in Indiana for PM10, SO<sub>2</sub>, NO<sub>2</sub>, 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 for the source section.
- (c) Fugitive Emissions  
Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2, or 326 IAC 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 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	negligible
PM10	negligible
SO <sub>2</sub>	negligible
VOC	0.89
CO	negligible
NO <sub>x</sub>	negligible
Single HAP	0.41
Combination	0.89

- (a) This existing source is not a major stationary source 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.

### Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing 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/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) applicable to this source.

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this source.

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

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

This source is not subject to 326 IAC 1-6, because the source is not required to obtain a permit under 326 IAC 2.

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

This source is not subject to 326 IAC 2-4.1, because it is not a major source of hazardous air pollutants, as defined in 40 CFR 63.

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

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is located in Marion County, it is not required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, and it does not emit lead into the ambient air at levels equal to or greater than five (5) tons per year.

#### **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 this permit:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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 6-1 (Nonattainment Area Limitations)**

Since the source does not have the potential to emit greater than 100 tons per year of particulate matter, or actual emissions of greater than 10 tons per year of particulate matter, and it is not one of the sources listed in 326 IAC 6-1-12, 326 IAC 6-1 does not apply.

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

This source does not have particulate emissions. Therefore, 326 IAC 6-3 does not apply to this source.

#### **326 IAC 7-1 (Sulfur Dioxide Emission Limitations)**

This rule does not apply to this source because the potential to emit is less than twenty-five (25) tons per year or ten (10) pounds per hour of Sulfur Dioxide.

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

This source has no facility with potential to emit more than twenty-five (25) tons per year of VOCs. Therefore, 8-1-6 does not apply.

### **Conclusion**

This operation of the soil vapor extraction system shall be exempt from air pollution permit requirements by exemption 097-19415-00541.

## Appendix A: Emissions Calculations

Company Name: Maplehurst Remediation  
 Address City IN Zip: 2929 South Holt Road, Indianapolis, Indiana 46241  
 Permit #: 097-19415-00541  
 Reviewer: Angelique Oligier  
 Date: August 5, 2004

flow rate: 355 cfm

constituent	Concentration in ppmv	MW g/mole	Total VOC Rate		
			lbs/hr <sup>1</sup>	lbs/day <sup>2</sup>	tons/yr <sup>3</sup>
Bis (2-ethylhexyl) phthalate	5	390.54	0.09	2.22	0.41
Dibenzofuran	10	168.2	0.08	1.91	0.35
Napthalene	5	128.6	0.03	0.73	0.13
			0.20	4.86	0.89

<sup>1</sup> VOC emission rate (lbs/hr) = conc. (ppmv) / 1e6 \* MW (g/mol) \* 1 mol / 23.9 L (at 18°C) \* 2.2 lbs / 1000 g \* 350 ft<sup>3</sup> / min \* 60 min / hr \* 1 L / 3.51e-2 ft<sup>3</sup>

<sup>2</sup> VOC emission rate (lbs/day) = lbs/hr \* 24 hrs / day

<sup>3</sup> VOC emission rate (tons/yr) = lbs / day \* 1 ton / 2000 lbs \* 365 days / yr