



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: August 12, 2005
RE: Creek Run, LLC / 003-21462-00357
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 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

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Mr. Jason Lenz
Creek Run L.L.C., Environmental Engineering
P.O. Box 114
Montpelier, Indiana 47359

August 12, 2005

Dear Mr. Lenz:

Re: Exempt Construction and Operation Status,
003-21462-00357

The application from Creek Run L.L.C., Environmental Engineering received on July 15, 2005, 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 groundwater remediation system, to be located at 5030 Bluffton Road, Ft. Wayne, Indiana 46809, is classified as exempt from air pollution permit requirements:

One (1) groundwater remediation system, installed in 2005, and consisting of the following:

- (a) One (1) Dual Phase Extraction (DPE) System having a maximum process rate of 600 gallons per hour and consisting of the following:
 - (1) One (1) extraction system consisting of one (1) air compressor and two (2) extraction wells each equipped with a pneumatic pump.
 - (2) One (1) air stripper with emissions vented to process vent V-1.
 - (3) Two (2) granular activated carbon canisters arranged in series.
 - (4) One (1) Moisture Separation tank with emissions vented to process vent V-1.
- (b) One (1) storage tank, identified as Holding Tank 1, with a maximum storage capacity of 300 gallons and used to store gasoline-contaminated groundwater.

The following conditions 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, 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.

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 Amanda Baynham, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 468-7910 to speak directly to Ms. Baynham. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, ask for Duane Van Laningham, or extension 3-6878, or dial (317) 233-6878.

Sincerely,
Original signed by

Nysa James, Section Chief
Permits Branch
Office of Air Quality

ERG/AAB

cc: File – Allen County
Allen County Health Department
Air Compliance – Patrick Barton
Permit Tracking
Compliance Data Section
Program Planning and Policy – Scott Delaney

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

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	Creek Run L.L.C., Environmental Engineering
Source Location:	5030 Bluffton Road, Ft. Wayne, Indiana 46809
County:	Allen
SIC Code:	Groundwater Remediation
Operation Permit No.:	003-21462-00337
Permit Reviewer:	ERG/AAB

The Office of Air Quality (OAQ) has reviewed an application from Creek Run L.L.C., Environmental Engineering relating to the operation of a groundwater remediation system located at a gas station.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units:

One (1) groundwater remediation system, installed in 2005, and consisting of the following:

(a) One (1) Dual Phase Extraction (DPE) System having a maximum process rate of 600 gallons per hour and consisting of the following:

- (1) One (1) extraction system consisting of one (1) air compressor and two (2) extraction wells each equipped with a pneumatic pump.
- (2) One (1) air stripper with emissions vented to process vent V-1.
- (3) Two (2) granular activated carbon canisters arranged in series.
- (4) One (1) Moisture Separation tank with emissions vented to process vent V-1.

(b) One (1) storage tank, identified as Holding Tank 1, with a maximum storage capacity of 300 gallons and used to store gasoline-contaminated groundwater.

Unpermitted Emission Units and Pollution Control Equipment

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

Existing Approvals

This is a new source. No previous air approvals have been issued.

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.

An application for the purposes of this review was received on July 15, 2005, with additional information received on August 4, 2005.

Emission Calculations

See Appendix A of this document for detailed emission calculations (Appendix A, page 1).

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	0
PM10	0
PM2.5	0
SO ₂	0
VOC	8.6
CO	0
NO _x	0

HAP	Potential to Emit (tons/year)
Benzene	0.020
Toluene	0.26
Ethylbenzene	0.028
Xylenes	0.14
Methyl tert-butyl ether	0.015
Total	0.46

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria 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.
- (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 Allen County.

Pollutant	Status
PM10	Attainment
PM 2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Basic Nonattainment
CO	Attainment
Lead	Attainment

- (a) Allen County has been classified as unclassifiable or attainment for PM2.5. 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 PM2.5 emissions, it has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions. See the State Rule Applicability for the source section.
- (b) 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. Allen 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.
- (c) Allen County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. 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.

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	0
PM10	0
PM2.5	0
SO ₂	0
VOC	8.6
CO	0
NO _x	0
Single HAP*	0.26
Combination HAPs	0.46

*Toluene.

- (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, 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 new source is not a major stationary source because VOC and NOx emissions are not emitted at a rate of 100 tons per year or greater. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This 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.

This status is based on the data provided in the source's application and the emission calculations shown in Appendix A.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the exemption for this source.
- (b) The Holding Tank is not subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Kb (Standards of Performance 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) because this storage tank has a maximum storage capacity less than 75 cubic meters (19,813 gallons).
- (c) 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 for this source.
- (d) This groundwater remediation systems is not subject to the requirements of 40 CFR 63, Subpart GGGGG (National Emission Standards for Hazardous Air Pollutants: Site Remediation) because this source is not a major source as defined in Section 112 of the Clean Air Act. Any changes to this source that would increase the potential to emit to equal to or greater than 10 tons per year for a single hazardous air pollutant or 25 tons per year for total hazardous air pollutants requires prior approval from IDEM, OAQ.
- (e) This groundwater remediation system is not subject to the requirements of 40 CFR 61, Subpart FF (National Emission Standard for Benzene Waste Operations) because this subpart applies only to hazardous waste treatment, storage and disposal facilities that are used to treat waste from chemical manufacturing plants, coke by-product recovery plants, and petroleum refineries. This remediation facility is located at a gas station and will treat groundwater contaminated with gasoline leaked from an underground storage tank.

State Rule Applicability – Entire Source

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

This new source does not belong to one of the 28 source categories and has the potential to emit less than 250 tons per year of all criteria pollutants. Therefore, the construction of this source is not subject to the requirements of 326 IAC 2-2 and the source will be a minor source under PSD for any future modifications.

326 IAC 2-3 (Emission Offset)

This new source will be located in Allen County, which has been designated as non-attainment for the 8-hour ozone standard. The potential to emit VOC and NOx is less than 100 tons per year. Therefore, the construction of this source is not subject to the requirements of 326 IAC 2-3 and the source will be a minor source under Emission Offset for any future modifications.

326 IAC 2-6 (Emission Reporting)

This source is located in Allen County and is not required to operate under a Title V permit. Therefore, 326 IAC 2-6 does not apply.

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.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The groundwater remediation system will emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs and belongs to a category (Site Remediation (see discussion of 40 CFR 63, Subpart GGGGG) for which a NESHAP has been developed. Therefore, 326 IAC 2-4.1 does not apply.

State Rule Applicability – Individual Facilities

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

This source will not emit particulates; therefore, the requirements of 326 IAC 6-3 do not apply.

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

Although this source will be constructed after January 1, 1980, it is not subject to the requirements of 326 IAC 8-1-6 because the potential VOC emissions are less than 25 tons per year. Any changes to this source that would increase the potential VOC emissions to greater than 25 tons per year requires prior approval from IDEM, OAQ.

326 IAC 12 (New Source Performance Standards)

The Holding Tank is not subject to the July 1, 2002 version of 40 CFR 60, Subpart Kb because the storage capacity of this tank is less than 40 cubic meters (10,567 gallons).

Conclusion

The construction and operation of this groundwater remediation system shall be subject to the conditions of the attached Exemption No.: 003-21462-00337.

**Appendix A: Emissions Calculations
Air Stripper and Soil Vapor Extractor**

Company Name: Creek Run L.L.C, Environmental Engineering
Address City IN Zip: 5030 Bluffton Road, Fort Wayne, Indiana 46809
CP: 003-21462
Pit ID: 003-00337
Reviewer: ERG/AAB
Date: 5-Aug-05

Groundwater remediation system (air stripper)

Conditions Water Flow = 10 GPM

Contaminant	Conc. in ug/L* X	3.785 L/gal X	gal./min X	60 min/hr X	g/1000000 ug X	Kg/ 1000 g X	2.2046 lbs/ KgX	8760 hr/yr X	ton/ 2000 lb.
Benzene	380	1,438 ug/gal	14,383 ug/min	862,980 ug/hr	0.86 g/hr	8.63E-04 kg/hr	1.90E-03 lb/hr	16.67 lb/yr	8.33E-03 Tons / year
Toluene	4300	16,276	162,755	9,765,300	9.77	9.77E-03	2.15E-02	188.59	9.43E-02
Ethylbenzene	460	1,741	17,411	1,044,660	1.04	1.04E-03	2.30E-03	20.17	1.01E-02
Xylenes	1520	5,753	57,532	3,451,920	3.45	3.45E-03	7.61E-03	66.66	3.33E-02
MTBE**	180	681	6,813	408,780	0.41	4.09E-04	9.01E-04	7.89	3.95E-03
Total									1.50E-01 Tons / year

PTE (tons/yr) = conc (ug/L) * 3785 L/gal * flow rate (gal/min) * 60 min/hr * 1g/1,000,000 ug * 1Kg/1,000 g * 2.2046Lbs/Kg * 1ton/2,000 lbs

Soil vapor extraction system

Conditions Air Flow = 84 cfm

c=constant at standard condition at 68 F, 29.2 inches of HG = 385260000 cuft / lb-mole

Contaminant	Conc. in ppm*	Molecular Weight (lb/lb-mole)	Emission Rate (lbs/hour)	Emission Rate (tons/year)
Benzene	2.7	78.11	2.76E-03	1.21E-02
Toluene	31	92.13	3.74E-02	1.64E-01
Ethylbenzene	3	106.16	4.17E-03	1.82E-02
Xylenes	16.7	106.16	2.32E-02	1.02E-01
MTBE**	2.1	88.15	2.42E-03	1.06E-02
Total				0.3062

PTE (tons/yr) = conc (ppm) * Molecular Weight (lb/lb mole) * 3.28E8 cu.ft/lb-mol * Air flow (cfm) * 60 min/hr * 8760 hrs/yr * 1 ton/2000lbs

VOC PTE (tons/yr) = PTE of toluene (tons/yr) * 100/(wt % of toluene in original product)

VOC PTE (tons/yr) = 2.58E-01 * 100/3 = 8.60 tons per year

Note: Creek Run LLC were unable to provide data for VOC concentration in groundwater. VOC PTE was estimated using the PTE for toluene (HAP with highest PTE) and the % of toluene in the original gasoline (toluene concentrations in gassoline vary from 3.0 to 15.0 % by weight based on MSDS). VOC content of gasoline is 100% by weight based on MSDS.

Notes:

* - Maximum concentration found in monitoring wells (based on analytical results provided by the source).

** - Methyl tert-butyl ether.