INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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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: November 28, 2006

RE: Penn Capillary Tube Division / 107-23671-00041

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

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Mr. Orem Gottlieb, Manager
SECOR International Incorporated
8770 Guion Road, Suite B
Indianapolis, IN 46268

November 28, 2006

Dear Mr. Gottlieb:

Re: Exempt Operation Status,
107-23671-00041

The application from Penn Capillary Tube Division - Marmon Group, received on September 20, 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 groundwater remediation system, located at US Hwy 136 New Ross, Indiana, is classified as exempt from air pollution permit requirements:

(a) One (1) vacuum pump, constructed in 2006, with a maximum capacity 300 actual cubic feet per minute, servicing eighteen (18) soil vapor extraction wells, using no control equipment, and exhausting though stack (SVE-1-S1) to the atmosphere.

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:

(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.

The Exemption 107-23085-00041 issued on June 9, 2006 has been revised. The source may continue to operate according to 326 IAC 2-1.1.

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 Mr. 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, 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 signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

ERG/BL

cc: File - Montgomery County
Montgomery County Health Department
Air Compliance - Jim Thorpe
West Central Regional Office
Permit Tracking
Compliance Data Section
Program Planning and Policy – Scott Delaney
Part 70 Application File - T- 107-23671-00041

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name:	Penn Capillary Tube Division - Marmon Group
Source Location:	US Hwy 136, New Ross IN 47968
County:	Montgomery
SIC Code:	1629
Operation Permit No.:	107-23085-00041
Operation Permit Issuance Date:	June 9, 2006
Permit Revision No.:	107-23671-00041
Permit Reviewer:	ERG/BL

The Office of Air Quality (OAQ) has reviewed an application from Penn Capillary Tube Division - Marmon Group relating to the operation of a groundwater remediation system.

Permitted Emission Units and Pollution Control Equipment

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

(a) One (1) vacuum pump, constructed in 2006, with a maximum capacity 300 actual cubic feet per minute, servicing eighteen (18) soil vapor extraction wells, using no control equipment, and exhausting though stack (SVE-1-S1) to the atmosphere.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

(a) Exemption 107-23085-00041 issued on June 9, 2006.

All conditions from previous approvals were incorporated into this permit.

Justification for the Revision

The permit exemption is being modified and reissued. At construction the source had the potential to emit less than one (1) ton per year of a single hazardous air pollutant (HAP) or two and one-half (2.5) tons per year of any combination of HAPs and pursuant to 326 IAC 2-1.1-3(e)(1)(H) qualified for an exemption. This Permittee has proposed a more aggressive remediation strategy which has the potential to emit 2.94 tons per year of a single HAP and 3.13 tons per year of a combination of such HAPs. Pursuant to 326 IAC 2-5.5-1, the increased emissions remain below the potential to emit thresholds of a registration. An exemption will be issued.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (^{o}F)
SVE-S1	Groundwater remediation	12	0.25	300	70

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 September 27, 2006.

Emission Calculations

The calculations submitted by the applicant have been verified and found to be accurate and correct. These calculations are provided in Appendix A of this document 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/yr)
PM	0.00
PM-10	0.00
SO_2	0.00
VOC	2.96
CO	0.00
NO_x	0.00

HAPs	Potential to Emit (tons/yr)
Single HAP	2.94
Combined HAPs	3.14

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM, PM-10, SO_2, VOC, CO, and NO_x are less than five (5) tons per year.

(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 Montgomery County.

Pollutant	Status
PM-10	Attainment
PM 2.5	Attainment
SO_2	Attainment
NO_2	Attainment
8-hour Ozone	Attainment
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. Effective October 25, 2006, 326 IAC 1-4-1 has been revised revoking the one hour ozone standard in Indiana.

(a) Montgomery County has been classified as unclassifiable or 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 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) emissions 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. Montgomery 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. See the State Rule Applicability for the source section.

(c) Montgomery County has been classified as attainment or unclassifiable in Indiana for PM-10, SO_2, NO_x, 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.

(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, Part 70, or FESOP 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	0.00
PM-10	0.00
SO_2	0.00
VOC	2.96
CO	0.00
NO_x	0.00
Single HAP	2.94
Combination HAPs	3.14

(a) This existing source is not a 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.

(b) These emissions were based on the application submitted by the company

Proposed Modification

PTE from the proposed modification (based on 8760 hours of operation per year at rated capacity including enforceable emission control and production limit where applicable):

Pollutant	PM (ton/yr)	PM-10 (ton/yr)	SO_2 (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO_x (ton/yr)
Proposed Modification	0.00	0.00	0.00	2.94	0.00	0.00
PSD	250	250	250	250	250	250

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD major source levels. 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, including the emissions from this permit 107-23671-00041, is still not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

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

This status is based on all the air approvals issued to the 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) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Site Remediation, Subpart GGGGG because this source is not a major source of HAPs.

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

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source is located in Montgomery County, which is classifies as attainment for all criteria pollutants, has the potential to emit of attainment pollutants less than two hundred fifty (250) tons per year, and is not one of the twenty-eight (28) listed source categories. Therefore, 326 IAC 2-2 does not apply.

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

The operation of remediation system will emit less than ten (10) tons per year of a single HAP or 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 Montgomery County, is not required to operate under a Part 70 permit, and emits less than five (5) tons per year of lead. 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.

326 IAC 8

There are no Article 8 rules applicable to this source. Groundwater remediation source are not included in the miscellaneous operations (326 IAC 8-5) and the groundwater conatmination is not the result of a petroleum sources operations.

326 IAC 8-1-6

The source will emit less than twenty-five (25) tons per year of VOC. Therefore, 326 IAC 8-1-6 does not apply.

Conclusion

The operation of this groundwater remediation system shall be subject to the conditions of the Exemption Permit 107-23671-00041.

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

Company Name: Penn Capillary Tube Division - Marmon Group
Address: US Hwy 136 New Ross IN 47968
Registration: 107-23671-00041
Reviewer: ERG/BL
Date: November 2, 2006

AIRFLOW/SVE Model Input Data:

Soil Vacuum (inches of Mercury)	5.5
Well Screen Depth Range	5 to 10
Ground Surface Cover	grass

Grid:

Horizontally - 10 m (32.8 ft) of 50 columns of 0.2 m (0.656 ft) spacing
Vertically - 3 m (9.84 ft) of 15 rows of 0.2 m (0.656 ft) spacing

Soil:

Air Permeability - Horizontal 0.5 Darcy (0.0005 cm/sec); Vertical 0.1 Darcy (0.0001 cm/sec)
Effective Porosity - 0.35
Residual (irreducible) Water Content - 0.1
Fraction of Organic Carbon - 0.001
Van Genuchten Parameters - Alpha = 1; N = 2 (to calculate vertical soil moisture profile)
Depth to groundwater - 3 m

Initial Contamination Concentration in soil:

Contaminant		Worst Case Conc. (mg/kg)
Trichloroethylene		255
Perchloroethylene		40
Vinyl chloride		0.09

AIRFLOW/SVE Model Output Data:

Total Mass of Contaminant removed per SVE Well:

Contaminant	Mass (kg/yr)	Mass (lbs/yr)	Mass (tons/yr)
Trichloroethylene, HAP, VOC	148	326	0.16
Perchloroethylene, HAP	9	19.8	0.01
Vinyl chloride, HAP, VOC	1	2.20	0.00
VOC Totals:	149	328	0.16
Largest Single HAP Totals:	148	326	0.16
Combined HAP Totals:	158	348	0.17

Emission Calculations based on Model Output

Maximum Number of Soil Vapor Extraction Wells Remediated Per Year: 18

Total Mass of Contaminant removed for Entire SVE System Installation:

Contaminant	Mass (kg/yr)	Mass (lbs/yr)	Mass (tons/yr)
Trichloroethylene, HAP, VOC	2,664	5,873	2.94
Perchloroethylene, HAP	162	357	0.18
Vinyl chloride, HAP, VOC	18	39.7	0.02
VOC Totals:	2,682	5,913	2.96
Largest Single HAP Totals:	2,664	5,873	2.94
Combined HAP Totals:	2,844	6,270	3.13

Emissions from the system will be periodically monitored to verify contaminant removal is progressing as modeled.