



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: June 9, 2006
RE: Penn Capillary / 107-23085-00041
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 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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June 9, 2006

Mr. Oren Gottlieb
Penn Capillary Tube Division – Marmon Group
8770 Guion Road, Suite B
Indianapolis, IN 46268

Dear Mr. Gottlieb:

Re: Exempt Construction and Operation Status,
107-23085-00041

The application from Penn Capillary Tube Division – Marmon Group, received on May 12, 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 operation of a groundwater remediation system, to be located at, U.S. Highway 136, New Ross, Indiana 47968, is classified as exempt from air pollution permit requirements:

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

One (1) vacuum pump, with a maximum of six (6) soil vapor extraction wells, using no control, and emissions exhausting to the atmosphere.

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 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 Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

Sincerely,

Original signed by

Nysa L. James, Section Chief
Permits Branch
Office Of Air Quality

JF

cc: File - Montgomery County
Montgomery County Health Department
Air Compliance – Jim Thorpe
Permit Tracking
Compliance Data Section

**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:	U. S. Highway 136, New Ross, Indiana 47968
County:	Montgomery
SIC Code:	1629
Operation Permit No.:	107-23085-00041
Permit Reviewer:	James Farrell

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.

Emission Units and Pollution Control Equipment

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

One (1) vacuum pump, with a maximum of six (6) soil vapor extraction wells, using no control, and emissions exhausting to the atmosphere.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
SVE-1-S1-S6	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.

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 (1 page).

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/yr)
PM	0.0
PM-10	0.0
SO ₂	0.0
VOC	1.0
CO	0.0
NO _x	0.0

HAPs	Potential to Emit (tons/yr)
Single HAP	1.0
Combined HAPs	1.0

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) 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 2-1.1-1(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 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 Status
PM-10	Attainment
PM-2.5	Attainment
SO ₂	Attainment
NO ₂	Attainment
1-hour Ozone	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

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 exemption.
- (b) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), Subpart GGGGG – National Emission Standards for Site Remediation, because it is not a major source of HAP's. Therefore, this NESHAP is not included in this exemption.
- (c) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPS)(326 IAC 14 and 40 CFR Part 63) included in this exemption.

State Rule Applicability – Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source, located in Montgomery County, which is classified 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))

This source will emit less than 10 tons per year of a single HAP and 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 not required to have an operating permit under 326 IAC 2-7, is located in Montgomery County and does not emit lead into the ambient air at levels ≥ 5 tpy. 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.

- (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. 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.
- (b) Montgomery 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 surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.
- (c) Montgomery County has been classified as attainment or unclassifiable in Indiana for all remaining 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.
- (d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (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	0.0
PM-10	0.0
SO ₂	0.0
VOC	1.0
CO	0.0
NO _x	0.0
Single HAP	<10
Combination HAPs	<25

- (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 one of the twenty-eight (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 source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.

326 IAC 8 (Volatile Organic Sources)

There are no provisions under Article 8 that will apply to this groundwater remediation source, because it does not fit any of the source categories in the rule.

State Rule Applicability – Individual Facilities

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

This rule applies to new facilities as of January 1, 1980 which have potential VOC emission of 25 tons per year. The groundwater remediation facility does not have potential VOC emissions greater than 25 tons per year. 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 attached Exemption No. 107-23085-00041.

Company Name: Penn Capillary Tube Division - Marmon Group
Address City IN Zip: US Highway 136, New Ross, IN 47968
Permit Number: 23085
Plt ID: 107-00041
Reviewer: James Farrell
Date: 1-Jun-06

Groundwater remediation system

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

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 Contaminant Concentrations in soil:

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

Total Mass of Contaminant removed per SVE Well:

Contaminant	Mass (kg/yr.)	Mass (lb/yr.)	Mass (ton/yr.)
Trichloroethylene, HAP, VOC	148	326.3	0.163
Perchloroethylene, HAP	9	19.8	0.010
Vinyl chloride, HAP, VOC	1	2.2	0.001
VOC Totals:	149	328.5	0.164
Largest Single HAP Totals:	148	326.3	0.163
Combined HAP Totals:	158	348.4	0.174

Emission Calculations

Total Number of Soil Vapor Extraction wells: 6

Total Mass of Contaminant removed for Entire SVE System Installation:

Contaminant	Mass (kg/yr.)	Mass (lb/yr.)	Mass (ton/yr.)
Trichloroethylene, HAP, VOC	888	1958	0.979
Perchloroethylene, HAP	54	119	0.060
Vinyl chloride, HAP, VOC	6	13	0.007
VOC Totals:	894	1971	0.986
Largest Single HAP Totals:	888	1958.0	0.979
Combined HAP Totals:	948	2090	1.045

Calculations provided by SECOR International Incorporated and verified by IDEM, OAQ.