

Mr. Bruce Penn
Midwest Soil Remediation, Inc.
1480 Sheldon Drive
Elgin, Illinois 60120

Re: Portable Source Relocation Site
Approval Letter INDOT No.
L089-11769-05039

Dear Mr. Penn:

Approval is hereby granted to operate the portable GEM 1000 low-temp thermal soil remediation unit, described in Operation Permit No. 777-2325-00200, to be located at 13304 and 13305 Morse Street, Cedar Lake, Indiana, in Lake County. This portable unit was previously authorized to relocate to 3000 Sheffield Avenue, Hammond, Indiana. Site approval 089-5760-05039 authorized the move on June 14, 1996. Midwest Soil Remediation, Inc. relocated out of state instead. The last operating site in Indiana was at Highway 231 North and Church Street, Loogootee, Indiana. In addition to the operation conditions in Operation Permit No. 777-2325-00200, the plant must adhere to the following requirements:

1. That pursuant to 326 IAC 6-4 fugitive particulate matter emissions shall not be visible crossing the property lines.
2. That pursuant to 326 IAC 6-5 fugitive particulate matter emissions shall be controlled according to a control plan. This plan consists of spraying water on unpaved roads and on stockpiles of petroleum contaminated soil (PCS) and remediated soil on an "as needed" basis. In addition, fugitive emissions shall also be controlled by covering PCS stockpiles with polyvinyl liners at all times except when loading and unloading the material. Pursuant to 326 IAC 6-1-11.1 fugitive emissions shall be considered in compliance with the control plan provided that visible emissions from unpaved roads do not exceed an average instantaneous opacity of ten percent (10%). Average instantaneous opacity shall be the average of twelve (12) instantaneous opacity readings, taken for four (4) vehicle passes, consisting of three (3) opacity readings for each vehicle pass. The three (3) opacity readings for each vehicle pass shall be taken as follows:
 - a. The first will be taken at the time of emission generation.
 - b. The second will be taken five (5) seconds later.
 - c. The third will be taken five (5) seconds later or ten (10) seconds after the first.

The three (3) readings shall be taken at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Each reading shall be taken approximately four (4) feet above the surface of the unpaved roadway. Visible emissions from stockpiles of PCS and remediated shall not exceed ten percent (10%) on a six (6) minute average. The opacity shall be determined using 40 CFR 60, Appendix A, Method 9, except that the opacity shall be observed at approximately four (4) feet from the surface at the point of maximum opacity. The observer shall stand approximately fifteen (15) feet from the plume and at approximately right angles to the plume. Compliance with the opacity limits will also satisfy the requirements of 326 IAC 5-1.

3. That pursuant to 326 IAC 6-1-2 particulate matter (PM) emissions shall be limited to 0.03 grains

per dry standard cubic foot (gr/dscf). PM emissions shall be considered in compliance with the rule provided that:

- a. all gas flow from the dryer is directed through the baghouse,
 - b. visible emissions do not exceed 10% opacity,
 - c. that the baghouse operates at an average pressure drop demonstrated to comply with 326 IAC 6-1-2. Daily records of the average pressure drop shall be kept for at least the past 24 month period and made available upon request to the OAM.
4. That pursuant to 326 IAC 1-6-2, a record of all malfunctions shall be kept for a period of the past three (3) years and made available to the OAM upon request. If a malfunction occurs that cannot be corrected within one (1) hour, notification of the condition shall be made to the OAM no later than four (4) daytime business hours after the occurrence.
5. Midwest Soil Remediation, Inc. (MSR) shall prequalify any contaminated soil considered for processing. Contaminated soil shall be limited to only "petroleum contaminated soil" (PCS). This includes the following:
- a. Soil which has been contaminated by leaking petroleum underground storage tank systems, as defined under 329 IAC 9-1-36 and 40 CFR 280.12, that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances. Such systems include those containing motor fuels (boiling point 150-300 oF @ 1 atm), middle distillate fuels (boiling point 350-700 oF @ 1 atm), heavy ends (boiling point > 500 oF @ 1 atm), and any other petroleum-based material having physical and chemical properties similar to these materials as approved by IDEM's Office of Solid and Hazardous Waste Management (OSHWM).
 - b. Industrial "petroleum contaminated soil" which would otherwise meet the criteria under subdivision (a) except for its source; and
 - c. "Petroleum contaminated soil" which is considered nonhazardous according to the identification procedures found in 329 IAC 3.1-6 and 40 CFR 261 (Identification and Listing of Hazardous Waste). In particular, petroleum contaminated media that fail the test for Toxicity Characteristics of 40 CFR 261.24 (Hazardous Waste Codes D018 through D043 only) and are subject to the corrective action regulations under 40 CFR 280 (Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks).
6. MSR shall process only PCS from the site on which the portable plant is located.
7. That for every soil to be processed on a different site, MSR shall as a minimum obtain the following documentation:
- a. description of the generator's sampling and handling procedures;
 - b. copies of signed laboratory reports on samples collected and tested, which shall include information on the laboratory's certification;
 - c. chain-of-custody documentation for the samples;
 - d. survey detailing:
 - (i) name, mailing address and telephone number of generator,
 - (ii) address of site where the PCS was generated,
 - (iii) description of the PCS,

- (iv) detail of the quantity of PCS,
- (v) method of transporting the PCS to the remediation facility,
- (vi) detail of other potential components to be found in the PCS, and
- (vii) physical characteristics of the PCS:
 - (AA) physical state
 - (BB) percent solids
 - (CC) presence of free liquids

e. documentation that proves that the PCS meets the requirements under condition 9.

For soil, groundwater, and soil leachate sampling of petroleum contaminants, IDEM's OSHWM Neutral Leach Test shall be used. Approval of other test procedures and analysis requirements of other substances may be obtained by calling IDEM's Chemistry Support Section at (317) 233-6465.

8. If the information obtained per condition 11 indicates that the soil proposed to be processed meets the requirements of condition 9, MSR shall forward to OSHWM a certified letter stating the company's intent to process the prequalified soil. Included with the letter shall be copies of the documentation detailing the soil. MSR will receive a certified notification from OSHWM within fourteen (14) days saying whether or not the facility can process the reviewed PCS. The notification will include any reasons for disapproval and whether further review is necessary. Upon receipt of approval, all soils authorized for processing shall be accompanied by a manifest.
9. Records required by condition 8 and 9 shall be maintained by MSR for a period of 24 months from the date of receipt of the PCS and shall be made available upon request to the OAM and OSHWM. The period(s) of record retention may be extended by OAM and OSHWM during the course of any unresolved enforcement action regarding the regulated activity.
10. Pursuant to 326 IAC 2-1-3(i)(8) the following conditions are established to ensure that the source or facility will comply with all applicable rules; and that the ambient air quality standards established in 326 IAC 1-3, the prevention of significant deterioration standards established in 326 IAC 2-2, and the offset requirements established in 326 IAC 2-3, will be attained and maintained and that the public health will be protected:
 - a. The storage area used to stockpile contaminated soils shall be designed to prevent run-off and surface water run-on. This shall be done by utilizing the following:
 - (i) a dike covered with a polyvinyl liner. The liner shall be constructed of materials that do not allow PCS constituents to migrate through the liner itself; be placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression tearing or uplift; be of sufficient strength and at least 12 millimeters thick to prevent collapse under the pressures exerted by the overlying PCS and any equipment used at the stockpile; be continuous under the stockpile to the highest points of the perimeter earth berm.
 - (ii) an earth berm to prevent surface water run-on. This earth berm shall be constructed at least 24 inches high to not be damaged by heavy equipment crossing the berm to add or remove PCS from the stockpile.
 - b. A fence shall be used to prevent the entry of unauthorized persons onto the PCS storage area;

- c. The PCS shall be processed within twelve (12) days from the time it is received at the plant;
- d. No other types of waste material shall be processed or stored on site without receiving the proper approval from the OSHWM.
- e. The amount of PCS stockpiled at any time shall not exceed 3,600 tons (2,990 cubic yards) and stockpile should be covered by a polyvinyl liner at all times except when loading and unloading the material.

Relocation of this plant must take place within 120 days. Pursuant to IC 4-21.5-3-5(f), this approval is not effective until eighteen (18) days from the date of this letter. This approval supersedes all previous site approval letters.

Advance notice to the OAM of start-up is required in order for IDEM to perform an inspection. If the plant is not operating in compliance with all applicable regulations upon inspection, the plant must cease operation upon notification to you by IDEM staff of such non-compliance. Operations may only resume once remedial actions have been taken.

If you have any questions concerning this permit, please contact Don Poole at 317/232-8327 or at 1-800-451-6027, press 0 and ask for extension 2-8327.

Sincerely,

Paul Dubenetzky, Chief
Permit Branch
Office of Air Management

cc: File – Lake County
Lake County Health Department
Air Compliance Section – Ramesh Tejuja
Air Compliance Section – Gene Kelso
Compliance Data Section – Karen Nowak
IDEM Northwest Regional Office
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