

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor Scott Hassett, Secretary Ron Kazmierczak, Regional Director Oshkosh Service Center 625 E. County Road Y, Suite 700 Oshkosh, WI 54901-9731 Telephone 920-424-3050 FAX 920-424-4404

April 20, 2005

Ray Roder (Representative for the Ripon FF/NN landfill Potentially Responsible Party (PRP) Group) Reinhart, Boerner, Van Deuren S.C. P.O. Box 2018 Madison, WI 53701-2018

SUBJECT: Conditional Approval of the Pilot Test Workplan Landfill Gas Extraction System report for the Ripon HWY FF/NN Landfill, WDNR License # 467, BRRTS # 02-20-000915

Dear Mr. Roder:

The Department has received the March 23, 2005 GeoTrans report titled "Pilot Test Work Plan Landfill Gas Extraction System" on behalf of the PRP Group via an email dated March 23, 2005. You have requested our approval of this workplan prior to implementation. The Department and EPA had some initial questions in regards to the workplan which were then answered in a email memorandum dated April 7, 2005 from Jerry DeMers at GeoTrans. This memorandum will be considered an amendment to the workplan. The Department of Natural Resources ("Department"), hereby conditionally approves the landfill gas workplan for the closed Ripon FF/NN Landfill (License number 467) subject to the following conditions:

- 1. Please add MW-101 and MW-102 as part of the vacuum measurement locations.
- 2. The condensate from the testing that will be disposed of at the local WWTP the analytical should be submitted in the gas pilot testing report.
- 3. After the first test is completed, overnight recovery of the methane in the landfill may not be adequate. If methane levels/pressure levels have not returned to pre-testing conditions, more time should be allowed for recovery. This should be done to make sure the next test is representative.
- 4. Please include photo-documentation of the differing testing setups in the gas pilot testing report.
- 5. It has been previously discussed in an email from Jerry DeMers dated March 29th, 2005 that the PID meter would not be used for VOC measurements because of the interference's due to the high methane concentrations. The Department is in concurrence with this. Summa canisters will still be utilized to obtain a representative VOC analysis of the extracted gases and a Landtec GA90 instrument will measure methane, oxygen and carbon dioxide concentrations.
- 6. The Department will allow, in the pilot test, to utilize a vacuum on GP-3 for the third test, but would also like to state that utilization of gas extraction for a full scale implementation (if requested) is discouraged and potentially would not be approved. Gas extraction should be taking place from within the waste mass, which will tend to

keep the gas more confined and deter landfill gas from escaping out the sides of the waste mass.

The installation of large diameter vertical gas extraction wells should not be discarded as a possibility for remediation. If the pilot test shows that the current gas system is not adequate for gas extraction, then large diameter gas extraction wells should be considered as part of the Feasibility Study.

It should be noted that a flare type gas extraction unit may not be necessary. Currently, under NR506.08(6) (WAC) landfills which exceed a mass of 500,000 cubic yards are required to have a gas extraction system that collects and combusts the gases. However, due to the size of the landfill (less than 500,000 cubic yards), combustion is not necessary if the emissions do not exceed any standards in NR400 (WAC). However, a 25 foot stack would be necessary to vent the landfill gases without prior gas combustion.

If you have any questions concerning this letter, please contact me at (920) 303-5447 or Lee at 608-267-0542.

Sincerely,

Jennie Easterly Hydrogeologist Remediation and Redevelopment Program

Lee Archiquette Solid Waste Engineer Solid and Hazardous Waste Program

cc: Oshkosh Case File Jerry DeMers – GeoTrans Inc. via email Bernard Schorle – EPA via email 2