



Remediation and Liability Management Company, Inc.

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October 10, 2003

Mr. Kevin Holdwick
Michigan Department of Environmental Quality
Waste Management Division
P.O. Box 30241
Lansing, Michigan 48909-7741

Dear Mr. Holdwick:

Re: Proposed Additional Investigations in Support of Groundwater Not In An Aquifer
(GWNIAA) Designation
Former Peregrine (U.S.) Inc. Coldwater Road Facility
Genessee County, Michigan

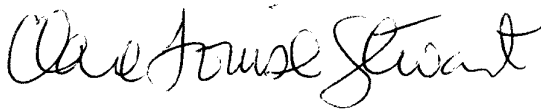
As a follow-up to the meeting held on October 6, 2003 between the Michigan Department of Environmental Quality (MDEQ), General Motors Corporation (REALM), and REALM's consultant Conestoga-Rovers & Associates (CRA) regarding the designation of Groundwater Not In An Aquifer (GWNIAA) REALM is seeking for the shallow perched zone at the Former Peregrine (U.S.) Inc. Coldwater Road Facility in Genessee Township (Site), REALM has reviewed the issues raised by the MDEQ at the meeting. Based on these, REALM has developed a series of sequential tasks that we propose to potentially complete to address the MDEQ's remaining issues. The tasks will be completed in a sequential order (as determined appropriate by REALM), with the next task completed only if the proceeding task does not yield sufficient additional information to address the MDEQ issues. The proposed tasks are included in Attachment A.

The results of each additional investigation will be integrated with the current conceptual hydrogeologic model for the Site, and reviewed to determine if it further supports the GWNIAA designation.

Please feel free to contact me at (248) 680-5219 if you have any questions regarding the enclosed or if you require any further information.

Yours truly,

REMEDICATION AND LIABILITY MANAGEMENT COMPANY, INC.



For: Cheryl Hiatt
Project Manager

CS/pw/12636/14
Encl.

c.c.: MDEQ-WMD (4 additional copies)
Marilyn Dedyne (REALM)
Jean Caufield (REALM)
Glenn Turchan (CRA)

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Alex Rothchild
LFR
Sep 30, 2009 09:39

ATTACHMENT A

Proposed Additional Investigations in Support of Groundwater Not In An Aquifer (GWNIAA) Designation Former Peregrine (U.S.) Inc. Coldwater Road Facility Genessee County, Michigan

- Task 1 - REALM will develop a Conceptual Site Model (CSM) and water budget for the Site. The CSM and water budget will support the evaluation of the interactions between precipitation, perched water, and drift aquifer groundwater. This task may also involve other similar visualization approaches.
- Task 2 - REALM will submit a Freedom of Information Act (FOIA) request to the MDEQ to search for files related to other environmental sites in the area immediately surrounding the Site. These files will be reviewed for any relevant information regarding the stratigraphic and hydrogeologic conditions in the area.
- Task 3 - REALM will re-examine its files for the Site at a smaller scale to document the subtle changes in stratigraphy, especially as related to the presence and potential for continuity of sand stringers/seams within the clay till.
- Task 4 - REALM will evaluate the utility of a geophysical survey across the Site to further define the continuity of the clay till and the depth to and thickness of the drift aquifer (methods to be reviewed).
- Task 5 - REALM will complete an additional shallow subsurface investigation along the perimeter of the property to evaluate the presence of sand seams in the clay till and the potential for migration from the developed portions of the Site to the property line. The investigation will involve advancement of 5-10 boreholes along the south and southeast property boundary as identified by the direction of groundwater flow in the drift aquifer and the topography of the Site. The boreholes will be advanced using a Geoprobe™ 30 feet into clay. Soil samples collected during advancement of the Geoprobe™ will be examined and logged in the field by a qualified geologist to map any sand seams encountered within the clay till. Should any groundwater be encountered during drilling, attempts will be made to collect a sample using a Screen Point Sampler™ for laboratory analysis for Site compounds of concerns. The Screen Point Sampler™ will be driven to the identified target depth from the soil core in an adjacent borehole. In addition, a Membrane Interface Probe™ may be utilized at each location to collect insitu vapor monitoring data for organics. In addition, a Geoprobe™ water sample will be collected from any utility trench in the perched zone at the point where it exits the Site.
- Task 6 - In a similar investigation to Task 5, this task will involve the advancement of boreholes using Geoprobe™ in a radial pattern outwards from the former Drum Storage Area to delineate the impacted area. In addition, an investigation will be completed to evaluate the presence and quality of groundwater and the presence of sand seams that could serve as pathways for contaminant transport.

- Task 7 - This task is designed to provide additional information on the deep drift aquifer between the existing monitoring wells at the landfill to the north and PFW-1 at the southern end of the Site. A single deep borehole will be advanced through the clay till to the drift aquifer, continuing to a depth where the clay below the drift aquifer is encountered. During drilling, soil samples will be collected from the surface and through the entire clay till and examined for the presence of sand seams. A double surface casing will be set at a depth of at least 10 feet into the clay, to prevent the migration of any potential impacts from surface to the drift aquifer as a result of the drilling process. A fully penetrating monitoring well will be installed within the drift aquifer. Any sand seams noted during advancement of the borehole will be investigated using a Geoprobe™ at radial distances of 5 to 10 feet from the drift aquifer monitoring well. Small diameter, short screen monitoring wells will be constructed in each of the identified and significant sand seams. A pumping test will be completed on the new drift aquifer monitoring well to investigate the potential for hydraulic connection between the drift aquifer and the sand seams. This task will provide additional information in the central portion of the Site.
- Task 8 - This task is included to identify reporting requirements. Appropriate reports will be prepared for each of the Tasks for the purpose of supplementing the GWNIAA Report.

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