



CONESTOGA-ROVERS
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July 27, 2011

Reference No. 012636

Mr. Richard Conforti
Hazardous Waste Section, Resource Management Division
Michigan Department of Environmental Quality
525 W. Allegan (Constitution Hall)
Lansing, Michigan
U.S.A. 48933

Dear Mr. Conforti:

Re: Response to MDEQ Comments Dated June 10, 2011
Former Peregrine Coldwater Road Facility, Genesee Township, Michigan

On behalf of Revitalizing Automotive Community Environmental Response Trust (RACER), the following presents responses to the Michigan Department of Environmental Quality (MDEQ) comments and questions received by letter on July 6, 2011 regarding the "Response to MDEQ Comments Dated March 29, 2011 and Revised Monitoring Well Installation and Groundwater Monitoring Report; Former Peregrine (US), Inc. (Peregrine), Coldwater Road Facility, Genesee Township, Michigan [Site]" submitted to the MDEQ on May 9, 2011.

A letter dated February 14, 2011 was submitted to the MDEQ titled "Monitoring Well Installation and Groundwater Monitoring Report and Address Change Notification" which presented the results of the November and December 2010 groundwater sampling event. On March 29, 2011, MDEQ provided comments on the submission. On May 9, 2011, CRA, on behalf of RACER, submitted responses to the MDEQ comments dated March 29, 2011 and submitted a Revised Monitoring Well Installation and Groundwater Monitoring Report .

We are available if you would prefer a meeting or call to discuss our responses. For ease of review, the original comment is presented in ***bold italics***, followed by a response.

DEQ Comment #1

With respect to the response to our comment 3b - you state that you will conduct a background study to evaluate whether or not metals concentrations above applicable criteria may be background concentrations. This is consistent with our recommendations, but the document does not provide any additional details on conducting this study other than the plan to sample

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two upgradient wells (B-2D and B-19A). Please provide a detailed plan for conducting this study that includes the number of sampling events, parameters, methods, statistical procedures, etc., so that we are in mutual agreement that the study will be acceptable for defining representative background concentrations.

Response

As stated in the May 9, 2011 submittal, we propose to sample deep landfill well B-2D and shallow landfill well B-19A, located to the north of the landfill, as presented in Figure 1. The samples will be used as part of the Facility-Specific Background study.

Further details of the background study are proposed as follow:

1. Sample deep landfill well B-2D and shallow landfill well B-19A quarterly for the remaining three events of 2011 using low flow procedures for 2011; one of which has been completed. These locations will help to characterize the background groundwater concentrations as they are a significant distance from the former facilities operations.
2. Deep landfill wells B-20D, B-23DR, B-21D and shallow landfill wells B-18A, B-7 and B-19AR, as presented in Figure 1, will be sampled quarterly for the two remaining quarterly events for 2011, using low flow procedures. These additional locations will help to further characterize the background groundwater concentrations as they are a significant distance from the former facilities operations.
3. Consistent with MDEQ guidance (Sampling Strategies and Statistics Training Materials for Part 201 Cleanup Criteria, 2002), the proposed monitoring identified above will result in nine shallow background samples (3 from B-19A, 2 from each B-18A, B-7, and B-19AR) and nine deep background samples (3 from B-2D, and 2 from each B-20D, B-23DR, and B-21D).
4. Once field parameters are stable and within low flow limits, collect and analyze samples for total metals that previously exceeded screening criteria of aluminum, arsenic, chromium, iron, lead, manganese, and vanadium. If low flow sampling cannot yield low flow turbidity limits (5 NTU or less), samples will be filtered and analyzed for dissolved metals instead of total metals.
5. Following completion of monitoring, the results will be evaluated to determine underlying statistical distributions (normal/log normal/neither) for the deep data set and shallow data set. The data will be checked for the presence of outliers.
6. The Facility-Specific Background values will be calculated per MDEQ guidance (mean plus 3 standard deviations).



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7. The Facility data will be screened against the Facility-Specific Background on a point-by-point basis. The results will determine all wells showing concentrations below the Facility-Specific Background concentrations. All wells showing below Facility-Specific Background concentrations will be exempt from further screening against MDEQ criteria.

DEQ Comment #2

With respect to the response to our comment 3c - the document appears to state that there is no possibility for off-site migration of contaminated groundwater since there is no continuous shallow groundwater system and, as such, that no further investigation is required. The RMD cannot accept this conclusion without a definitive demonstration that no off-site migration of contaminated groundwater is occurring. The hydrogeology of this site has proven complex and, the Groundwater Not In An Aquifer (GWNTA) demonstration previously submitted was denied by the MDEQ. The demonstration that contaminated groundwater is not migrating off site needs to combine information generated by the site specific background study for metals (to determine if migration of metals in site groundwater needs to be further considered) along with additional downgradient monitoring at the property border (for metals, as appropriate, and volatile organic compounds) and specific consideration of potential migration via storm sewers and utility corridors (preferential pathways). Once site specific background values are determined, we request that you provide a proposal for downgradient groundwater monitoring, including well locations, interval screened, analytical parameters, and other pertinent information.

Response

In order to work cooperatively towards completing the project, as suggested a proposal will be developed and submitted following the completion of the 2011 quarterly sampling program. The proposal will include an analysis of groundwater metals using Facility-Specific Background information and the utility corridor monitoring will be conducted and will propose additional monitoring, as appropriate.

Please recall that as stated in the May 9, 2011 response, we believe the potential for off-Site migration of shallow groundwater is not possible for the following reasons:

1. During drilling activities conducted at the Site, perched water within the shallow silty sand was generally found to be absent. As reported in the Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report (CRA, August 2010), including the drilling activities conducted by Peregrine in 1996 and 1997, water was identified in 83 of 236 borings, or approximately 35 percent of the locations. The saturated thickness of the shallow perched zone identified during drilling are presented in Figure 2. When



present, the shallow perched zone is intermittent and discontinuous in nature and is usually associated with engineered permeable fill placed during the construction of the plant.

2. Based on remedial actions completed to address volatile organic compounds (VOC(s)) previously observed at the Site and subsequent monitoring, our opinion is that VOC issues have been sufficiently addressed at the Facility and require no further sampling. Figure 3 presents the groundwater sample results which identify exceedances of screening criteria for VOCs (trichloroethene and cis-1,2-dichloroethene) at six monitoring wells (MW-4, MW-11, MW-12, MW-13, MW-14 and DSA_MW-01). VOC impacted soil in the vicinity of monitoring wells MW-14 and DSA MW-01 was excavated in April, 2004 and soil samples were taken to verify the removal of VOCs to a level below screening criteria. MW-4 and MW-13 both exhibited concentrations of VOCs below screening criteria during the most recent sampling events. During the well survey performed in April, 2004 MW-4 was unable to be located, despite excavating all backfill within a 100 ft radius of the approximate location, all that was found was a whole in the pavement filled with soil believed to be the location of the well. Similarly, MW-13 was not located. Despite cleaning all dirt and weeds from the concrete pavement near the approximate location of the well and the excavation of native clay to approximately 4 ft, all that was found was a broken piece of PVC casting lying horizontally 3 ft below ground surface believe to be the remnants of the well. MW-11 and MW-12 were removed prior to 2004.
3. The potential for migration along utility corridors exists for utilities crossing the property line below the water table. It is expected that only storm and sanitary sewers would be applicable. The main stormwater discharge from the Site is through a 72-inch sewer that leaves the property to the north near SS01 and ultimately enters Hughes Drain, as presented on Figure 1. An additional utilities corridor containing a storm sewer and a sanitary sewer exists at the south end of the property near MW-16-10 as presented in Figure 2. We propose installing a monitoring well in the bedding of the sewers near the property boundary to characterize the water in the sewer bedding. We can complete the well installation and sampling in 2011, however, we will need MDEQ authorization for additional budget since this was not contemplated in the 2011 budget that has been approved. Alternatively, the work will be completed in 2012 and identified in the proposal identified above. We anticipate that the groundwater samples will be analyzed for aluminum, arsenic, chromium, iron, lead, manganese, vanadium, and VOCs.
4. With respect to the GWNIAA demonstration previously proposed, our recollection is that based on discussion amongst the parties at that time (MDEQ, GM, and CRA) it was concluded that existing groundwater impacts would be better addressed by restricting



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the use of groundwater at the property rather than attempting to satisfy the GWNIAA requirements. Can you please advise if this is still MDEQ's position?

Should you have any questions on the above, please do not hesitate to contact the undersigned.

Yours truly,

CONESTOGA-ROVERS & ASSOCIATES

A handwritten signature in black ink, appearing to read "Michael R. Tomka".

Michael R. Tomka, P.E.

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Encl.

Cc: David Favero, RACER Trust





