

HIGHLIGHTS

National Risk Management Research Laboratory Ground Water and Ecosystems Restoration Division Robert S. Kerr Environmental Research Center Status Report for the week of January 6, 2014

TECHNICAL ASSISTANCE

Technical Assistance Region II: On November 20, 2013, Mr. Steven Acree (GWERD) provided a technical review to RPM Clifford Ng on the comments concerning the "Implementation Work Plan-Hydraulic Surcharging Pilot Study," DuPont Pompton Lakes Works, Pompton Lakes, New Jersey. In general, the changes to the work plan proposed in the responses address previous comments. The proposed changes to the monitoring of hydraulic gradients surrounding the horizontal well will greatly enhance the evaluation of flushing rates within the shallow aquifer. However, it is recommended that the three new piezometers proposed for installation south of the horizontal well be temporarily added to the ongoing semi-annual groundwater monitoring program for the duration of the pilot study. Groundwater quality data from these locations may allow relatively rapid demonstration of the effectiveness of increased flushing rates. Monitoring of groundwater quality at these three locations should be periodically re-evaluated and, ultimately, eliminated when the effects of additional flushing have been documented.

(14RC02-001) (S. Acree (GWERD) 580-436-8609)

Technical Assistance Region IV: On November 22, 2013, Dr. Bruce Pivetz (Dynamac Corp.), under the direction of Dr. David Burden (GWERD), provided technical review comments to RPM Jon Bornholm on the Work Plan for a Back Valley Pre-Design Geotechnical Investigation, Chemtronics Site, Swannanoa, Buncombe County, North Carolina, (the Work Plan). It was determined that the Work Plan was technically valid and complete, based on a technical review of the Work Plan supplemented with information from previous site documents. It was further determined that the Work Plan contained sufficient information and discussion for site activities to move forward with the pre-design geotechnical investigation and laboratory study. In general, the proposed methods, studies, and investigation locations appear appropriate. No major flaws or discrepancies were found in the Work Plan. For the Work Plan, very minor clarification and the addition of some explanatory text is recommended. For the geotechnical investigation activities, recommendations include consideration of the use of grout in a few of the site borings, a very brief assessment of the potential for vertical flow to result in contaminant migration under the VBW, and that great care be taken in handling of the ground water to be used in the laboratory testing (in order to minimize loss of volatile contaminants). (14-R04-002)

Technical Assistance Region II: On November 25, 2013, Dr. Bruce Pivetz and Dr. Daniel Pope (Dynamac Corp.), under the direction of Mr. Steven Acree (GWERD), provided technical review comments to RPM Clifford Ng on the monthly progress reports for the enhanced in-situ bioremediation (EISB) pilot study (Reports #1, #2, and #3), DuPont Pompton Lakes Works, Pompton Lakes, New Jersey. The reports briefly discuss the activities completed during the reporting period, the results to date, and the activities scheduled for the next reporting period. The available performance data indicate that the hydraulic aspects of the EISB system are, in general, performing as intended. It is recommended that the study activities continue as they are currently being conducted. An additional recommendation is that the monthly reports include some preliminary evaluation of what the bromide data mean in terms of pore volume estimations and correlation of changes in volatile organic compounds (VOC) concentrations to EISB related activities. Also, graphs over time of the parent and daughter compounds, TOC, and oxidation/reduction potential (ORP) would be useful additions to the reports.

(14RC02-001)

(S. Acree (GWERD) 580-436-8609)