HIGHLIGHTS

National Risk Management Research Laboratory
Ground Water and Ecosystems Restoration Division
Robert S. Kerr Environmental Research Center
Status Report for the week of February 24, 2014

TECHNICAL ASSISTANCE

Technical Assistance Region I: On February 12, 2014, Dr. Eva Davis (GWERD) provided technical review comments to RPM Kevin Heine on the "Source Area and Permeable Reactive Barrier Pre-Design Investigation Report for the South Municipal Water Supply Well Superfund Site located in Peterborough, New Hampshire, dated July 2013. In addition, the review included two Technical Memorandums recently provided by New Hampshire Ball Bearing. This review focused on the characterization of the source zone areas, and did not include a substantive review of the Permeable Reactive Barrier related work. In general, the document is well written and comprehensive of the extensive characterization efforts that were undertaken from 2011 to 2013. However, there is concern with several of the conclusions drawn based on the data, and concerns about the proposed extent of treatment for the remedies chosen in the 2010 Record of Decision (ROD) Amendment. Other presentations of the data make it clear that the data does not exist to clearly determine that these areas are no longer part of the plume. Sometimes, soil analytical data can give a better indication (another line of evidence) of the presence or absence of DNAPL, however, soil sampling was not performed at MIP-12, and the results of the soil sampling at MIP-3 are not consistent with the groundwater data. Thus, there is not another line of evidence (other than the groundwater data) to indicate or refute the presence of DNAPL in this area.
(14-R01-004) (E. Davis (GWERD) 580-436-8548)

Technical Assistance Region I: On February 12, 2014, Dr. Bruce Pivetz (Dynamac Corp.), under the direction of Dr. David Burden (GWERD), provided technical review comments to RCRA Facility Manager, Aaron Gilbert, on the Memorandum: *Review of Potential Impacts to Biological Receptors Resulting from the Proposed Downsizing the Groundwater Remedial Effort at the Hamilton Sundstrand Facility, Windsor Locks, CT, October 30, 2013* (Oct. 30 Memo). The Oct. 30 Memo contains reasonable concerns about the proposal to deactivate all the EWs except for EW-10 through EW-13. The assumption of groundwater flow redirection after deactivating the western and eastern EWs lacks adequate evidence. The Remedial SE Report does not appear to contain sufficient information to fully validate the assumption. It is recommended that evaluation or modeling of the combined capture zone of EW-10 through EW-13 be done prior to deactivating any EWs. Further, the capture zones of the other EWs should be evaluated using the methods in USEPA (2008). If any EWs are deactivated, it is recommended maintaining the current extent and schedule of monitoring, until the impacts of deactivating any EWs are determined. If the monitoring data are negative or unclear, it is recommended that the deactivated EWs be reactivated.
(14-RC01-001) (D. Burden (GWERD) 580-436-8606)

Technical Assistance Region V: On February 19, 2014, Dr. Bruce Pivetz and Dr. Daniel Pope (Dynamac Corp.), under the direction of Dr. David Burden (GWERD), provided technical review comments to CAPM Donald Heller on the *Memorandum: Pilot-Scale Treatability Study, Evonik Degussa Corporation, Tippecanoe Laboratories, December 4, 2013* (Eli Lilly & Company) Lafayette, Tippecanoe County, Indiana. The Tech Memo describes some results and observations of the first phase of the pilot-scale study (the Study) the Site. The updated Tech Memo contains additional information and analytical data relating to the first phase of the Study. The updated Tech Memo makes it clear that the Study was not intended to examine the effectiveness of In-Situ Chemical Oxidation (ISCO) alone. As such, it is acknowledged that the second phase, enhanced biodegradation, could proceed. While the Study appears to be focused on the overall effect of the combined ISCO and bioremediation efforts, note that bioremediation is likely to be challenging. Therefore, it is recommended that initial or continued efforts be given to optimizing ISCO so that contaminant concentrations are reduced as much as possible before bioremediation is attempted. It is also recommended that all available hydrologic information for the Site be re-evaluated in order to clarify the probable oxidant transport pathways.
(14-RC05-002) (D. Burden (GWERD) 580-436-8606)

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