



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 20, 2014**

TECHNICAL ASSISTANCE

Technical Assistance Region I: On November 26, 2013, Mr. Steven Acree (GWERD) provided technical review comments to RPM Carol Keating on the “Long-Term Monitoring and Maintenance Plan Update, Fort Devens Site, Shepley’s Hill Landfill, Devens, Massachusetts. In general, the majority of the proposed changes to the monitoring locations and monitoring frequencies appear to be acceptable. It is noted that review of the groundwater flow model update is not yet complete and will be provided as soon as possible. Many wells are proposed only for monitoring of hydraulic head. Obtaining hydraulic head data more frequently for some of the wells would be useful for routine definition of the potentiometric surface. It is recommended that hydraulic head be monitored at the same frequency as the locations currently proposed for hydraulic monitoring only. In addition, it is recommended that hydraulic head be monitored at wells SHL-12 and SHL-17 to provide better control on the southern portion of the potentiometric surface maps and at well SHL-3 to provide control at the southern end of the slurry wall.

(14-R01-003)

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Technical Assistance Region V: On December 12, 2013, Dr. Daniel Pope (Dynamac Corp.), under the direction of Dr. David Burden (GWERD), provided technical review comments to Donald Heller on the *Historical Source Area Delineation and ERD Bench Scale Study Report* (Report), for the Demmer Properties, LLC/ Former Motor Wheel Facility, Lansing, Michigan. The Report, developed by consultants for the potentially responsible parties (PRPs), provides the results of 1) recent source area characterization/delineation efforts, 2) a synthetic precipitation leaching procedure (SPLP) test on vadose zone materials from the source area, and 3) a bench-scale bioremediation study (Study) on contaminated ground water. The results of the bench-scale ERD Study are promising, and we recommend proceeding on design of a pilot-scale study for the saturated zone. Additionally, because positive results occurred in the SPLP test, and there is general uncertainty associated with the limited knowledge of the contaminant source distribution and possible transport at the Site, it would be prudent to consider active measures such as soil vacuum extraction to remove contaminant source material from the source area vadose zone.

(14-RC05-001)

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Technical Assistance Region V: On January 8, 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) for the Evonik Degussa Corporation Tippecanoe Laboratories Site, Tippecanoe County, Indiana. The first phase of the Study was In-Situ Chemical Oxidation (ISCO), which consisted of subsurface injection of a chemical oxidation reagent at three locations within the Site. It is recommended that the enhanced biodegradation phase of the Study be delayed until the post-ISCO ground-water samples have been analyzed for the contaminants, and the results evaluated and reviewed. It is also recommended conducting the pilot scale treatability study so that the effects and effectiveness can be differentiated for each phase of the study. Additionally, it is recommended that a discussion of the planned conditions for bioremediation be provided, along with a discussion of how these conditions will contribute to the degradation of all of the Contaminants of Concern.

(14-RC05-002)

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