HIGHLIGHTS

National Risk Management Research Laboratory
Ground Water and Ecosystems Restoration Division
Robert S. Kerr Environmental Research Center
Status Report for the week of May 18, 2015

TECHNICAL ASSISTANCE

Technical Assistance Region II: On April 24, 2015, Dr. Bruce Pivetz (Dynamac Corp.), under the direction of Mr. Steven Acree (GWERD), provided technical review comments to RPM Clifford Ng on the "Draft Onsite Groundwater Interim Remedial Measures (IRM) Pilot Study Work Plan, DuPont Pompton Lakes Works, Pompton Lakes, New Jersey." This technical review evaluated the IRMWP for selection of treatment area locations, dimensions, and depths; technical validity of the treatment technology evaluations and selection of a technology; and process and performance monitoring plans. This technical review evaluated the IRMWP for selection of treatment area locations, dimensions, and depths; technical validity of the treatment technology evaluations and selection of a technology; and process and performance monitoring plans. The IRMWP appears to be well-written and accurate in technical aspects. In general, the delineation of the treatment zones (laterally and vertically), and the proposed methods, appear to be appropriate. The selection of ISCO as the treatment technology, rather than horizontal sparging or soil mixing, is appropriate. The process and performance monitoring approach appears acceptable. However, consideration could be given to establishing a baseline against which to conduct the performance monitoring. One recommendation is to consider establishing a baseline against which to compare the performance monitoring results. Another recommendation is to conduct the injections in a "top-down" manner, that is, injecting at progressively deeper depths rather than injecting while extracting the probe from a borehole.
(15RC02-001) (S. Acree (GWERD) 580-436-8609)

Technical Assistance Region VI: On April 29, 2015, Dr. Scott Huling (GWERD), provided technical review comments to RPM Stephen Tzhone regarding the document entitled, "Supplemental Groundwater Tracing Summary Report Arkwood, Inc. Superfund Site, Omaha, Arkansas", prepared by Ozark Underground Laboratory (March, 2015). It was proposed in the tracer study report that New Cricket Spring captured all the injected tracer and that any uncaptured tracer residuals were likely detained within the immobile porosity associated with the porous media. An additional fate mechanism not evaluated nor considered in the fate and transport assessment was that some of the tracer in the ground water could have migrated laterally, and bypassed the capture zone created by the naturally occurring spring. Multiple lines of evidence presented in this report and in previous reports, indicate that a ground water flow divide exists on site resulting in multi-directional ground water flow. Consequently, multiple contaminated ground water flow directions away from on-site waste management areas would occur and complete capture by the New Cricket Spring was projected to be unlikely. Ground water flowing beneath the waste management area located on the north side of the property, adjacent to the train tracks, would be particularly vulnerable in avoiding capture given that it flows in nearly the opposite direction of the spring. It was recommended to re-evaluate the feasibility of the New Cricket Spring ground water treatment system to fully capture all of the contaminated ground water emanating from the area encompassed by the Arkwood Superfund site.
(15-R06-002) (S. Huling (GWERD) 580-436-8610)

Technical Assistance Region I: On May 4, 2015, Dr. Eva Davis (GWERD) provided technical review comments to RPM Cheryl Sprague on the "Updated Operations and Maintenance Plan (OMP) for the Beede Waste Oil Superfund Site, Plaistow, New Hampshire," dated April 2015. In general, the Updated OMP responds to the concerns on the March 2014 Draft OMP. Recommendations include the identifying the perimeter air monitoring locations, and identifying the size and boundaries of the exclusion zone, the contaminant reduction zone, and the support zone. This information should be shown on figures in the OMP. Also, the OMP should ensure that the Standard Operating Guidelines contain the appropriate information for the Beede Oil site.
(15-R01-002) (E. Davis (GWERD) 580-436-8548)

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