



HIGHLIGHTS

**National Risk Management Research Laboratory
Ground Water and Ecosystems Restoration Division
Robert S. Kerr Environmental Research Center
Status Report for the week of March 16, 2015**

TECHNICAL ASSISTANCE

Technical Assistance Region I: On February 17, 2015, Dr. Eva Davis (GWERD) provided technical review comments to RPM Richard Hull on the “Draft Feasibility Study (FS) Report for the Bedrock Contamination at the Savage Municipal Water Supply Superfund Site in Milford, New Hampshire.” The Remedial Action Objectives (RAOs) for the site, as well as EPA’s Technical Impracticability (TI) Wavier Guidance, requires treatment of principal threat waste (commonly defined as dense nonaqueous phase liquid (DNAPL)) to the extent practicable. From the discussion provided in the Draft FS, it appears that thermal treatment of the bedrock is technically feasible, but costly, having significantly greater costs than the other alternatives that were evaluated. In light of the fact that thermal remediation has the greatest potential for achieving RAOs, and will achieve them more quickly than any of the other technologies evaluated, it is recommended that there be an evaluation of the potential benefits of treating smaller, less costly areas with thermal remediation. The Draft FS includes the costs to treat different sized areas, however, the cost/benefits of treating the smaller sized areas is never evaluated. This evaluation should take into account the exposure pathways that are most probable to be complete in the future, to determine the extent of thermal treatment needed to ensure that the exposure pathways cannot be completed.

(15-R01-004)

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Technical Assistance Region I: On February 25, 2015, Dr. Eva Davis (GWERD) provided technical review comments to RPM Cheryl Sprague on the “Updated Construction Quality Assurance Project Plan (CQAPP), the Draft Site Management Plan (SMP), the Draft Remedial Action Work Plan (RAWP), and the Draft Health and Safety Plans (HASP) for Beede Waste Oil Superfund Site in Plaistow, New Hampshire.” There were no comments on the HASP or SMP. There were only minor comments on the CQAPP and RAWP that were in the interest of maintaining consistency between the documents.

(15-R01-002)

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Technical Assistance Region III: On March 5, 2015, Dr. Daniel Pope and Dr. Bruce Pivetz (CSS-Dynamac Corporation), under the direction of Dr. David Burden (GWERD), provided technical review comments to RPM Sharon Fang on the “Monitored Natural Attenuation (MNA) at the North Penn Area 5 Superfund Site, Colmar, Pennsylvania.” Several documents were included in this review. It appears that the NA mechanisms that would play a significant part in an MNA remedy for the Site would be mostly non-destructive mechanisms. Note that especially where non-destructive NA processes are the most significant part of an MNA remedy, plume control may be desirable even if remediation is likely to be difficult. To the extent that the data available for this review indicate that destructive NA mechanisms are operating at the Site. The question to be considered at this point is *if MNA is feasible under the current site conditions*. Reviewing the data that appear to indicate that destructive NA processes are not significant at the Site, it appears that achievement of the desired downgradient ground-water contaminant concentrations by an MNA remedy will likely be a very long-term process.

(15-R03-002)

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SCIENTIFIC AND TECHNICAL PUBLICATIONS

Bell, James M. (Civil Engineering, 607th Support Squadron, Osan AB, Korea), John A. Christ (Commander’s Action Group, U.S. Air Force Academy, CO), Junqi Huang (GWERD), Mark N. Goltz (Air Force Institute of Technology, AFIT/ENV, Wright Patterson AFB, OH), Avery H. Demond (Univ. of Michigan, Ann Arbor, MI). 2015. “Remediation Complications: Subsurface Cracking at Hazardous Waste Sites.” *The Military Engineer (TME)*. Vol. 107, No. 693, January-February 2015.

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