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LETTER AND COMMENTS FROM U S EPA REGION I REGARDING LONG TERM MONITORING REPORT FOR THE SEMI ANNUAL ROUND 1 2009 AT RUBBLE DISPOSAL AREA OPERABLE UNITS 2 (OU 2) AND 9 (OU 9) NAS SOUTH WEYMOUTH MA
07/20/2009
U S EPA REGION I

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

July 20, 2009

Brian J. Helland, P.E.
BRAC Program Management Office NE
4911 South Broad Street
Philadelphia, PA 19112-1303

Re: Long-Term Monitoring Report for the Semi-Annual Round 1 – 2009 at the Rubble Disposal Area

Dear Mr. Helland:

Thank you for the opportunity to review the *Long-Term Monitoring Report for the Semi-Annual Round 1 – 2009 at the Rubble Disposal Area* dated June 2009. The report summarizes analytical results from the first round of the third year of long-term monitoring, based on sampling performed in March 2009. Monitoring frequency was reduced from quarterly to semi-annually in 2009. EPA reviewed the document for internal consistency, consistency with the project Quality Assurance Project Plan (QAPP) and Long-Term Monitoring Plan (LTMP), technical accuracy, and completeness. The quarterly report is complete, accurate, and objective in its presentation of the monitoring results. It documents in detail various adjustments made to the field sampling and laboratory analytical methods to accommodate unusual circumstances (*e.g.,* slow recharge of monitoring wells). Detailed comments are provided in Attachment A.

Analytical results generally are consistent with results from the previous two years. Notable results include:

- Arsenic, benzo(a)pyrene, and manganese are named in the ROD as groundwater COCs. Arsenic and benzo(a)pyrene were not detected in groundwater. Manganese was detected in groundwater at very high concentrations, as in previous LTM sampling rounds. Maximum Mn was 20.1 mg/L (total), comparable to previous results, at TT04, also consistent with past analyses.
- PCBs, which were a primary driver for the implementation of the remedy, were not detected in groundwater in this round.
- VPH and EPH were not detected in groundwater. (In previous rounds, low concentrations of VPH were detected at TT07, in the center of the landfill.)
- Surface water samples were ND for PCBs and VPH/EPH. Dissolved iron was detected at concentrations exceeding its NWRQC (1.0 mg/L), at a maximum of 21.8 J mg/L. Manganese was detected at concentrations up to 10.6 mg/L (total, SW03), possibly representing locally discharging groundwater. The surface water at all wetland locations was reducing ORP -125 to -86 mV).
- Landfill gas monitoring yielded results consistent with past rounds. Gas probes at the northern and western perimeter, and gas vents at the center of the landfill, showed elevated methane.

I look forward working with you and the Massachusetts Department of Environmental Protection on the investigation and remediation of the remaining areas of the base. Please do not hesitate to contact me at (617) 918-1385 should you have any questions.

Sincerely,

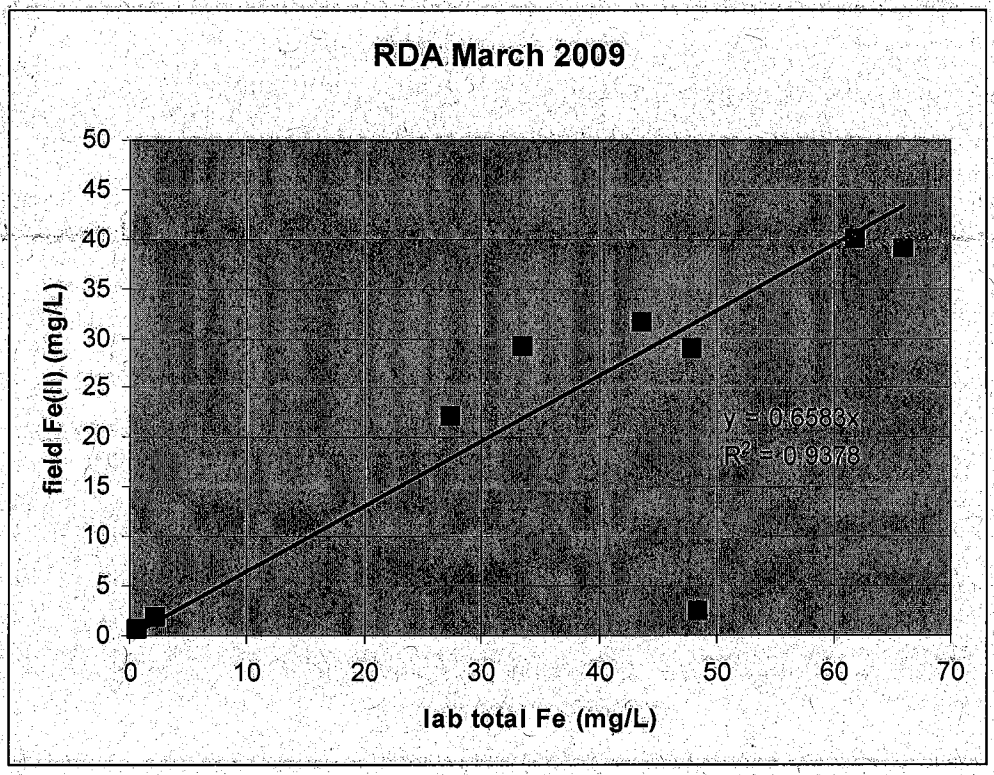
Kymberlee Keckler, Remedial Project Manager
Federal Facilities Superfund Section

Attachment

cc: Dave Barney, USN, South Weymouth, MA
Dave Chaffin, MADEP, Boston, MA
Kevin Donovan, SSTTDC, South Weymouth, MA
Phoebe Call, TTNUS, Wilmington, MA

ATTACHMENT A

Page	Comment
p. 2-3, §2.2.1	The text discusses water levels measured at the MW-50D/D2 well pair, and notes that, "… the gradient was negligible … ." Please revise this to, "… the *vertical* gradient was neglible …" for clarity.
p. 2-12, §2.5	The text states, "The target elevation for the bottom of each probe was 120, …." Please add appropriate units (*i.e.*, ft msl).
p. 3-4, §3.1	The text notes that, "Arsenic was not detected in any of the samples collected during this event." Because arsenic is a ROD-specified COC, and because arsenic analysis by ICP sometimes suffers from relatively high detection limits, please report the detection limits achieved by the laboratory for arsenic in this sampling round here. This will make the statement that arsenic was not detected more meaningful.
p. 3-5, §3.1	It is interesting that the field ferrous iron results and the laboratory total iron results are well correlated, with the field ferrous iron typically about 2/3 the laboratory result, as shown below. The anomalous point is the datum for MW-50D2. It is omitted from the linear regression shown. Given that this correlation is so good for other sample locations, and that the ORP measured at MW-50D2 was -62.9 mV (Table 2-3), under which conditions iron is expected to be reduced, please verify to the extent possible that the field ferrous iron result for MW-50D2 is reported correctly (Table 2-3).



p. 3-10, §3.3 The text states that a sheen was observed on the surface water at sediment sample locations SD02 and SD03. Please also mention that orange floc was observed at all three sediment sample locations (*e.g.,* p. 2-8, §2.3.2) as this may also affect the interpretation of the sediment analytical results.