

Summary of HRMB/LANL ER Meeting
TA-16-260 CMS Issues
13 July 1998

Attendees:

NMED: Kim Hill (EPA), John Young (HRMB), Steve Yanicak (DOE-OB), Michael Dale (DOE-OB)

LANL ER: Mark Tardiff, Donald Hickmott, Lynn Kidman, Val Rhodes

Agenda Items:

PRS 16-021(c) Data Update:

- LANL ER provided new data and data interpretations for PRS 16-021(c):
 - (1) Validated HE and VOC water data from borehole 2712 [located approximately 325 ft downgradient from the PRS 16-021(c) outfall] was provided. High RDX levels were noted and LANL speculated that this water could be along a pathway between the outfall area and Peter Seep. HRMB inquired whether bromide tracer breakthrough had been observed.
 - (2) Inorganic data for alluvial wells was provided in draft tabular form. High Ba in one alluvial sample was noted. LANL also noted that this alluvial Ba was a possible source for high Ba in surface water that has been observed sporadically downgradient from MDA-P.
 - (3) Updated tracer plots for all three springs were provided. LANL noted that there was evidence for a small Br breakthrough in Burning Ground spring along with the more dramatic Br breakthrough previously noted in SWSC spring. HRMB inquired whether Br had been observed in the alluvial wells.
 - (4) Statistical plots comparing spring waters and a provisional spring background dataset were provided. LANL inquired whether this was a useful form of data presentation. HRMB expressed no concerns with this presentation. HRMB suggested using Stiff diagrams for presentation of major element chemistry. DOE-OB suggested examining their background dataset as well, and stated that they would provide LANL with these data.
 - (5) Flow vs concentration data for springs was presented. LANL suggested that several of these anion plots suggested a constant source of these constituents.

Action Item: LANL will consider HRMB's inquiries during their data evaluation.

PRS 16-021(c) Additional Data Needs:

- LANL ER discussed the handout provided to HRMB on 6/17/98 in detail. This handout outlines additional data needs for presentation in the PRS 16-021(c) CMS Plan. See this handout for a technical summary of the presentation.
- HRMB and DOE-OB made the following suggestions: 1) ensure that borehole 2712 is sampled for Br; 2) consider use of TDS monitors in the alluvial boreholes; 3) consider use of the Hawk' Ba kit; consider use of flow integrated samples at 1000 ft intervals as a function of flow rate; 4) consider use of nitrogen isotopes as well as the more standard

HSWA LANL 3/10/98/16/16-003(k) + 16-021(c)



isotopic suite; 5) consider accelerating BMPs at MDA-R; and 6) ensure that the PRS 16-021(c) work is well-integrated with the groundwater protection plan and process.

Action Item: LANL agreed to consider all of HRMB's suggestions during drafting of the CMS Plan.

PRS 16-021(c) CMS Process and CMS Report Outline:

- LANL ER provided a draft memorandum outlining the CMS Process and the CMS Report outline, with PRS 16-021(c) as an example. HRMB (Kim Hill) will provide draft comments prior to 7/31/98.

Action Item: HRMB (Kim) will provide draft comments prior to 7/31.

PRS 16-021(c) Status of Ongoing and Potential Upcoming Pilot Studies:

- LANL ER noted that the in-situ bioremediation pilot had been placed on hold due to feedback from the ITRD team.
- LANL ER noted that the technologies that are still being considered as a result of the ITRD technology screening include: zero-valent iron treatment, the W.R. Grace process and ex-situ stabilization for the source region, and passive barriers, phytoremediation and granular activated charcoal units for the springs and surface waters.
- LANL noted that they had provided non-RCRA waste soils to Commodore and U. Nebraska for preliminary lab scale studies of the SET technology and zero-valent iron treatment. LANL noted that additional soils would be provided to other vendors and inquired how best to communicate these studies to NMED. **{Val – did we resolve this question?}**
- LANL also noted that a pilot of a passive barrier system might be proposed in the next few months and inquired whether a NOI or other regulatory notification would be required. HRMD suggested a presentation to multiple bureaus (including both the Surface and Groundwater bureaus) on 7/31. LANL will plan on presenting at this meeting.

Action Item: LANL will present information on the passive barrier systems on 7/31.