

**Meeting Notes:**  
**SX Farm Interim Measures Proof of Principle Test Planning**

Meeting Date: October 30, 2012  
Location: Ecology Building, room 3B

Purpose: Discuss plan for SX Farm interim measure soil contamination removal proof-of-principle test, and define next steps in completing work plan.

Attendees: Jeff Lyon (Ecology), Michelle Hendrickson (Ecology), Joe Caggiano (Ecology), Marysia Skorska (Ecology), Jim Alzheimer (Ecology), Mike Barnes (Ecology), Chris Kemp (ORP), Doug Hildebrand (DOE), Dan Parker (WRPS), Dan Glaser (WRPS), Harold Sydnor (WRPS), Mike Connelly (WRPS), Dan Glaser (WRPS), Mark Triplett (PNNL)

**Topics of Discussion:**

- Dan Parker described the stages of the SX farm contaminant removal test (see Figure 1).
  - The purpose of the test is to determine if contaminants can be removed using direct push boreholes.
  - Three direct push locations south of the farm will be pushed and logged.
  - Logs will be reviewed to determine sample depths.
  - Samples will be analyzed for moisture and a few mobile contaminants to determine if the location is feasible to perform the test.
  - Minimum moisture content for testing will be based on lab and modeling work performed by PNNL, but will be a qualitative call.
  - Nitrate is considered an important indicator for the ability of the process to remove dissolved chemicals – other soluble contaminants will behave similarly to nitrate.
  - The work plan will include a schedule for design of the field monitoring and test equipment, set-up, and test performance.
  - The work plan will not include the details of the field test configuration because the initial stages must be performed first, to obtain the needed information to design the test.
  - The work plan will include a schedule for the later proof-of-principle test activities and deliverables, including the recommendation on whether further testing or implementation of the method should be planned.
- Joe Caggiano asked if extraction through the narrow direct push borehole was feasible. Dan responded that the test will help answer that question. Dan noted that it is unclear how successful contaminant removal can be given the need to maintain air/water velocities in the formation as the radius impacted by the test increases, but we want to find out.
- Marysia Skorska asked if the test would employ only vacuum or a combination of vacuum and air injection. Dan responded that a decision had not yet been made, but multiple configurations were being considered. Conceptually vacuum could be used to pull water into the well from the formation, and a small diameter bladder pump could be used to carry the water from the well to the ground surface.
- Marysia requested a high level schedule of the activities associated with the SX test and other elements of the work plan.



- The group discussed the process for review of draft work plan sections prior to formal submittal. The purpose of advance review is to address questions, ensure that the deliverable does not contain surprises, and make the review process easier.
- Susan Eberlein indicated that her goal was to provide enough advance information that, after receiving the formal submittal, Ecology would consider it possible to provide provisional approval to start field work while completing detailed review of the work plan.
- The written work description section for each of the work plan activities (SX test, U farm resistivity work and TX farm direct push work) will be extracted and provided to Ecology as a draft for review. The draft will be provided by email, and a follow up meeting will be held if there are questions or comments that need discussion.
- Each work plan section (SX, U, TX) will be provided in a separate email to the entire group, over the next 2 weeks.
- Ecology may decide to appoint a lead to coordinate review and response for the various sections.

Actions:

1. Provide summary schedule of activities associated with each element of the work plan (Eberlein)
2. Provide U Farm work description section (Glaser)
3. Provide TX Farm work description section and draft TX data requirements document (Connelly)
4. Provide SX farm work description section (Parker)
5. Appoint Ecology lead/point of contact for each section as appropriate (Lyon)

Concurrence:

CJ Kemp                      11-13-12  
 C.J. Kemp, ORP                      Date

Jeff Lyon                      11-13-12  
 Jeff Lyon, Ecology                      Date

Figure 1. SX Farm Contaminant Removal Proof of Principle Test Phases

