200 West Tank Farms Interim Measures Investigations
Status Report as of November 19, 2013

BACKGROUND: On a monthly basis, DOE and Ecology representatives meet to discuss the documents, field work, and results of interim measures investigations being undertaken at the 241-TX, 241-SX, and 241-U Tank Farms. The scheduled November 2013 meeting conflicted with other commitments held by the meeting participants. As a result, Ecology and DOE agreed that DOE would prepare a status report in lieu of holding the November 2013 meeting. The contents of this status report align with a typical monthly meeting agenda for the 200 West Tank Farms interim measures investigations.

DISCUSSION:

Prior Meeting Notes: Entry of the September 2013 meeting notes into the TPA Administrative Record has been confirmed. The October 2013 meeting notes have been signed by the DOE and Ecology project managers and submitted for entry to the TPA Administrative Record.

Status of Ongoing Field Work: The following characterization field work is being undertaken at the 200 West Tank Farms pursuant to the *200 West Area Tank Farms Interim Measures Work Plan* (RPP-PLAN-53808, Revision 1):

- **SX Pore Water Extraction Test**: Attempts to reestablish the seal in the original extraction well (C8823) using bentonite pellets were made on October 24 and 31, 2013. Both attempts resulted in temporary fixes, but the well seals deteriorated over time to the point that vacuum in the extraction well could not be maintained. Extraction was switched to C8824 on November 7, and the system ramped back up to vacuum on November 11, 2013. The system has operated within parameters since that date, and a pore water sample was collected for analysis on November 18, 2013.

  The packers in the two remaining monitoring wells, C8825 and C8826, have developed slow leaks, and the packers cannot be kept inflated using the current well packer inflation system without endangering the seal in the extraction well. A modification to the well packer inflation system has been designed, and parts are being procured to allow the packers in the monitoring wells to be inflated using a separate nitrogen system than that used to keep the extraction well packer inflated. It is anticipated that the modified well packer inflation system will be installed the week of November 25, 2013.

  A modification to the test system design was implemented on October 22, 2013 to allow more efficient operation of the down-hole bladder pump. The vacuum placed on the extraction well to induce pore water flow into the well was affecting the bladder pump's ability to re-inflate after a pump cycle. A vacuum reservoir was installed, into which the pump controller discharges after a pump cycle, to correct the problem.

- **U Farm Surface Geophysical Exploration (SGE)**: Data processing is complete. Preparation of the characterization report has begun.

- **C Farm SGE**: Data processing is ongoing.

- **TX Farm Direct Push and Sampling**: All field activities for the initial 8 locations were completed as of October 31, 2013. On October 8 and October 24, 2013, DOE and Ecology met regarding the next four direct push locations. During the first week of November, ground penetrating radar was completed in the agreed-upon target areas for the next four direct push locations. Activities on the work package for these next direct push locations have been initiated, and field work is expected to start in early January 2014.

Laboratory Data Status:

- **SX Pore Water Extraction Test**: Quick-turn analyses have begun to be received (e.g., equipment rinsate).

- **TX Farm Direct Push**: Quick-turn results from the initial 8 locations were received late in October 2013. Some minor refinements on these results (e.g., detection limit update) were received from the laboratory in early November 2013.

Interim Surface Barrier Repair Status: Michelle Hendrickson of Ecology observed repairs to the T Farm Interim Surface Barrier the week of October 28, 2013. She will issue a report on her observations. The Retrieval and Closure organization did not participate in Ms. Hendrickson's visit.

New Topics: Nothing to report.

Next Meeting: 10:00 am, December 18, 2013, Ecology Richland Office Conference Room #3A, Snake River.

ACTIONS:

Action Items. (2 pages)				
Item #	**Topic/Title**	**Actionee**	**Description**	**Status**
2013-08-21-3	Action from annual M-45-56 meeting	Hildebrand	Evaluate the potential for providing a single comprehensive report on the electrical resistivity correlation work to date.	WRPS is defining the scope of this activity to support the possible addition of this report as new work scope in FY 2014.
2013-08-21-9	Electrical resistivity presentation	Glaser	Provide presentation on electrical resistivity correlation work to date.	Presentation is scheduled for November 20, 2013.
2013-08-21-9	Barrier effectiveness	Eberlein	(a) Provide Ecology with the barrier monitoring report after it has been issued; (b) Schedule a meeting on barrier effectiveness/ merits of barriers.	(a) Closed. RPP-RPT-55143, Rev. 1 has been provided to Ecology and is in the Administrative Record. (b) A meeting will be scheduled.

Action Items. (2 pages)				
Item #	**Topic/Title**	**Actionee**	**Description**	**Status**
2013-10-16-1	Ecology visit to TX Farm	Parker	Set up Ecology visit to TX Farm to view topography as it relates to design and construction of surface barriers.	Closed. See details below.

Action 2013-10-16-01 Details: Ecology visited TX, TY, T, and SX Farms on Tuesday, October 29, 2013. Jeff Lyon and Mike Barnes represented Ecology. Dan Parker, Harold Sydnor, Michael Greene, Daniel Herrera, Becky Wiegman, and Ruth Allen represented WRPS. The visit was conducted from the fence line of each tank farm.

The main purpose of the visit was to view the topography of TX Farm as it relates to the design and construction of an interim surface barrier. Characterization of TX Farm is ongoing to evaluate the potential need for an interim surface barrier or other interim measure. Maps and diagrams were used to aid discussion of TX Farm. The process for picking barrier materials and the means of water disposal was discussed, as well as the overall barrier design process.

Jeff Lyon and Mike Barnes were also provided a brief look at the TY barrier and associated evapotranspiration basin. The structure of the basin was discussed at length, and the inspection and maintenance of the sediment trap was discussed. The presence of the corrugated steel pipe surrounding openings to allow access to tank farm equipment was discussed. It was explained that the barrier monitoring was affected by the close proximity of one such structure.

The group also visited the T Farm Interim Surface Barrier. The group gathered on a rise at the east end of the fence line. Specific locations inside the T Farm were discussed, such as the location of tank 241-T-111 relative to the barrier edge.

The group visited SX Farm next. The Ecology-approved barrier designs for SX Farm were discussed. The discussion addressed which tanks would not be covered under the approved barrier designs, and size limitations for individual barriers.