

Date: October 7, 2016

To: file

From: Bob Schwarz, Project Manager
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Subject: Mosier spill, ECSI # 6115; status report

Groundwater monitoring. Four monitoring wells were installed north of the railroad tracks in mid-June. Contamination was found in the eastern-most of these wells (well MW-4). Four additional monitoring wells were installed in mid-August, during installation of the groundwater treatment system discussed below. Sampling of these four wells began on August 3. Groundwater testing is conducted weekly.

The results continue to show groundwater contamination in well MW-4. Two extraction wells installed south of the tracks, at the derailment site, also show contamination in groundwater. Contamination has not been found in the other seven wells that are north of the railroad tracks.

Groundwater treatment. In response to the contaminant concentrations found in monitoring well MW-4, a groundwater treatment system was installed in the vicinity of the contaminated groundwater monitoring well. This treatment process, called biosparging, involves using an air compressor to pump air into the groundwater through injection wells. The oxygen in the air stimulates naturally occurring organisms in the ground that consume oil, thereby speeding up this process. Construction of the first phase of this system was completed on August 17.

Because contaminant concentrations have not decreased significantly in well MW-4, and are still found in the two extraction wells, the sparge system will be expanded. Three additional sparge wells will be installed around well MW-4, approximately 10 feet from that well. A line of five new sparge wells will be installed in the vicinity of the two extraction wells. Installation of the additional sparge wells is scheduled for the week of October 10.

Columbia River water testing. Water in the Columbia River continues to be tested every two weeks. This sampling does not show significant contamination in the river. NOAA has requested a more sophisticated type of surface water sampling using passive diffusion bags that are placed in the water for two or more weeks. Oregon State University (OSU) collected one round of samples at the site for their own research, which we will be using to evaluate site conditions.

Testing nearby supply wells. The City of Mosier requested testing of a nearby domestic well, and city supply well No. 2. The city well is 1,000 feet from the derailment location, and water from this well is not used for drinking. It is, however, used to water the lawn at the school. CH2M tested these wells on August 23. Results indicate that neither the domestic well nor the City well has been impacted by the derailment. The City well that does provide drinking water to residents is approximately one mile from the site, and was therefore not tested.

Oil capture booms reinstalled at the beach. Immediately following the derailment, oil capture booms were installed at the beach in case oil escaped to the Columbia River. These were removed in late June because test results and visual observation indicated that the river was not impacted significantly. It was agreed at the time that these booms would be reinstalled prior to the fall rains, in case rain flushed residual contamination into the river. Booms were therefore reinstalled as a precaution on September 29. We will monitor the river over the next few weeks to determine when these booms can be removed. Visual inspection continues to indicate that the river is not impacted.

Site restoration. In addition to environmental investigation and cleanup, work is underway to restore the area affected by the derailment. The fence that ran along the south side of the railroad tracks has been replaced. Killed and damaged trees have been removed and ODOT and the City are discussing plans for revegetation. New gravel and sand have been placed on the beach.

Spill response report. CH2M, consultant to Union Pacific Railroad, is preparing a report documenting spill response work, and environmental investigation and cleanup to date. This report will be submitted for DEQ review on October 28. DEQ will post this report on its Mosier website shortly thereafter.