

MEMORANDUM | September 4, 2025

TO Katie Daugherty and David Lacey, Oregon Department of Environmental Quality (DEQ)

FROM Peter Shanahan, HydroAnalysis LLC (HALLC); Jennifer Hart and Gail Fricano, Industrial Economics, Inc. (IEc)

SUBJECT Five Tribe review of “Interim Remedial Action Measure 1 Performance Monitoring Well Network Installation Work Plan,” dated August 22, 2025

This memorandum, submitted on behalf of the Five Tribes,¹ reviews the *Interim Remedial Action Measure 1 Performance Monitoring Well Network Installation Work Plan* (IRAM 1 PMWP) prepared by Environmental Resources Management, Inc. (ERM) on behalf of Legacy Site Services LLC (LSS) (ERM 2025).

General Comments

1. The well drilling and installation procedures appear to be straightforward. We support the proposed plan to identify and test for dense nonaqueous phase liquid (DNAPL) during well drilling operations and to ensure that drilling is stopped if any DNAPL is encountered, those boreholes are sealed, and no contamination is pushed deeper into the subsurface.
2. Overall, the number and location of new wells seems sufficient for monitoring and evaluating the effectiveness of the IRAM. Fourteen new clusters of four wells each (one in each aquifer unit) are proposed near IITA. This is a large number and creates a fairly dense network. Our primary concern is that the work plan does not consistently provide justification for why wells should be drilled in certain locations and what their specific objectives are for the monitoring network. In Section 2.0, an explicit statement of purpose is provided for a few of the wells (e.g., monitoring groundwater below the in-situ stabilization and solidification [ISS] prism, monitoring groundwater near the top of the riverbank). Presumably each well cluster location was selected deliberately, and we recommend the specific monitoring objectives and justification for their locations be provided for all wells.

Specific Comments

3. Section 1.1 says “The primary objective of the PMWP is to establish a monitoring well network that will be used to evaluate the effect of IRAM 1 on MCB [monochlorobenzene] concentrations in groundwater near the IITA [IRAM 1 Treatment Area].” However, many of the wells shown in

¹ The five tribes are the Confederated Tribes of the Grand Ronde Community of Oregon, the Nez Perce Tribe, the Confederated Tribes of Siletz Indians, the Confederated Tribes of the Umatilla Indian Reservation, and the Confederated Tribes of the Warm Springs Reservation of Oregon.

Figure 3 are too distant from I1TA to contribute to meeting this specific objective. Rather, those wells seem to be intended for another purpose, potentially to monitor the trespass plume from the upgradient Rhone-Poulenc site. While that is a valid purpose, it is not stated in this plan. We recommend the PMWP be revised to clearly state each well's monitoring objectives.

References

Environmental Resources Management, Inc. (ERM). 2025. Interim Remedial Action Measure 1 Performance Monitoring Well Network Installation Work Plan. Arkema Inc. Facility, Portland, Oregon. Prepared for Legacy Site Services LLC (LSS). August 22.