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**Atlantic Richfield Response to Agency Comments on the Draft
Butte Priority Soils Operable Unit (BPSOU) 2021 Groundwater
Monitoring Data Summary Report, January 2021 – December
2021; dated April 8, 2022**

Atlantic Richfield Company

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Atlantic Richfield Response to Agency Comments on the *Draft Butte Priority Soils Operable Unit (BPSOU) 2021 Groundwater Monitoring Data Summary Report*, January 2021 – December 2021; dated April 8, 2022

Main Report Comments:

- Figure 1: According to the 2021 QAPP, key question 3 is “Are current capture systems preventing impacted groundwater from discharging to surface water in amounts that lead to exceedances of surface water ARARs?” the 2021 QAPP states “Questions 3 will be answered by measuring groundwater and surface water elevations at the network specified in Table 4 (provided at the end of the document), which also specifies water level monitoring frequency.” The water elevations data allow determination of a 2-dimensional capture area. This is particularly important at the western edge of BPSOU because the water downgradient to the capture system is impacted, so hydrologic measurements are the only way of confirming capture. Table 6 indicates that Cell D4 was consistently less than 5418.5 ft elevation and is a low point in the area. Figure 1 does not reflect these data and has contours indicating that groundwater is not captured but continues to flow westward past cell D4. Based on Figure 1, the answer to key question 3 would be “No” but the data in Table 6 indicate that the figure is wrong. Please revise Figure 1 in the area of Cell D4 to show capture so that key question 3 can be answered correctly.

Atlantic Richfield Response: Figure 1, contours in the vicinity of D4 have been redrawn to better reflect actual water table conditions.

- Figure 1: There are a number of wells in the MR Concentrator to Clark Park area that have elevations that do not fall within the interval of the contours. Some of these wells are not monitored under the BPSOU program and the data are obtained from the BMFOU program. Please verify that the data are correct for September 2021, then recontour if needed to accurately reflect the location of the groundwater divide in this area. Additionally, the presence of the groundwater collection system within the Parrot tailings area is expected to disrupt the flow of groundwater in this area. Unless accurate elevations within the collection system can be obtained, leave this area un-contoured.

Atlantic Richfield Response: September 2021 water level elevations of wells monitored under BMFOU were verified. The correct elevations are displayed on Figure 1. Re-contouring in the area of the groundwater divide was unnecessary. Atlantic Richfield agrees that accurate groundwater elevations are not available within the Parrot tailings area, thus contours have been removed from this region of Figure 1.

- Table 6: The aquifer for AMW-13B2 is listed as “Undef-S&G.” The shallower AMW-13B and deeper AMW-13C are listed as “Alluvium.” Please reclassify AMW-13B2 as “Alluvium.” The aquifer for MSD-05 is listed as “Undef.” Please change to “Alluvium.”

Atlantic Richfield Response: Table 6 has been revised with reclassifications of the aquifers for AMW-13B2 and MSD-05.

- Table 7: Please add the event of Rocky Mountain Contractors hitting a water line in the Civic Center parking lot in December. This is noted in Section 4.2 and on the hydrograph for AMW- 01A.

Atlantic Richfield Response: Table 7 has been revised to include the event of Rocky Mountain Contractors hitting a water line. This event was also included in Section 3.6 Operation and Maintenance Activities.

Data Validation Reports (data packages not provided – data validation reports reviewed based on guidance criteria):

Atlantic Richfield Comment: Note that laboratory reports are provided in [Appendix D Raw Data](#). Within the Sharepoint folder, choose Appendix D, then Lab Reports.

- SDG 0231348: In section 4 Matrix Spike, it is noted that qualifiers were required for MS/MSD criteria. From the information provided in that section it looks like no qualifiers were required. Please confirm and update the data validation report accordingly.

Atlantic Richfield Response: SDG 0231348 is believed to be referring to SDG 10583409, section 4 Matrix Spike has been corrected to indicate that no data were qualified based on MS/MSD recoveries.

Appendix B: Data Quality Assessment:

- Section 3.2.1 Laboratory and Field Duplicates: Please confirm the percentage of samples that met criteria. It appears that 97% of the sample results were within criteria for field duplicate precision instead of 96%.

Atlantic Richfield Response: The text in Section 3.2.1 was referring to the field duplicate results that met precision criteria (86 of 90 results, or 96%). Table B4 refers to total primary sample results. This has been clarified in the text in Section 3.2.1.

- Section 3.3.6: Remaining Laboratory Calibration and QC Samples: Please explain where the 264 number of associated analyses was determined shown in Table B14.

Atlantic Richfield Response: Full data packages are required for wells outside of the Technical Impracticality (TI) zone, which encompasses 264 primary sample data points. This has been clarified in Section 3.3.6.