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April 23, 2024

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Butte Priority Soils Operable Unit Diggings East 60% Remedial Design Package Submittal

Agency Representatives:

On behalf of Atlantic Richfield Company (Atlantic Richfield), I am submitting the Butte Priority Soils Operable Unit (BPSOU) Diggings East 60% Remedial Design (RD) package ([Diggings East 60% RD Package](#)) for U.S. Environmental Protection Agency (EPA), in consultation with Montana Department of Environmental Quality (collectively referred to as Agencies), review. This design submittal is being provided in accordance with the 2018 EPA *Guidance Letter for: Proactive work under the Remedial Elements Scope of Work for Remedial Designs and Section 3 – Remedial Design of Appendix D – BPSOU Statement of Work of the BPSOU Consent Decree*.

The BPSOU Further Remedial Elements Scope of Work (FRESOW) Requirements Checklist included with this submittal verifies that the design meets, and often exceeds, the requirements of the FRESOW. Additionally, the FRESOW Requirements Checklist provides references to requirements documented in the submittal package or elsewhere. Also included with this submittal is the Response to Comments describing how comments received by Atlantic Richfield on the 30% RD package were incorporated into this 60% RD submittal.

To support efficient document preparation and review, and to reduce unnecessary redundant documentation, RD elements that are common to all Silver Bow Creek Conservation Area (SBCCA) project sites will be provided separately from project-specific RD progress packages. These items and their status include the following:

- SBCCA Technical Specifications – Atlantic Richfield intends to submit a 60% submittal package in the coming weeks. The SBCCA Technical Specifications will address all common construction features and materials. Project-specific exceptions will be integrated into supplemental specifications or directly into Construction Drawings.

- SBCCA Materials Management Plan – Atlantic Richfield intends to submit a draft Materials Management Plan in the coming weeks. The document will address identification, characterization, management, and disposal of waste and characterization and management of on-site reuse and imported backfill materials for the SBCCA.
- SBCCA Greener Cleanups Report – Atlantic Richfield intends to submit a draft document in the coming weeks that describes how SBCCA remedial action will be implemented in a manner that minimizes environmental impacts in accordance with the 2009 EPA Principles of Greener Cleanup.
- SBCCA Construction Quality Management Plan – Atlantic Richfield intends to submit a draft document in the coming months and have it finalized prior to initiation of either the Buffalo Gulch or Diggings East projects. The plan will describe planned and systemic activities to ensure that the remedial action construction satisfies all plans, specifications, and related requirements, including quality objectives. Atlantic Richfield intends to pair this document with a SBCCA Construction Monitoring Quality Assurance Program Plan that includes environmental monitoring and control measures to protect human health and the environment.
- Preliminary SBCCA Operation, Maintenance, and Monitoring (OM&M) Plan – Atlantic Richfield has initiated development of this document. The OM&M Plan will be structured to provide a systematic and programmatic approach to OM&M for the SBCCA remedy systems and end land use features. The OM&M Plan will evolve as SBCCA projects are progressed through design, are constructed, and mature throughout the OM&M phase.
- SBCCA Program Leak Detection and Monitoring Technical Memorandum – Atlantic Richfield intends to provide an SBCCA leak detection and monitoring evaluation to the Agencies to address associated FRESOW requirements.

Please note, due to the complexity of multiple cross references throughout the 60% RA and RD documents, the above described SBCCA level documents have been maintained as structured within the project specific document structure (e.g., shown as attachments to the RAWP). These document references will be updated and corrected for the 95% Diggings East design submittal.

In addition to the changes made to the RD based on Agency comments, the RD has been updated to be a continuation and expansion of the previous 30% RD. Significant items worth noting include the following:

- The Diggings East and Northside Tailings projects have been separated and will now be managed as independent deliverables.
- Removed the geo-synthetic clay liner as it was redundant to the high-density polyethylene (HDPE) and linear low-density polyethylene (LLDPE) geosynthetic liner

that already exceeds the FRESOW leakage performance requirement.

- Refined the forebay edges for consistency with remaining SBCCA end land use elements.

The RD items to be advanced or integrated into the Diggings East design between the 60% and 95% submittals include the following:

- Incorporate the capillary break recommendations from the Diggings East Capillary Break Design Evaluation Technical Memorandum.
- Complete a no-rise evaluation to substantively meet the floodplain evaluation requirements.
- Integrate circulation bogs to reduce the potential for anoxic conditions.
- Integrate additional end land use design features (e.g., vertical structures).
- Integrate additional electrical and instrumentation and control elements.
- Integrate surface water drainage expressing onto the site from the east (i.e., Marcia Street).
- Integrate makeup water delivery to the site (i.e., from the Silver Lake Water Line system).
- Refine the recirculation system.
- Integrate leak detection based on the forthcoming SBCCA Program Leak Detection and Monitoring Technical Memorandum.
- Additional constructability refinement based on review from Atlantic Richfield's construction contractor and team.

Atlantic Richfield looks forward to maintaining a productive working relationship with the Agencies as we continue implementation of the SBCCA projects. To facilitate completion of remaining design work and enable construction work in early 2025, I kindly request you complete your technical review within 60 days of receipt of this package.

If you have any questions or comments, please call me at (406) 723-1834.

Regards,



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