

Montana Tech Library

Digital Commons @ Montana Tech

Silver Bow Creek/Butte Area Superfund Site

Montana Superfund

Fall 9-9-2024

Comment letter for the Butte Priority Soils Operable Unit (BPSOU) Draft Final Insufficiently Reclaimed Sites Belle of Butte (BRES No. 8 & UR-39) Remedial Action Work Plan (RAWP)

Molly Roby

Follow this and additional works at: https://digitalcommons.mtech.edu/superfund_silverbowbutte



Part of the [Environmental Health and Protection Commons](#), [Environmental Indicators and Impact Assessment Commons](#), and the [Environmental Monitoring Commons](#)



REGION 8

DENVER, CO 80202

September 9, 2024

Mr. Mike McAnulty
Liability Manager
Atlantic Richfield Company
317 Anaconda Road
Butte, Montana 59701

Re: Comment letter for the Butte Priority Soils Operable Unit (BPSOU) Draft Final Insufficiently Reclaimed Sites Belle of Butte (BRES No. 8 & UR-39) Remedial Action Work Plan (RAWP)

Dear Mr. McAnulty:

The U.S. Environmental Protection Agency (EPA), in consultation with the Montana Department of Environmental Quality (DEQ), is providing the following comments on the Butte Priority Soils Operable Unit (BPSOU) Draft Final Insufficiently Reclaimed (IR) Sites Belle of Butte (BRES No. 8 & UR-39) Remedial Action Work Plan (RAWP) (dated July 15, 2024). Please address the comments below and resubmit for agency review:

1. Section 1.0, Introduction and Purpose. In the first paragraph, Please revise “BRES” to be defined as the “Butte Reclamation Evaluation System” not “Butte Remediation Evaluation System” as currently written.
2. Section 2.1. Site Location and Work Plan. In the fifth sentence of the second paragraph, revise as follows: “There is an existing fence around the inner part of the reclaimed portion of the Site, which acts to limit access to the capped mine shaft.” The fence does not constitute the western and northwestern border of the Site. The Site boundaries were defined in the second sentence of this paragraph. In the bullets at the end of this section, please add a bullet describing the disposition of the existing fence.
3. Section 3.1, Roles and Responsibilities. Please either list the key roles and responsibilities under each party or provide an organization chart that includes this information.
4. Section 3.2, Safety Considerations. In the bullet list, please add: “Working near former underground mine workings” and “Working around potentially contaminated soils/materials”.
5. Section 4.2.1, Vegetated and Non-Vegetated Caps. In the second to last sentence of the second paragraph, modify to read as follows: “Within the upper 6 inches of the cover soil layer, organic amendment shall be incorporated necessary to achieve 1 to 1.5% organic matter (on a dry weight basis) within this layer.” In the first sentence of the third paragraph, please consider if the access road along the south edge of the site should also be graded and have an engineered cap installed.

In the first sentence of the last paragraph, modify to read: "...obtained from Atlantic Richfield approved sources with concurrence from the Agencies."

6. Sections 5.1 and 5.2. Although the stockpile location is shown in Appendix A and the Agency approval documentation is provided in Appendix B, it was not readily apparent which source will be used for which material application at the site. Please specify which material type will be used in Section 5.0 (i.e., the approved Helehan, Amended Whitehall, and ARWW&S RDU 8 South Borrow Area sources).
7. Sheet G-2. Add the following to the end of General Note #7: "THE GENERATION OF VISIBLE DUST MUST BE MINIMIZED."
8. Sheet G-3. Show and call out the existing fence on the reclaimed portion of the site.
9. Sheet G-4. Revise this sheet to be labeled "Remedial Action Work Extents", not "Site Ownership." Recommend that the SW corner of the work extents be extended south to include the eroded area slope adjacent to the road. In addition, recommend callout of structure encroachment area in SW corner as ARCO property to be addressed via alternate sampling and potential remediation program. As noted in comment on Section 4.2.1 above, please consider regrading and capping of the access road along the south edge of the site.
10. Sheet G-5 and Sheet C-3. Please make highlight colors for the engineered caps on the east and northwest sides of the site match the legend color. Consider site access controls (e.g., boulders) along the northern boundary (along E. Clark Street) and western boundary (along Main Street).
11. Sheet C-1. Based on grading contours, the secondary stormwater channel does not appear to direct flow or containment in the northwest dogleg. Please confirm.
12. Sheet D-4. Have the curb and gutter reaches been sized for sufficient flow capacity and pavement spread (i.e., per Hydraulic Engineering Circular No. 22)? Where are these calculations located?
13. Specification Section 02205. For A+ and A- materials on page 02205-2, the comment above on Section 4.2.1 applies. The organic matter content for A+ and A- materials is required to be 1 to 1.5%. The amount of organic amendment needed depends on the initial organic matter content of the growth media plus any organic amendment needed to achieve the 1 to 1.5% organic matter criteria. The organic matter content of the organic amendment needs to be determined to make this calculation. EPA assumes the organic matter content requirements will be revised in the upcoming Butte Hill Revegetation Specifications update expected in 2024.
14. Specification Section 02222, Part 2 Products. It is stated in Subpart 2 "...excess material may be incorporated on the site and/or be graded smooth in areas at locations designated by Atlantic Richfield". Please indicate this excess material will be placed under the cap and meet depth specifications for waste or hauled to repository.
15. Appendix C, Section 3. Consider re-evaluating the site-wide hydrology through HEC-HMS; there are concerns utilizing Hydrflow for modeling interconnected areas.

16. Appendix C, Section 4.1. Does the 9.014 cfs primary channel peak account for the secondary and tertiary channel peaks (i.e., how does the entire site's hydrology function as a whole)? Please verify.
17. Appendix C, Section 4.1. Consider reducing the currently oversized channel dimensions of the primary run-off channel through re-use of cut materials to reduce offsite disposal and potentially reduce grading to shape the channel.
18. Appendix C, Section 4.4. The 12.8 cfs capacity of the existing 12" PVC pipe is for flowing-full conditions. Because culverts/pipes rarely flow full, please consider HY8 or a similar software to evaluate the pipe hydraulics under different outlet control scenarios.
19. Appendix C, Attachment C. Please indicate the software was used to perform channel hydraulic calculations.

If you have any questions or concerns, please call me at (406) 457-5021.

Sincerely,

Molly Roby
Remedial Project Manager

cc: (email only)

Butte File
Chris Greco/Atlantic Richfield
Josh Bryson/Atlantic Richfield
Loren Burmeister/Atlantic Richfield
Dave Griffis/Atlantic Richfield
Jean Martin/Atlantic Richfield
Irene Montero/Atlantic Richfield
David A. Gratson/ Environmental Standards
Mave Gasaway/DGS
Adam Cohen/DGS
Brianna McClafferty/Holland & Hart
Daryl Reed/DEQ
Logan Dudding/DEQ
Jon Morgan/DEQ
Kevin Stone/DEQ
Amy Steinmetz/DEQ
Katie Garcin-Forba/DEQ
Doug Martin/NRDP

Jim Ford/NRDP
Pat Cunneen/NRDP
Katherine Hausrath/NRDP
Ted Duaiame/MBMG
Gary Icopini/MBMG
Becky Summerville/MR
John DeJong/UP
Robert Bylsma/UP
John Gilmour/Kelley Drye
Leo Berry/BNSF
Robert Lowry/BNSF
Brooke Kuhl/BNSF
Lauren Knickrehm/BNSF
Doug Brannan/Kennedy Jenks
Matthew Mavrillac/RARUS
Mark Neary/BSB
Eric Hassler/BSB
Chad Anderson/BSB
Brandon Warner/BSB
Abigail Peltomaa/BSB
Sean Peterson/BSB
Josh Vincent/WET
Scott Bradshaw/W&C
Emily Evans/W&C
Pat Sampson/Pioneer
Andy Dare/Pioneer
Karen Helfrich/Pioneer
Randa Colling/Pioneer
Scott Sampson/Pioneer
Jesse Schwarzrock/Pioneer
Ian Magruder/ CTEC
CTEC of Butte
Scott Juskiewicz/ Montana Tech
David Shanight/CDM Smith
Curt Coover/CDM Smith
Chapin Storrar/CDM Smith
Erin Agee/EPA
Ben Mathieu/EPA
Will Lindsey/EPA
Jamie Miller/EPA
Carolina Balliew/EPA
Emma Rott/EPA
Katherine Jenkins/EPA
Charlie Partridge/EPA