

Buffalo Gulch Area

The proposed remedy would remove tailings, wastes, and contaminated soils from an approximately 9-acre site located at the bottom of Buffalo Gulch and would construct a stormwater basin in the excavated area to reduce the amount of contaminated sediment and metals that reach Silver Bow Creek and improve the quality of water in the creek.

The proposed remedial activities would be performed by Atlantic Richfield Company and would include:

- 1) Excavation and Disposal** – Approximately 30,000 cubic yards of tailings, wastes and contaminated soils, including municipal wastes, would be excavated from the site and hauled to a repository. Some excavated materials, including uncontaminated soil (from previous reclamation activities) and small concrete, may be reused to complete reconstruction of the site.
- 2) Stormwater Basin** – A stormwater basin would be constructed to capture stormwater from the Buffalo Gulch drainage to improve water quality before it enters Silver Bow Creek. The stormwater basin may be partially or fully lined and would be designed to cover about 8 acres (about six football fields), which is a sufficient size to manage stormwater and accumulated sediments. Maintenance of the basin would include removal and disposal of captured sediments at a repository.
- 3) End Land Use** – The Buffalo Gulch area would be reconstructed in a manner that enables future community use of the site and land around the stormwater basin. Although the basin is expected to occupy most of the site, Atlantic Richfield Company, Butte-Silver Bow, EPA, and MDEQ would work with the residents of Butte to develop an end land use plan that is compatible with the proposed remedy.

Site-specific Details:

- Wastes would be removed to the depth of the most recently observed 3-year maximum groundwater elevation.
- Mining waste, tailings, and contaminated soils would be disposed of at a repository outside of the Silver Bow Creek and Blacktail Creek corridors.
- Municipal waste, household waste, timbers, and other construction debris not suitable for re-use would be disposed of at an appropriately permitted facility.
- The stormwater detention/retention basin would be sized to capture a 10-year, 24-hour Type I Soil Conservation Service (SCS) design storm. This would allow for capture and treatment of 20 acre-feet (approximately 6.5 million gallons) of stormwater. Additional storage volume would be provided to support management of accumulated sediments.



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ALL RENDERINGS AND ASSOCIATED FEATURES ARE CONCEPTUAL IN NATURE AND INTENDED TO FACILITATE REMEDY IMPLEMENTATION IN CONSIDERATION OF DESIRED END LAND USE. FINAL SIZE AND POSITIONING OF REMEDY AND END LAND USE FEATURES TO BE DETERMINED DURING REMEDIAL DESIGN PHASE.

