## Butte-Silver Bow Creek Health Assessment/Study Annotated Compendium

## Table includes site reports and documents developed as part of the Superfund program.

Study Date(s)	Name	Authors/Sponsors	Discrete/Periodic (Frequency)	Comments
2021	<u>Fifth Five-Year Review Report for Silver Bow</u> <u>Creek/Butte Area Superfund Site, Silver Bow and Deer</u> <u>Lodge Counties, Montana</u>	EPA, Region 8, Superfund Remedial	Periodic (quinquennial)	Site-wide assessment of remedy protectiveness for all operable units with remedies in place; provides the 3 <sup>rd</sup> review for Butte Priority Soils Operable Unit
2020	Community Health Needs Assessment Butte-Silver Bow County, Montana	St. James Healthcare & The City-County of Butte-Silver Bow Health Department	Periodic (triennial)	Systematic, data-driven approach to determining the health status, behaviors, and needs of residents in Butte-Silver Bow County, Montana
2020	Second Butte RMAP Medical Monitoring Study (Phase 2) Report	The Superfund Medical Monitoring Study Working Group (Ramboll US Corporation)	Periodic (triennial)	Provides a review of the blood lead data for Butte collected through 2019. Review required pursuant to the settlement and Consent Decree
2020	Study: High incidence of brain and other nervous system cancer identified in two mining counties, 2001-2015 (*see footnote)	Montana Department of Health and Human Service and the City/County of Butte-Silverbow	Discrete	Factsheet documenting some Frequently asked Questions regarding a 2020 research paper published about brain cancers in Butte and Anaconda
2018	Cancer in Silverbow County (*see footnote)	Montana Cancer Control Programs	Discrete	Factsheet produced by Montana Department of Public Health and Human Services describing cancer types, rates and mortality in Silverbow county
2016	Fourth Five-Year Review Report for Silver Bow Creek/Butte Area Superfund Site	EPA, Region 8, Superfund Remedial	Periodic (quinquennial)	Site-wide assessment of remedy protectiveness for all operable units with remedies in place; provides the 2 <sup>nd</sup> review for Butte Priority Soils Operable Unit
2014	<u>Butte Priority Soils Operable Unit</u> <u>Public Health Study – Phase 1</u>	Butte-Silver Bow Health Department (ENVIRON International Corporation)	Periodic (triennial)	Provides a review of the blood lead data for Butte collected through 2014. Conducted in accordance with the EPA-approved work plan dated May 2013 and titled, "Butte Priority Soils Operable Unit: Public Health Study Remedial Design Work Plan, Phase 1 Study."
2011	<u>Third Five-Year Review Report for Silver Bow</u> <u>Creek/Butte Area Superfund Site, Volume 6: Butte</u> <u>Priority Soils Operable Unit</u>	EPA, Region 8, Superfund Remedial	Periodic (quinquennial)	Site-wide assessment of remedy protectiveness for all operable units with remedies in place; provides the 1 <sup>st</sup> review for Butte Priority Soils Operable Unit

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2010	Manganese evaluation for Silver Bow Creek/Butte Area Superfund Site	EPA contractor (CDM)	Discrete	Provides a screening assessment of possible health effects from manganese in Butte area soils
2003	Human Health Risk Assessment, Walkerville Residential Site, Butte-Silver Bow County, Montana	EPA contractor (URS Operating Services)	Discrete	Human health risk assessment for lead, arsenic, and mercury for the Walkerville neighborhood; also included development of risk-based PRGs
2001	Health Consultation: Exposure Investigation, Silver Bow Creek/Butte Area (a.k.a. Walkerville)	ATSDR	Discrete	Performed in response to a request from the Butte-Silver Bow County Health Department and the Montana Department of Public Health and Human Services to address community and health department concerns regarding ongoing exposure to lead and arsenic.
1998	Bioavailability of Lead in Soil Sample from the Butte NPL Site, Butte, MT	University of Missouri	Discrete	Summarizes the lead bioavailability results of a juvenile swine dosing study conducted by the University of Missouri on behalf of EPA
1997	Baseline Human Health Risk Assessment for Arsenic, Butte Priority Soils Operable Unit	EPA contractor (CDM)	Discrete	Human health risk assessment for arsenic for Butte Priority Soils Operable Unit
1994	Baseline Risk Assessment for Lead, Expedited Response Action, Priority Soils Operable Unit, Silver Bow Creek/Butte Area NPL Site	EPA contractor (CDM)	Discrete	Human health risk assessment for lead for Butte Priority Soils Operable Unit
1992	The Butte-Silver Bow County Environmental Health Lead Study	Butte-Silver Bow Health Department, University of Cincinnati	Discrete	Provides a review of the blood lead data for children in Butte and Walkerville, estimates accessible lead sources in the environment, estimates the contribution of environmental lead sources, evaluates arsenic and cadmium exposures, and provides methods to reduce lead exposures
1991	Preliminary Baseline Risk Assessment, Priority Soils Operable Unit, Silver Bow Creek/Butte Area NPL Site	EPA contractor (Clement International)	Discrete	Preliminary human health risk assessment for arsenic, cadmium, and lead for Butte Priority Soils Operable Unit
1991	Bioavailability of Lead in Mining Waste Soil: A Dosed Feed Study Using Sprague-Dawley Rats	Battelle	Discrete	Summarizes the lead bioavailability results of a rat dosing study conducted by the Battelle on behalf of ARCO
1990	Bioavailability of Lead in Mining Wastes: An Oral Intubation Study in Swine	Michigan State University	Discrete	Summarizes the lead bioavailability results of a swine intubation study conducted by Michigan State University
1988	Butte Soils Screening Study	EPA contractor (CDM)	Discrete	Presents an initial screening-level evaluation of mill sites, waste rock dumps, mine areas,

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				residential yards, vegetable gardens, play areas/parks, etc. to inform prioritize removal
				activities
1985	Hazard Ranking System (HRS), Butte Mining District	EPA	Discrete	Provides an evaluation of site conditions for the Butte Mining District to inform NPL listing potential