



Community Involvement Plan

Butte Mine Flooding, Rocker Timber Framing and Treating Plant, and Butte Priority Soils Operable Units

U.S. Environmental Protection Agency Region 8

August 2021

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Table of Contents

Section 1 Introduction	1-1		
1.1 Purpose and Goals of the Community Involvement Plan			
1.2 Regulatory Authority	1-2		
1.3 Project Structure and Roles	1-2		
1.3.1 Regulatory Oversight	1-2		
1.3.3 Settling Defendants	1-3		
1.4 Community Involvement Plan Structure	1-3		
Section 2 Site Description	2-1		
2.1 Location and Layout	2-1		
2.2 Contamination	2-1		
2.2.1 Butte Mine Flooding - Operable Unit 3	2-1		
2.2.2 Rocker Timber Framing and Treating Plant - Operable Unit 7	2-3		
2.2.3 Butte Priority Soils - Operable Unit 8	2-3		
2.3 Current Land Use	2-3		
2.4 Nearby Contamination	2-4		
2.5 Regulatory Milestones	2-4		
2.6 Schedule	2-5		
Section 3 Community Profile	3-1		
3.1 Demographics			
3.2 Public Schools and Libraries	3-1		
3.2.1 Schools	3-1		
3.2.2 Libraries	3-2		
3.3 Local Government	3-2		
3.4 Site-Related Local Groups	3-2		
3.5 Community Involvement History	3-3		
3.5.1 Required Outreach	3-3		
3.5.1.1 Designate a Contact	3-3		
3.5.1.2 Notify Affected Citizens	3-3		
3.5.1.3 Establish Administrative Record and Information Repository	3-3		
3.5.1.4 Conduct Community Interviews	3-4		
3.5.1.5. Prepare a Community Involvement Plan			
3.5.1.6 Website	3-4		
3.5.2 Additional Outreach Conducted by EPA	3-4		
3.5.2.1 Advertisements and Notices	3-4		
3.5.2.2 Environmental Justice Action Plan	3-4		
3.5.2.3 Fact Sheets and Other Written Materials	3-4		
3.5.2.4 Meetings with Elected Officials	3-5		
3.5.2.5 Monthly Update Calls	3-5		
3.5.2.6 Public Meetings	3-5		
3.5.2.7 Other	3-5		
Section 4 Environmental Justice	4-1		

4.1 EPA's Environmental Justice Program	4-1
4.2 Local Suggestions to Address Environmental Justice	4-1
4.3 EPA's Environmental Justice Action Plan for Butte	4-2
4.3.1 Environmental Justice Goals	4-2
4.3.2 Steps to Meet the Goals	4-2
4.3.3 Potentially Impacted Area	4-2
4.3.4 Update of the Community Involvement Plan	4-3
4.3.5 Considerations Prior to Implementing Environmental Justice Activities	4-3
4.3.6 Specific Activities	4-3
Section 5 Community Concerns and Issues	5-1
5.1 Concerns by Operable Unit	5-1
5.1.1 Mine Flooding	5-1
5.1.2 Rocker	5-2
5.1.3 Priority Soils	5-2
5.2 Carry Over Suggestions for EPA	5-3
5.2.1 Written Materials	5-3
5.2.2 Best Ways to Get Information Out	5-3
5.2.3 Extra Steps	5-4
Section 6 Community Involvement Action Plan	6-1
6.1 Planned Actions	6-1
6.1.1 Points of Contact, Information Repositories, and Administrative Record	6-2
6.1.1.1 Points of Contact	
6.1.1.2 Administrative Record and Information Repository	6-2
6.1.2 Face-to-Face Interactions	6-2
6.1.2.1 Public Meetings	6-2
6.1.2.2 CTEC Meetings and Interaction	6-2
6.1.2.3 Open Communication with Key Stakeholders	6-3
6.1.2.4 Community Networking	6-3
6.1.2.5 Briefing Elected Officials	6-3
6.1.2.6 Community Visits/Tours and Open Houses	6-3
6.1.3 Written Materials	
6.1.3.1 Community Involvement Plan	6-4
6.1.3.2 Fact Sheets, Flyers, Posters, and Other Materials	6-4
6.1.3.3 Mailing List	6-4
6.1.3.4 Advertisements/Notifications	6-4
6.1.3.5 Press Releases	6-4
6.1.3.6 Project Technical Documents	6-5
6.1.4 Other	6-5
6.1.4.1 Social Media and Websites	6-5
6.1.4.2 Email List	6-5
6.2 Schedule of Community Involvement Activities	6-5
6.3 Measurement of Success	6-5
Section 7 References Cited	7-1

List of Exhibits

Exhibit 1.1. Project Structure for Mine Flooding, Priority Soils, and Rocker	. 1-3
Exhibit 6.1. Responsibilities by Agency	6-2
Exhibit 6.2. Summary of CERCLA-Mandated and Other Outreach Proposed by EPA	6-5

Appendices

Appendix A EPA and Montana DEQ Contacts

Appendix B Federal Elected Officials and Contacts

Appendix C State, County, and Local General Contacts

Appendix D Stakeholder Group Contacts

Appendix E Local Media Contacts

Appendix F Meeting Locations, Administrative Record, Information Repositories, Websites

Appendix G EPA's Environmental Justice Action Plan

Appendix H Examples of Environmental Justice Maps Using EJ Screen

List of Acronyms

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CTEC Community Technical Environmental Committee
DEQ Montana Department of Environmental Quality

EPA U.S. Environmental Protection Agency Montana Tech Montana Technological University

NCP National Contingency Plan TAG Technical Assistance Grant

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Introduction



1.1 Purpose and Goals of the Community Involvement Plan

This community involvement plan has been prepared in accordance with federal regulations as a guide for the U.S. Environmental Protection Agency (EPA) to engage and inform community members, environmental groups, government officials, the media, and other interested parties in the environmental cleanup activities at three operable units at the Silver Bow Creek/Butte Area Superfund Site.

Those operable units are:

- Butte Mine Flooding Operable Unit
 Referred to herein as "Mine Flooding" or "BMFOU."
- Rocker Timber Framing and Treating Plant - Operable Unit 7. Referred to herein as "Rocker."
- Butte Priority Soils Operable Unit
 Referred to herein as "Priority Soils" or "BPSOU."

The State of Montana has responsibility for the Streamside Tailings - Operable Unit 1 and has their own community involvement plan. The Warm Springs Ponds - Operable Units 4 and 12 has had an interim record of decision and is on hold until upstream operable units are completed. The final operable unit is West Side Soils - Operable Unit 13, referred to herein as "West Side Soils," which is at a different stage of the Superfund process (investigation versus cleanup) and is covered by the *Community*

Involvement Plan, West Side Soils Operable Unit, Silver Bow Creek/Butte Area Superfund Site (EPA 2021) for issues related to that phase of work.

In addition, the Montana Pole and Treating Operable Site is in the same general area as the Silver Bow Creek/Butte Area Superfund Site but is a separate site with the State of Montana as the lead agency. It is not part of this community involvement plan.

EPA's goals for this community involvement plan are to:

- Ensure that the public has appropriate opportunities for involvement in a wide variety of site-related decisions.
- Determine appropriate activities to ensure such public involvement.
- Provide appropriate opportunities for the community to learn about Mine Flooding, Rocker, and Priority Soils and the entirety of the Silver Bow Creek/Butte Area Superfund Site.

The community involvement plan is a roadmap for EPA to plan outreach but is available to the public. Use of acronyms or scientific terminology has been avoided where possible.

For several reasons, this update of the existing plan does not include interviews:

 Interviews were conducted for a previous update for Priority Soils that marked the shift to remedial design and remedial action.

- Interviews were conducted for the West Side Soils community involvement plan in 2020.
- The Atlantic Richfield Company (Atlantic Richfield) conducted interviews in 2021 for its community engagement plan for cleanup activities at Priority Soils.

Information from those various sources informed this updated plan and recent demographic data were used to tailor the plan to fit the needs of the community.

This community involvement plan is a living document that EPA reviews and updates periodically. Appendices are updated annually to ensure contact information is relevant.

Guidance documents and other resources used in drafting this plan include:

- Environmental Justice Action Plan (EPA 2020a)
- Superfund Community Involvement Handbook (EPA 2020b)
- Community Involvement Toolkit (EPA 2016)
- National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (NCP 1994)

1.2 Regulatory Authority

In 1980, Congress enacted the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLA or "Superfund," as it is more commonly known, allows EPA to clean up hazardous waste sites and to force responsible parties to perform cleanups or reimburse the government for cleanups led by EPA.

The NCP is a set of regulations detailing how Superfund cleanups are to be conducted, including requirements for community involvement. Mine Flooding, Rocker, and Priority Soils are all in the remedial design/remedial action phase of cleanup.

1.3 Project Structure and Roles

EPA often divides a site into distinct operable units to address specific problems, geographic areas, or areas where a specific action is required. As mentioned in Section 1.1, there are seven operable units at the Silver Bow Creek/Butte Area Superfund Site and the three included in this plan (Mine Flooding, Rocker, and Priority Soils) are all EPA-lead operable units in the cleanup phase of the Superfund process. Cleanups at each of the operable units are governed by consent decrees or unilateral administrative orders.

Depending on the operable unit, some combination of Atlantic Richfield, Montana Resources, and/or Butte-Silver Bow County, and their contractors are conducting the cleanup under the oversight of EPA in accordance with the EPA-approved work plans, designs, and other documents. The project structure is shown in Exhibit 1.1 and described below.

1.3.1 Regulatory Oversight EPA

EPA is the lead agency at the three operable units at the Silver Bow Creek/Butte Area Superfund Site addressed by this plan and is responsible for ensuring work is done in accordance with Superfund law, the NCP, guidance and policy, and the terms of the applicable consent decrees. EPA will perform oversight on the work conducted by the settling defendants at the site. For more

information on EPA, visit their website (www.epa.gov).

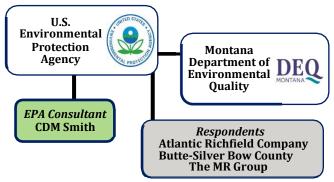


Exhibit 1.1. Project Structure for Mine Flooding, Priority Soils, and Rocker

Montana Department of Environmental Quality

The Montana Department of Environmental Quality (DEQ) is "charged with protecting a clean and healthy environment as guaranteed to our citizens by our State Constitution." DEQ's mission is "to champion a healthy environment for a thriving Montana today and in the future." DEQ is a support agency to EPA at these three operable units and reviews key documents, provides input, and represents the interests of the State of Montana. For more information on DEQ, visit their website (www.deq.mt.gov).

1.3.3 Settling Defendants

The settling defendants for the operable units are:

- Rocker. Atlantic Richfield is a settling defendant for Rocker.
- Mine Flooding. Atlantic Richfield and Montana Resources; Montana Resources, Incorporated; Dennis Washington; AR Montana Corporation; and ASARCO (collectively known as the MR Group) are the settling defendants for Mine Flooding.

 Priority Soils. Atlantic Richfield and Butte-Silver Bow County are the settling defendants for Priority Soils.

1.4 Community Involvement Plan Structure

This community involvement plan provides outreach information for Mine Flooding, Rocker, and Priority Soils in a single location. It is not necessary to read all sections to understand the scope of planned outreach activities; however, the individual sections provide added information relevant to Mine Flooding, Rocker, and Priority Soils.

The plan structure is:

- Section 1 Introduction. Purpose and goals of the plan, regulatory authority, project structure and roles.
- Section 2 Site Description. Location and layout, history of contamination, land use, nearby contamination, regulatory milestones, and schedule.
- Section 3 Community Profile.
 Demographics and description and community involvement activities conducted to date.
- Section 4 Environmental Justice.
 EPA's commitment to environmental justice.
- Section 6 Community Involvement Action Plan. Planned actions, schedule, and measurement of success.
- Section 7 References. List of references cited.
- Appendices A through G. Contact information for people, repositories, and venues and EPA's Environmental Justice Action Plan (EPA 2020).

Site Description

2.1 Location and Layout

The Silver Bow Creek/Butte Area Site is in southwest Montana in Silver Bow County. It includes much of the communities of Butte and Walkerville and extends 26 miles west along Silver Bow Creek to Warm Springs Ponds. Rocker lies three miles west of Butte along Silver Bow Creek and U.S. Interstates 15 and 90.

Butte was the scene of extensive underground mining beginning in the mid-1800s, supported by smelters, mills, rail lines, and wood treating facilities. In 1883, the Anaconda Copper Mining Company built a smelter 25 miles away in what would be called Anaconda. and the Berkeley Pit and surface mining began in 1955 and mining continued through the 1980s.

The boundaries of the Mine Flooding, Rocker, and Priority Soils operable units are shown in Exhibit 2.1, along with the current study area boundary for West Side Soils.

2.2 Contamination

Mine Flooding, Rocker, and Priority Soils have been impacted by historic mining which created mine dumps, mill tailings, smelter fallout, slag, and other mining-related wastes. Some wastes migrated or were disposed of in Silver Bow Creek and other waterways.

Contamination at the site includes:

- Groundwater impacted by mine and process wastes in and adjacent to flooded mine workings and in the alluvial aquifer
- Surface water at the Berkeley Pit and adjacent areas of Mine Flooding, Silver Bow

Creek, Black Tail Creek, and other streams and drainages

- Sediment in Silver Bow Creek and its floodplain and in other streams
- Local soils and mine dumps
- Attic dust

2.2.1 Butte Mine Flooding - Operable Unit 3

The operable unit covers 16,333 acres and includes miles of underground mine workings, several bedrock aquifers, and the Berkeley Pit. The pit is a former open pit copper mine (420 acres and 1,780 feet deep with a surface that is over a mile wide). It contains over 49.5 billion gallons of toxic water. Flooding began when dewatering practices were halted as mining operations ceased in 1982.

The pit is the lowest point in the groundwater system, and all contaminated groundwater flows toward it. The contaminated groundwater plume extends well outside the boundary of the pit and under much of the city of Butte and is a result of the extensive underground mine workings that extend well beyond the pit.

The Horseshoe Bend Water Treatment Plant was built in October 2003 to treat water from the Horseshoe Bend seeps, which originate at the toe of the Yankee Doodle tailings impoundment. The treated water is used as part of the active mine operations in Montana Resource's mine/mill circuit. The water from the Horseshoe Bend seeps had, until that point flowed to the Berkeley Pit. When the seeps water was diverted the rate of filling of the pit was significantly slowed

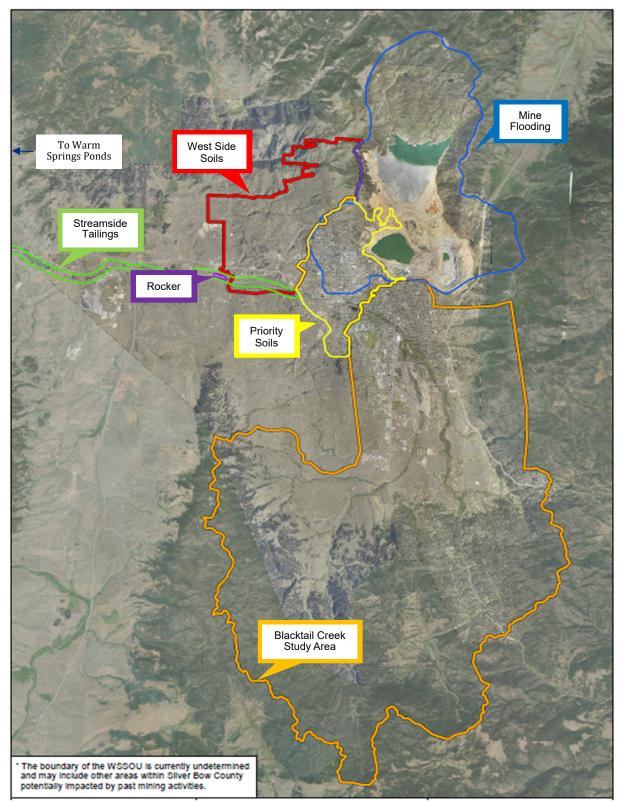


Exhibit 2.1. Operable Units and Study Areas at the Site

In 2019, as part of the discharge pilot project, a polishing plant was built to treat water from the Yankee Doodle tailings impoundment and discharge the treated water to Silver Bow Creek.

Pumping of the water within the Berkeley Pit began in conjunction with the polishing plant, and the pit water is treated in the Horseshoe Bend Water Treatment Plant and/or pumped to the Yankee Doodle Tailings Impoundment. Pumping and treatment of water has kept the water level in the pit below the protective water level and the water level has held steady since October 2019.

Water quality in the bedrock aquifer and the water level in the pit are monitored extensively. The recent five-year review found that the remedy is working well and is protective of human health and the environment.

2.2.2 Rocker Timber Framing and Treating Plant - Operable Unit 7

Rocker is the smallest operable unit at the site and includes 16 acres of land 3 miles west of Butte. Contamination comes from spilled process materials (arsenic trioxide powder), treated wood chip residues, and leaked process solutions (creosote and caustic heated arsenic brines) used as a preservative for the timbers used in the mines. The plant operated from 1909 to 1957.

In 1997, 48,000 cubic yards of contaminated soil were removed. Groundwater was treated and a new water main connected Rocker to the city water supply. The cleanup included an innovative treatment technology to immobilize arsenic in soils and precipitate arsenic from groundwater.

The operable unit is in the operation and maintenance phase. However, the fourth five-year review determined the contaminant plume is not currently contained. Based on

recommendations from that review, an additional investigation is being performed to refine understanding of the groundwater contaminant plume extent and flow direction, and whether there are impacts to Silver Bow Creek. An updated site conceptual model is being prepared, and a focused feasibility study is being performed to determine potential additional remedy actions.

2.2.3 Butte Priority Soils - Operable Unit 8

Priority Soils covers 4,233 acres of historic mining areas in Butte and the adjacent town of Walkerville and includes five operable units (2, 5, 6, 10, and 11) that were incorporated into Priority Soils in 2006. Over 12 million cubic yards of soils were contaminated with smelter and mine waste contamination. Surface water, groundwater, and storm water are also contaminated.

EPA's early actions significantly reduced risk and Butte-Silver Bow County does blood lead level testing of children under the Women Infant and Children and the Residential Metals Abatement Programs.

The Superfund status across the Priority Soils varies and includes remedial design, remedial action, and operation and maintenance.

2.3 Current Land Use

The predominant land use for each of the three operable units is:

- Mine Flooding. Industrial. Most of the area is occupied by the Berkeley Pit and the active mine operations.
- Rocker. Industrial.
- Priority Soils. Residential, open space, and commercial.

2.4 Nearby Contamination

Impaired waters nearest to the three operable units (EnviroMapper 2020) are Silver Bow Creek, Blacktail Creek, and the Clark Fork River. The West Site Soils and Streamside Tailings operable units are adjacent. The Warm Springs Ponds operable units and the Anaconda Smelter Superfund Site are approximately 24 miles to the northwest.

2.5 Regulatory Milestones

The initial environmental assessment was completed in 1979 and the 26-mile-long Silver Bow Creek Superfund Site was added to the National Priorities List in 1983. The Butte Area was added in 1987. Mine Flooding, Rocker, and Priority Soils are all in design and/or cleanup.

Decision documents for these operable units have included:

- Records of Decision. Mine Flooding (1994), Rocker (1995), and Priority Soils (2006).
- Explanations of Significant
 Differences. Mine Flooding (2002),
 Priority Soils (2011), and Rocker (2014).
- Amendment to the Record of Decision. Priority Soils (2020).
- Consent Decree. Rocker (2000), Mine Flooding (2002), and Priority Soils (2020).

The Superfund process is summarized below. Community involvement requirements and additional activities planned by EPA are provided in Section 6. The operable units covered by this plan are in the remedial design and remedial action phases.

- Remedial investigation. Assesses the nature and extent of contamination. Includes human health and ecological risk assessment and a final report.
- Feasibility study. Screens and evaluates potential cleanup technologies based on remediation objectives and goals. Results are used by EPA's risk management team to develop a plan for cleanup. Typically overlaps the remedial investigation.
- Proposed plan. Presents EPA's preferred plan for cleanup based on the remedial investigation and feasibility study. The public is provided an opportunity to comment.
- Record of decision. Documents EPA's final decision on cleanup and is made after review of all comments are received on the proposed plan.
- Remedial design. Includes development of engineering drawings and specifications for cleanup, as specified in the record of decision.
- Remedial action. The construction period in which the plan specified in the remedial design is implemented.
- Construction completion/deletion. Deletion of sites from the National Priorities List may occur once all response actions are complete and all cleanup goals have been achieved. EPA is responsible for processing deletions with concurrence from the state. Deleted sites may still require five-year reviews to assess protectiveness.

2.6 Schedule

The schedule is flexible and subject to change, but current timelines for the remedial design and remedial action for the three operable units included in this community involvement plan are:

- Mine Flooding. Remedial design. 2020 to present. Remedial action. 2002 to present.
- Rocker. Operations and management. 1997 to present.
- **Priority Soils.** Remedial design. 2020 to 2025. Remedial action. 2022 to 2027.

Community Profile

3.1 Demographics

Butte was established as a mining camp in the 1860s. Once the most populous city in the state, Butte-Silver Bow is now outranked in population by Billings, Missoula, Great Falls, and Bozeman. Demographic highlights for Butte-Silver Bow County, as estimated by the U.S. Census Bureau website (Census 2019), are provided below:

- **Population**. 34,207.
- **Age**. Butte's population is slightly older than that of the U.S. (19 percent [%] over age 64 versus 16% nationally).
- Race. The racial breakdown of Butte is 94% White, 5% Hispanic, 2% American Indian, less than 1% Asian, and less than 1% Black.
- Education. Approximately 93% of the population has a high school diploma and 27% of people over 25 have a bachelor's degree or higher.
- Median household income (2018). \$45,797
- Persons in Poverty. 17%
- Housing. Most (67%) housing is owneroccupied, with an average of 2.2 people per household.
- Computer and Internet Use. Most (84%) households have a computer and broadband internet (76%).
- Languages spoken. English is the primary spoken language in most (97%) households.

Rocker has an estimated population of 27 to 150 people, depending on the source, and is not included in the U.S. Census Bureau's online statistical database. The unverified median household income in Rocker, Montana is \$31,951 and the median age of residents is 44. Major local businesses are limited to two large, multi-service gas stations/truck stops.

3.2 Public Schools and Libraries

3.2.1 Schools

Butte has 1 university, 1 college, 2 high schools, 2 middle schools, 10 elementary schools, and 2 all-grade schools. Butte Central, Capstone Christian, and Butte-Silver Bow Montessori are private schools.

The schools are:

- Montana Technological University (Montana Tech)
- Highlands College
- Butte High School
- Butte Central High/Junior High/ Elementary School
- Capstone Christian Academy
 High/Junior High/Elementary School
- East Middle School
- Emerson Elementary
- Hillcrest Elementary
- Kennedy Elementary
- Margaret Leary Elementary
- West Elementary
- Whittier Elementary
- Silver Bow Montessori

Montana Tech, Butte High, Butte Central, Kennedy and West Elementary Schools lie within the Priority Soils boundary. There are no schools in Mine Flooding or Rocker.

3.2.2 Libraries

Butte has two public libraries, and both are in Priority Soils. They are:

- Butte-Silver Bow Public Library
- Montana Tech Library

There are no libraries in Rocker.

3.3 Local Government

The Butte-Silver Bow County consolidated city/county government is led by an elected chief executive and board of commissioners representing 12 county districts (Appendix C). The commission meets the first and third Wednesday of each month. Their website is www.co.silverbow.mt.us.

The Butte-Silver Bow Planning Department has a Superfund Division that is responsible for implementing several programs critical to the Silver Bow Creek/Butte Area Superfund Site. These are:

- Superfund Land Management Program
- Storm Water Management Program
- Residential Metals Abatement Program

Butte-Silver Bow County is a settling defendant for Priority Soils.

Rocker has a volunteer fire department, but most other services are provided by the county. Drinking water is piped in from Butte-Silver Bow and administered by the Rocker Water and Sewer District. State records show 95 residential connections in Rocker.

3.4 Site-Related Local Groups

Groups identified as having an interest in the Silver Bow Creek/Butte Area Superfund Site are listed in Appendix D. The list includes Community Technical Environmental Committee (CTEC), a Technical Assistance Grant (TAG) group formed in 1989 to address interests and concerns with the Silver Bow Creek/Butte Area Superfund Site. CTEC operates on an annual \$50,000 grant to review documents and provide public outreach and education.

CTEC's website (<u>www.buttectec.org</u>) describes their role as follows:

"Our specific charge from the EPA is to hire independent scientific experts to review documents and provide public outreach and education on behalf of the local community. CTEC also provides access to government studies, BP-ARCO studies, and other studies about contaminants in the surface water, ground water, and air, and promotes public involvement in the Superfund process. CTEC informs local citizens about cleanup options, meetings, and how to contact those influential in choosing a course of action.

CTEC also prepares technical comments on the Superfund process. These technical comments are designed to provide decision-makers with an independent perspective on current Superfund activities. EPA established technical committees through grants under Superfund to provide technical assistance to local communities in and around Superfund sites. The more than 300 CTEC members make up a diverse group of individuals from all walks of life.

The easiest way to understand the role of a technical assistance committee in Superfund is to think of a triangle with a represented party at each point. In the instance of the Clark Fork Superfund process, the EPA and Montana Department of Environmental Quality (DEQ) represent the federal and state governments, the Potentially Responsible Parties (PRPs) represent their own and investors interests, and CTEC represents the interests of the local

community. The goal is for all three parties— U.S. citizens at large (EPA), the PRP group, and the local citizens—to have input into the EPA's final cleanup decision."

CTEC's website lists three goals, as follows:

- "To educate the general population through the assembly, analysis, interpretation, translation, and dissemination of environmental information to those people in the area and to collect their questions, fears, needs, desires and opinions.
- 2. To develop and effectively convey community-based recommendations, advice, and criticism, independent of government or industry-based special interests, to include both consensus and dissenting views about particular issues.
- 3. To assure the sustainability of CTEC, so that we may fulfill our mission to foster meaningful, informed public discourse about issues of environmental concern in our community, now and in the future."

CTEC holds meetings and provides background, project news, and information. EPA representatives for Mine Flooding, Rocker, and Priority Soils have participated and are available for other public functions that encourage active participation and education about remedial activities.

3.5 Community Involvement History

3.5.1 Required Outreach

At all three operable units, EPA has conducted the community involvement required by Superfund. That work has included:

- Designate a contact
- Notify affected citizens
- Establish a local information repository
- Conduct community interviews

Prepare a community involvement plan

These activities are discussed below, along with the addition of a website and a public meeting.

3.5.1.1 Designate a Contact

Since the 1980s, EPA has maintained one or more designated spokespersons to inform the community of actions taken, respond to inquiries, and provide information concerning the release of hazardous substances.

Current EPA contacts identified for Mine Flooding, Rocker, and Priority Soils are:

- Community Involvement
 Coordinator, Dana Barnicoat
- Remedial Project Manager, Nikia Greene

Contact information for these EPA staff are provided in Appendix A. Responsibilities are presented in Section 6.1.1.

3.5.1.2 Notify Affected Citizens

EPA began notifying affected citizens shortly after the site was listed on the National Priorities List and has provided updates since then. EPA has notified all county, state, and federal officials, as necessary.

3.5.1.3 Establish Administrative Record and Information Repository

EPA has established an administrative record and an information repository for the site. The administrative record is housed in the EPA Region 8 Superfund Records Center in Helena. It holds the documents that EPA considers or relies on in selecting response actions that culminate in a record of decision for remedial action.

The local information repository is housed at the Montana Tech Library in Butte and contains documents useful to the public such as legal documents, this community involvement plan, fact sheets, work plans, reports, proposed plans, and a record of decision. A summary is sometimes provided with technical reports to relay facts in simple terms and enhance understanding.

There are also two electronic information repositories—the websites for CTEC and EPA (Appendix F).

Both the administrative record and information repository are updated as necessary. In accordance with the Americans with Disabilities Act, the information repository location is handicapped accessible.

3.5.1.4 Conduct Community Interviews

EPA conducted community interviews for preparation of the original community involvement plans for Mine Flooding, Rocker, and Priority soils and for the revised plan for Priority Soils.

3.5.1.5. Prepare a Community Involvement Plan

This document is the updated community involvement plan for Mine Flooding, Rocker, and Priority Soils.

3.5.1.6 Website

EPA's website for the Silver Bow Creek/Butte Area Superfund Site (Appendix F) has information on EPA's involvement, site status, what is being done to protect human health and the environment, how to stay informed, what the risks are, and redevelopment. It houses many reports and documents that can be downloaded for viewing and provides information on public meetings.

3.5.2 Additional Outreach Conducted by EPA

EPA's community involvement efforts beyond that required by Superfund have been minimal at Mine Flooding and Rocker because of the primarily industrial nature of those operable units. The status of Mine Flooding and Rocker are often discussed at broader site meetings and EPA has provided information to the *Montana Standard* related to the polishing plant and discharge to Silver Bow Creek.

The Berkeley Pit Public Education Committee (funded by Atlantic Richfield and Montana Resources, with staff support from Butte-Silver Bow) maintains an educational website, *Pitwatch*, specific to issues at Mine Flooding.

EPA's outreach at Priority Soils has been extensive due to the potential impacts and on the residential population and the degree of local interest. That outreach is summarized below.

3.5.2.1 Advertisements and Notices

EPA has developed and run advertisements and notices in the *Montana Standard* and *Butte Weekly* on a variety of topics. Most recently, these have included the consent decree at Priority Soils, the *Environmental Justice Action Plan*, and the five-year review.

3.5.2.2 Environmental Justice Action Plan

In December 2020, EPA prepared a plan specific to Butte that established the environmental justice goals, objectives, and considerations for Superfund work in the community (Appendix G).

3.5.2.3 Fact Sheets and Other Written Materials

Examples of EPA outreach include:

- A monthly bulletin (19 issues) for distribution to the community as an insert in the Montana Standard (daily newspaper) and the Butte Weekly (weekly free newspaper)
- Status update fact sheets and topicspecific fact sheets (e.g., stormwater risk issues, record of decision, consent

decree, public participation in design, proposed plan, redevelopment successes, technical impracticability, and five-year review results)

- Fact sheets for the EPA-led operable units and for the Clark Fork River Basin sites
- A booklet entitled, Be Contaminant Smart
- A glossary of acronyms used site wide

3.5.2.4 Meetings with Elected Officials

EPA meets informally with Butte/Silver Bow commissioners, the planning director, and the chief executive to keep them up to date with project progress. EPA also meets on a regular basis with its agency partners at DEQ.

3.5.2.5 Monthly Update Calls

In late 2020, EPA began hosting monthly meetings (Mondays from 6 to 8 pm) online for residents of Butte to keep them updated on current EPA issues and events. Program updates are provided by EPA, DEQ, Butte-Silver Bow County, and Atlantic Richfield. Other organizations are invited to present about Superfund-related issues. The meetings include a community discussion and a question-and-answer session to get community input.

3.5.2.6 Public Meetings

EPA has held dozens of public meetings specific to the Silver Bow Creek/Butte Area Superfund Site.

3.5.2.7 Other

EPA has made appearances on the local radio program, *Party Line*, to provide information on site activities. To bring the community up to speed with their participation opportunities related to the record of decision, EPA prepared and ran a series of ads called *Superfund and You*. EPA also facilitated a work group and

maintained a local office in Butte for over 20 years.

Environmental Justice

This section discusses EPA's Environmental Justice Program, local suggestions to address environmental justice, and EPA's *Environmental Justice Action Plan* (EPA 2020) (Appendix G).

4.1 EPA's Environmental Justice Program

EPA defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental, and commercial operations or policies.

Meaningful involvement means:

- People have an opportunity to participate in decisions about activities that may affect their environment and/or health.
- The public's contribution can influence the regulatory agency's decision.
- Public concerns will be considered in the decision-making process.
- Decision makers seek out and facilitate the involvement of those potentially affected.

By using readily available environmental and demographic information, EPA conducts environmental justice screenings to highlight areas within a community where disproportionate environmental and health impacts may fall on low-income and/or racial minority groups.

4.2 Local Suggestions to Address Environmental Justice

EPA received written comments stressing that additional educational outreach to impacted areas was needed to involve low-income citizens. Concern was expressed that low-income citizens—who often have compromised immune systems, poor diet because of monetary restrictions, less access to health care, and live in substandard housing—may be at a higher risk.

The Residential Metals Abatement Program and Butte-Silver Bow Health Department outreach were cited as examples of successful appeals tailored to low-income citizens to boost participation in their respective programs.

Suggestions received regarding environmental justice are:

- Involve low-income communities in Superfund decision-making
- Consider impacts and cleanup of toxic waste in Butte on the vulnerable
- Promote environmental justice in Butte

Suggested communication tools are:

- Print media (newspapers)
- Targeted-distribution flyers
- Posters placed in areas used by lowincome citizens (such as laundromats)

- Meetings in informal settings (home or neighborhood center)
- Social media (texting and Facebook)
- Radio talk shows (*Party Line*)
- Television news and public affairs programming

Suggested locations for outreach are:

- Neighborhood associations (Centerville Citizens group and Greely Neighborhood Association)
- Workplaces
- Schools
- Homes
- Local meeting places (volunteer fire stations)
- Libraries
- Providers of services to low-income citizens
- Churches
- Union halls

4.3 EPA's Environmental Justice Action Plan for Butte

EPA has prepared an *Environmental Justice Action Plan* (EPA 2020) (Appendix G) specifically for Butte. Highlights are presented below.

4.3.1 Environmental Justice Goals

EPA's goals are to embrace all residents and stakeholders in Superfund decision-making in Butte and the surrounding area (the area of the expanded Residential Metals Abatement Program) and to:

- Assess risks and design remediation programs concerning harmful effects of contaminants of concern on all citizens living in Butte
- Identify and notify the community of potential environmental justice concerns in Butte and the surrounding area
- Familiarize and inform the public on a regular basis of the environmental justice

- activities being conducted in Butte and the surrounding area
- Promote a clean, healthy, and natural environment in Butte and Silver-Bow County

4.3.2 Steps to Meet the Goals

EPA will partner with community organizations and interested individuals to help achieve the goals.

Actions will include:

- Identify issues related to environmental justice and the impact of remediation decisions and activities on vulnerable communities in Butte and the surrounding area
- Develop and disseminate information regarding the impact of remediation decisions and activities, and steps individuals can take to protect themselves and their families from exposure to contaminants of concern like arsenic and lead
- Develop and disseminate information that focuses on vulnerabilities of lowincome residents regarding available services such as the Residential Metals Abatement Program
- Provide feedback opportunities for communities in Butte and surrounding areas to EPA and partners regarding the implementation and effectiveness of the Environmental Justice Action Plan

4.3.3 Potentially Impacted Area

EPA's publicly available, nationally consistent screening and mapping tool is called EJSCREEN and can be found at www.epa.gov/ejscreen. The 2020 EJSCREEN report in the Action Plan (Appendix G) was prepared for the Butte Priority Soils Operable Unit and indicated that the overall low-income population in the area is 55% (compared to

34% for the State of Montana). "Low-income" is defined as the percent of a population in households where the household income is less than or equal to twice the federal poverty level. Demographics for Butte are presented in Section 3.1.

4.3.4 Update of the Community Involvement Plan

EPA's Community Involvement Handbook (EPA 2020) states that it is important to consider if there are hard-to-reach people in the community, such as people who may speak languages other than English or community members who may be wary of the government because of legal status or other concerns.

If the community is likely to have environmental justice concerns, additional efforts should be made to involve segments of the community that are not effectively reached by conventional approaches. The project team will embrace this approach in their community involvement activities. Assessing and addressing potential environmental justice concerns is one of the overarching themes to keep in mind when planning and conducting community involvement and outreach. Teams should consider tailoring community involvement approaches to reach out more effectively to specific populations.

Some examples include:

- Use translation or interpretation services
- Partner with local community groups or community leaders
- Use nontraditional media outlets for outreach
- Identify nongovernment locations to hold public meetings
- Schedule community involvement activities at times other than during

- subsistence fishing, hunting, or agriculture seasons
- Continue to distribute paper copies of outreach materials when members of the community lack access to electronic forms of communication

4.3.5 Considerations Prior to Implementing Environmental Justice Activities

The following will be considered when implementing environmental justice activities:

- Specify and delineate the goals for reaching out to the low-income communities in Butte
- Agree on the roles to be played by community partners and interested individuals, as well as EPA
- Identify specific activities and how EPA and partners will interface with the lowincome communities in Butte
- Develop and articulate a common understanding of environmental justice goals and identify opportunities to participate in the development and evaluation of EPA project plans
- Articulate a methodology for reaching out to all community members and determine the most effective venues for reaching out to low-income communities around Butte

4.3.6 Specific Activities

Environmental justice activities have or could include any of the following:

- Tailoring cleanup activities to address the needs of low-income citizens
- Involving all citizens in Superfund remedial design decision-making
- Considering the impact and cleanup of contaminants of concern on all citizens

- Promoting educational outreach about human health protection throughout Butte community
- Helping the local health department promote and support environmental justice goals and activities
- Identifying opportunities for financial support through, for example, environmental justice grants
- Adding the Environmental Justice Action Plan into the community involvement plan as has been done here

Community Concerns and Issues

No interviews were done for this update of the community involvement plan. However, EPA has been intensively involved with the public and the major stakeholders, especially over the last ten years. Feedback from various meetings, working groups, and other outreach and discussions with project staff and managers has informed this section.

Interest in the three operable units included in this plan varies widely and concerns are lowest in areas where land use is primarily industrial versus residential/commercial. Community concerns and issues are discussed by operable unit below.

5.1 Concerns by Operable Unit

5.1.1 Mine Flooding

Mine Flooding concerns center on the Berkeley Pit and can be grouped as follows:

Pit overflow. Although it is physically impossible, the rumor persists in the community that water in the pit could rise to a level that would allow it to overflow the pit walls. Since 1982, when mining and pumping ceased, the water level in the pit has risen as it seeks to reach its pre-mining elevation and come into equilibrium with the surrounding aguifer. Without any intervention, the water level in the pit would naturally stop rising when it reached the elevation of the surrounding aquifer. That level is at least 34 feet below the height of the pit walls. Thus, the pit would not overflow. This is explained in more detail in a fact sheet entitled, **Butte Mine** Flooding Operable Unit.

Groundwater contamination. There is concern with groundwater quality. The shallow (alluvial) aquifer can discharge to Silver Bow Creek and Blacktail Creek and degradation of water quality in that aguifer could be a threat to those creeks. To prevent that possibility, the record of decision and consent decree for Mine Flooding requires that the water level in the East Camp system (which includes the pit and the surrounding bedrock aguifer) stay below the protective water level (5.410 feet above mean sea level). This is 50 feet below the level at which the surface of the pit lake could intersect with the alluvial aquifer, providing an additional factor of safety.

The bedrock aquifer is monitored at various points of compliance (POCs) that include wells and historical mine shafts. The protective water level must be maintained at a POC with the highest water elevation. Currently, the water levels at the highest POC is 25 feet higher than the water level in the pit.

There have also been some concerns voiced that existing or future groundwater contamination could impact drinking water. However, Butte's drinking water supply comes from three surface water reservoirs outside of the site that are unimpacted by mining contamination. Thus, contaminated groundwater does not impact Butte's drinking water supply.

 Waterfowl. Threats to migratory waterfowl remain an issue, due in large part to the November 2016 deaths of thousands of migrating snow geese in a single weekend. Montana Resources has ramped up their bird hazing program to prevent a recurrence. Changes were made to the waterfowl mitigation plan in coordination with the waterfowl advisory group, comprised of local experts, and in consultation with U.S. Fish and Wildlife Service. New identification, tracking, and hazing measures have been employed (drones, fireworks, lasers, and a sonic cannon) to keep birds from landing.

- Discharge to Silver Bow Creek. When discharge of treated water from the discharge pilot polishing plant began in 2020 there were some initial concerns about its impact on water quality. However, analytical results have shown no negative impacts on the creek. Discharge has the added benefit of increasing creek flow, which benefits local creek enthusiasts and aquatic habitat during periods of low flow in the creek (late summer).
- Dust. Dust from active mining at Montana Resources is a continuing concern for some residents in the Greeley Neighborhood which is downwind of the activity. The State of Montana and Montana Resources are monitoring air quality to determine if there are violations of hard rock mining regulations. Active mining operations are outside of the purview of Superfund and must be addressed by other agencies and regulations. EPA stays up to date with the dust issue but has no regulatory authority over it.

5.1.2 Rocker

Due to the remote and industrial nature of the operable unit, concerns have been expressed by the Water and Sewer Board which is made

up of residents. Those concerns focus on the issue of potable water.

The Rocker Sewer and Water District has expressed interest in removing the controlled groundwater area so that drinking water could be sourced locally, via municipal groundwater wells, rather than by purchase of piped-in water from the Butte-Silver Bow system. Leaking valves in the water distribution system had driven up water costs for Rocker in recent years. The leaks resulted from corrosion of valves bedded in fill that contained acidic mine waste. This issue was alleviated in the short term when Atlantic Richfield replaced the valves, but it is likely to reoccur. A Butte-Silver Bow fact sheet, Controlled Groundwater Areas, Butte-Silver Box provides useful information on the topic.

5.1.3 Priority Soils

Priority Soils has the highest population of the three operable units and is a mix of residential and commercial property in the heart of Butte. It has by far the largest degree of public interest and garners most of EPA's outreach resources.

In the previous update of the community involvement plan, the primary community concerns for Priority Soils were the removal of the Parrott Tailings, the order of cleanup, and impacts to public health. The State of Montana has taken the lead on addressing the Parrott Tailing and the order of cleanup is no longer expressed as an issue.

Public health concerns remain a priority. People continue to want to know if contamination is impacting the community and to be assured that homes are safe, especially for low-income people. There remains a concern about disproportionate health impacts to people on the hill, and about the need for children to have safe places to play and go to school.

Atlantic Richfield began remedial design work in 2020, with remedial action (cleanup) slated to begin in 2022. Atlantic Richfield will be leading outreach related to cleanup of the Priority Soils. They are developing a community engagement plan of their own, specific to that task, and have conducted community interviews to assess the needs of the community regarding information. The results of that assessment will drive development of specific engagement tools in the engagement plan.

5.2 Carry Over Suggestions for EPA

The previous update of the Priority Soils community involvement plan was done before the record of decision and the consent decree for that operable unit. People believed it was important for EPA or Atlantic Richfield to get information out in a timely and easily accessible fashion. That interest is likely to increase once cleanup of Priority Soils ramps up and the public sees construction equipment near their property.

The following are suggestions carried over from the previous plan that will inform EPA's approach to outreach during remedial design and action.

5.2.1 Written Materials

People interviewed for the previous update said that they liked receiving site information as written materials, such as the EPA bulletins that are now distributed as newspaper inserts. Several people had specific suggestions on how to improve those materials:

- Simplify the information. CTEC should help boil down the data into what the public needs.
- Use fewer words and more pictures.
 Graphics can show progress and issues, status, principal parties, goals,

- objectives. Show time-specific accomplishments.
- Make sure information is timely.
- Make sure updates tell what and where work is being done and how the community can help.
- Give us a review of the whole site history. Show a timeline of how we got to where we are. Publicize the remediation plan in simple terms.
- Educate the public on what can and can't be done to protect the caps. Maybe start CapWatch which would be like PitWatch and could be a place that people could go for information on cap awareness and protection.
- Provide ongoing test result trends by month, by year, by neighborhood, for air and soil quality, with identified sources for previous and ongoing contaminators.
 Particularly, air particulate matter at the Greeley monitoring site, as related to Montana Resources' mine blast times and at hourly intervals thereafter.

5.2.2 Best Ways to Get Information Out

Suggestions on how best to distribute information are summarized in Exhibit 5.1. This includes input from recent interviews at West Side Soils.

Schools

- History club
- Science fair
- Ann Cody Smith Essay contest

Written Materials

• Newsletters, fact sheets, bulletins, PitWatch

News Media

- Party Line radio interview
- Montana Standard and Butte Weekly (bi-weekly EPA science Q&A or a regular column – maybe spearheaded by CTEC).

Face-to-Face

- Public meetings
- Talks to local groups (e.g., Exchange Club or Rotary)
- CTEC meetings
- Neighborhood community gatherings

Internet

- Central location for reports with cross-link
- Improved EPA website
- Fact sheet inserts sent via email list
- Short environmental topic films online
- Environmental blog
- Facebook page

Exhibit 5.1 Best Ways to Get Information to the Community

5.2.3 Extra Steps

Previous interviewees were asked what one thing EPA could do better. Responses included:

- Tell us about accomplishments and what EPA can and can't do. There is no use taking the heat for something that you are not even allowed to do.
- Be more visible. Reach out to clubs and get them to spread the word. Get on Party Line. Advertise your successes.
 EPA shouldn't take the brunt of 100 years of mining.
- Talk to the public in a way they can understand. Incorporate GIS layers, so

- people can use the internet to look up what interests them about the site.
- Give more information on time-specific goals, objectives, and strategy.
- Get the community groups working together and teach us how to sustain after EPA leaves.
- Improve your website. Add some "web facts" on how Superfund affects you, what happens if contaminants increase, and next steps. Use public service announcements to direct people to the web site.
- Butte is a reclamation economy.
 Superfund needs to be about cleanup,
 job retraining, and public infrastructure.
 The issues need to be addressed
 holistically. Make this a flagship site that is a model for the community.

Community Involvement Action Plan

Communication and engagement are important throughout the Superfund process to ensure the public is made aware of opportunities for meaningful involvement. This section presents tools for communication and engagement and includes:

- Section 6.1 Planned Actions. Provides specific steps that will be taken to address community concerns outlined in Sections 4 and 5 over the remainder of the project.
- Section 6.2 Schedule of Outreach Activities. Provides a table of specific outreach activities and the general times for implementation and identifies which are required by Superfund and which are additional efforts on EPA's part.
- Section 6.3 Measurement of Success. Describes why and how EPA will measure outreach success.

This plan is a blueprint for outreach work that EPA intends to implement based on current knowledge. It is a living document and will change as work progresses. As a Superfund requirement, it is independent of any other plans that may be specific to a task or entity.

EPA is committed to environmental justice and will make use of the *EJScreen* mapping tool when planning new outreach efforts. This will provide insight into challenges that people might have in understanding and following the complexities associated with risks from contamination and with Superfund investigation or cleanup.

Examples of existing site-specific maps produced using the *EJScreen* tool are provided in Appendix H. They include a map to help target priorities for Residential Metals Abatement Program sampling (children under 5, low-income, and lead paint potential) as well as a general map showing low-income and education level which highlights where people may need more face-to-face communication. Specific demographic or environmental factors mapped will depend upon the task at hand.

EPA will urge other stakeholders to consider environmental justice in their plans and activities and will encourage use of the free *EJScreen* mapping tool, or other available tools, in that effort.

6.1 Planned Actions

Planned actions are individual activities that EPA intends to implement or continue implementing, as needed. The scope of these actions is based on CERCLA requirements and on feedback from the community (Sections 4 and 5).

For ease of reading, these actions have been divided as follows:

- Points of contact, information repositories, and administrative record
- Face-to-face interactions
- Written materials
- Electronic media and sources of information

6.1.1 Points of Contact, Information Repositories, and Administrative Record

6.1.1.1 Points of Contact

EPA has designated points of contact for the site and has provided this information to stakeholders and the public. This plan identifies points of contact for distribution of information (e.g., agency representatives and local, state, and federal contacts).

Exhibit 6.1 summarizes the types of issues that are addressed by EPA (the lead agency) and DEQ (the support agency). Contact information is provided in Appendix A.

Agency	Area of Responsibility
U.S. Environmental Protection Agency	 Scope and status of work Settling defendant issues Protectiveness issues Summary of activities Plans, reports, and other technical documents
Montana Department of Environmental Quality	 Support agency issues and concurrence

Exhibit 6.1. Responsibilities by Agency

6.1.1.2 Administrative Record and Information Repository

EPA will continue to make information available to the public in the administrative record and the information repository (described in Section 3.5). Contact information for the administrative record and information repository is provided in Appendix F.

6.1.2 Face-to-Face Interactions

Interactions between EPA and stakeholders, or EPA and the community, are effective in educating and fostering relationships that increase trust and understanding about work being conducted at the site. This helps to avoid surprises as the project progresses.

Face-to-face interactions will be conducted remotely (e.g., Skype, Zoom, Teams) if social distancing restrictions are in place or if requested by those involved.

6.1.2.1 Public Meetings

EPA will sponsor public meetings/open houses at appropriate times during the Superfund process. These may include:

- Periodic update meetings
- Remedial design/remedial action meetings (such as prior to the start of field activities)

Virtual meetings will be held using virtual platforms is social distancing restrictions are in place of if requested by those involved. A combination of virtual and in-person meetings may also be used. In-person meetings will be held at facilities on site (Appendix F) that meet the accessibility requirements of the American with Disabilities Act at times and days that are judged to be convenient for residents and other interested parties.

Meetings will include handouts and visual aids to explain the topics in easily accessible language and will include translations of materials, where appropriate.

Advance notice of the meetings will be provided in the form of notices/ads that will run at least a week in advance in the *Butte Weekly* and *Montana Standard* (Appendix E), emails, and announcements on websites of interested groups (e.g., CTEC). The news desk of the two newspapers will also be notified to allow them the opportunity to cover the meeting and an announcement may be made on the radio.

6.1.2.2 CTEC Meetings and Interaction

As discussed in Section 3.4, CTEC is funded by a federal TAG that provides the resources

for a community group to hire someone to interpret and explain technical reports, site conditions, and EPA's proposed cleanup plans. The group is responsible for sharing information with the community at large.

EPA is exploring opportunities to ensure that CTEC's strengths are utilized in information sharing during all phases of the Superfund process. These may include presenting at CTEC meetings, providing information for the CTEC website, using the CTEC website as second local information repository, and providing handouts or other materials for events.

6.1.2.3 Open Communication with Key Stakeholders

EPA will coordinate with key stakeholders, including local health agencies, to keep them informed of project activities and will ask for feedback on their concerns. This will encourage ongoing communication and clarify roles.

EPA's communication efforts may include:

- Holding small group meetings on a regular basis to stay in touch
- Periodic (but regular) conversations

As discussed in Section 3.5, EPA is hosting monthly meetings online for residents of Butte and other stakeholders to keep them updated on current EPA issues and events. EPA, DEQ, Butte-Silver Bow County, and Atlantic Richfield provide updates and other organizations are invited to present about related issues. The meetings include a community discussion and a question-and-answer session to get input.

EPA will rely on input from stakeholders as to how often and what format is preferred for additional stakeholder communication.

6.1.2.4 Community Networking

Additional networking events will be considered if EPA determines there is an interest.

Such opportunities may include:

- Partnering with local schools, community organizations, and youth organizations
- Partnering with environmental and civic organizations to announce project updates, meetings, and involvement opportunities
- Participating in local cultural and civic events and project area activities

6.1.2.5 Briefing Elected Officials

Briefings for elected officials (Appendix B and C) will be scheduled, as needed, to communicate significant events. Briefings will keep leaders involved and informed on progress and will provide an opportunity for questions or resolution of concerns. Handouts may be provided to assist officials in responding to public inquiries and could include site history and status and copies of any print media released to the public (e.g., fact sheets, newsletters, media releases, media articles).

6.1.2.6 Community Visits/Tours and Open Houses

Tours and visits provide the public access to portions of the site that may be of interest. EPA is open to conducting tours should there be an interest.

An open house is a chance for posters to be displayed. Stations with multiple posters are staffed with technical and resource personnel who guide people and answer questions. This can increase small group and one-on-one communication, build relationships, and educate people about

environmental issues. If there is interest, EPA would be open to holding an annual open house in conjunction with a public meeting to update the community on project status.

6.1.3 Written Materials

Written materials include a wide variety of tools to help to expand understanding and engagement.

6.1.3.1 Community Involvement Plan

CERCLA requires that each site have a community involvement plan. The plan will be reviewed periodically to ensure it is up to date, particularly the lists of contacts. EPA may occasionally seek feedback from organizations, stakeholders, and individuals on how successful they believe the actions in the plan are in engaging and informing the community (Section 6.3).

6.1.3.2 Fact Sheets, Flyers, Posters, and Other Materials

EPA will periodically prepare written materials to increase community awareness and knowledge of the project and its status.

These may include:

- Fact sheets
- Topic-specific flyers for meetings or other events
- Posters or other displays for events
- Proposed plan for cleanup
- A responsiveness summary for the record of decision (summarizing comments received and EPA's responses to those comments)

Written materials will use nontechnical language understandable to an audience not trained in environmental issues. Graphics and illustrations will be common. Content may include project status, names of recent

documents, contacts for more information, descriptions of study methods or technologies, and project milestones.

Topics for flyers and the extent and nature of their distribution (hard copy versus electronic) will be discussed within the project team and with CTEC and other interested parties.

6.1.3.3 Mailing List

EPA will continue to update a site mailing list that includes property owners, individuals and organizations identified in the appendices, and people who indicate their interest on sign-in sheets at public meetings or who otherwise request to be added.

6.1.3.4 Advertisements/Notifications

Notifications will be placed in the *Butte Weekly* and *Montana Standard* (Appendix F)
to alert the public to the availability of major
documents as they become available.
Opportunities for public review or
involvement will also be advertised.

These include:

- Issuance of significant documents (e.g., the Environmental Justice Action Plan or the remedial investigation report)
- Public meetings/open houses

Public notices will inform stakeholders and the community of upcoming events. If the event is significant enough, local officials will be notified prior to publication so they can respond to community questions or concerns. Ads and notices will be easy to read and understand.

6.1.3.5 Press Releases

For milestones, EPA will provide press releases to the media contacts listed in Appendix E. Media briefings can also be arranged if media representatives have the need for additional information, specific issues of concern, or project status.

6.1.3.6 Project Technical Documents

EPA will post technical documents online in a timely fashion. Hard copies will be placed in the local information repository.

6.1.4 Other

6.1.4.1 Social Media and Websites

EPA will explore the use of social media, such as Twitter and Facebook, in notifying the community of upcoming meetings, available documents, and opportunities for involvement.

The website will be updated regularly with electronic copies of fact sheets, notices, handouts, maps, and other documents of public interest. EPA will encourage the development of a single, non-EPA website that is easy to find and update (possibly hosted by CTEC or Atlantic Richfield). EPA will explore the use of visual tools such as Arc-GIS storyboards to provide an easy-to-digest format for complicated issues.

6.1.4.2 Email List

EPA will maintain an email distribution list for status updates and notifications of meetings or deadlines.

6.2 Schedule of Community Involvement Activities

Exhibit 6.2 lists EPA's responsibilities for community involvement under CERCLA and includes additional activities EPA has taken or will undertake to engage the community. All of the CERCLA-mandated tasks have been completed.

6.3 Measurement of Success

EPA will implement the activities in Exhibit 6.2 to build on and improve engagement

When	Community Involvement Action
Throughout the Superfund process	 Ensure EPA website is updated Prepare fact sheets on progress and post on website Use written materials and meetings to address community issues Hold public meetings/open houses Brief elected officials as needed Measure outreach success and effectiveness
Prior to remedial investigation fieldwork	 Establish information repositories and an administrative record file Publish notice of availability in paper Conduct community interviews Prepare a community involvement plan
Upon publication of proposed plan	 Publish proposed plan notice in paper Prepare a fact sheet that summarizes the proposed plan and provides other information Add proposed plan and supporting information to administrative record Provide a public comment period of at least 30 days Conduct a public meeting and add transcription to administrative record
After comment period	 Summarize significant comments and EPA's responses (responsiveness summary) and make available with the record of decision
After record of decision signing and prior to remedial action	 Make the record of decision available for public inspection at or near the site and in the administrative record Publish notice of availability for record of decision in local newspaper Prepare a record of decision fact sheet
Prior to remedial design	 Review community involvement plan Revise plan during remedial design/ remedial action
Prior to cleanup	 Issue a fact sheet on the remedial action As appropriate, provide a public briefing on the remedial action
Red text is outreach mandated by CERCLA Black text is additional outreach conducted and/or proposed by EPA.	

Exhibit 6.2. Summary of CERCLA-Mandated Outreach and Additional Outreach Proposed by EPA

with the local community and achieve the overall goals listed in Section 1.

Questions asked before each undertaking will include:

- What do we want to accomplish?
- Who is our target audience?
- What do we want members of the community to learn or what actions do we want them to take as a result?

To ensure outreach is effort well-spent, EPA will periodically monitor the outreach activities to determine if adjustments are needed. Consistent evaluation of outreach can help the team continuously improve its approach.

Obtaining and responding to feedback is an important aspect of the measurement of success. Feedback will be evaluated against the questions asked above (and others) and the results will be used to adjust specific activities or the overall approach. Specific methods (informal and formal) can be determined as work progresses and will include tracking of project progress milestones.

Informal feedback can be obtained through conversations after a community meeting or via emails or phone calls from community members regarding outreach efforts. It can be used to make mid-course corrections or to address any issues or shortcomings as they arise. When more formal input is needed, EPA may draw from the approved customer satisfaction surveys in EPA's *Superfund Community Involvement Handbook* (EPA 2020) to gather input about EPA's efforts.

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Appendix A

EPA and Montana DEQ Contacts

EPA

Montana mailing address: 10 W 15th St, Helena, MT 59626

- Region 8 Director, Superfund and Emergency Management Division, Betsy Smidinger, 800-227-8917, smidinger.betsy@epa.gov
- Montana Superfund Chief, Joe Vranka, Baucus Federal Building, 10 West 15th Street, Suite 3200, Helena, MT 59626, 866-457-2690, 406-457-5039, vranka.joe@epa.gov
- Montana Office Remedial Project Managers:
 - Nikia Greene (Operable Units 3, 7, 8, and 13), 406-457-5019, greene.nikia@epa.gov,
 - Allie Archer (Operable Units 1, 4, 7, and 12), 406-457-5033, archer.allie@epa.gov
- Montana Office Community Involvement Coordinator, Dana Barnicoat, 406-457-5007
 <u>barnicoat.dana@epa.gov</u>

DEQ

Mailing address: P.O. Box 200901, Helena, MT 59620-0901

- Headquarters, 1520 East Sixth Avenue, Helena, MT
 - Chris Dorrington, Director, <u>cdorrington2@mt.gov</u>, 406-444-2544
- Waste Management and Remediation Division, 1225 Cedar Street, Helena, MT
 - Jenny Chambers, Administrator, <u>ichambers@mt.gov</u>, 406-444-6383
 - Moira Davin, Public Information Specialist, moira.davin@mt.gov, 406-444-6360
 - Kevin Stone, Public Information Specialist, kevin.stone@mt.gov, 406-444-6469
- Federal Superfund and Construction Bureau, 1225 Cedar Street, Helena, MT
 - Matt Dorrington, Bureau Chief, <u>matthew.dorrington@mt.gov</u>, 406-444-6445
 - Joel Chavez, State Project Officer, <u>ichavez@mt.gov</u>, 406-444-6407
 - Daryl Reed, State Project Officer, dreed@mt.gov, 406-444-6433

Appendix B

Federal Elected Officials and Contacts

- Senator Steve Daines, 320 Hart Senate Office Building, Washington, DC 20510, 202-224-2651, press@stevedaines.com
 - Helena office, 30 West 14th Street, Suite 206, Helena, MT 59601, 406-443-3189, no email address listed on website
- **Senator Jon Tester**, 311 Hart Senate Office Bldg., Washington, DC 20510-2604, 202-224-2644, rit@tester.senate.gov
 - Butte office, Silver Bow Center, 125 West Granite Street, Suite 200, Butte, MT 59701, 406-723-3277, no email address provided on website
- Congressman Matt Rosendale, 1037 Longworth House Office Building, Washington, DC 20515, 202-225-3211, no email address provided on website
 - 7 West 6th Avenue, Suite 3B, Helena, MT 59601, 406-502-1435, no email address provided on website

Appendix C

State, County, and Local General Contacts

State Officials

- Governor Greg Gianforte, Office of the Governor, P.O. Box 200801, Helena MT 59620-0801, 406-444-3111
- Lt. Governor Kristen Juras, Office of the Lt. Governor, see above

County Officials

- House District 73, Butte-Silver Bow County, Jim Keane (D), 2131 Wall Street, Butte, MT 59701, 406-723-8378, no email address listed on website
- House District 74, Butte-Silver Bow County, Derek Harvey (D), PO Box 3111, Butte, MT 59702-3111, 406-490-5472, derek.harvey@mtleg.gov
- House District 75, Jefferson County, Marta Bertoglio (R), PO Box 294, Clancy, MT 59634-0294, 406-438-1772, marta.bertoglio@mtleg.gov
- House District 76, Butte-Silver Bow County, Donovan Hawk (D), PO Box 3791, Butte, MT 59702, 406-578-1233, <u>Donavon.Hawk@mtleg.gov</u>
- House District 78, Anaconda-Deer Lodge County, Gregory Frazer (R), 210 4th Street, Deer Lodge, MT 59722, 406-560-4707, no email address listed on website
- Senate District 37, Butte-Silver Bow County, Jerry Schillinger (R), Butte, MT 59701, 406-974-2478, jerry.schillinger@mtleg.gov
- Senate District 38, Butte-Silver Bow County, Edie McClafferty (D), 1311 Stuart Avenue, Butte, MT 59701, 406-490-5873, edie.mcclafferty@gmail.com
- Senate District 39, Anaconda-Deer Lodge County, Mark Sweeney (D), PO Box 200500, Helena, MT 59620-0500, 406-560-0171, <u>masween@hotmail.com</u>

Local Officials

Butte Silver Bow County, Courthouse, Room 106, 406-497-6214

- Chief Executive, J.P. Gallagher, 155 West Granite Street, Butte, MT 59701, 406-497-6222, <u>igallagher@bsb.mt.gov</u>
- Butte-Silver Bow County Planning Department, Courthouse, Room 108, Lori Casey, Director, 406-497-6250, <u>lcasey@bsb.mt.gov</u>
- Butte-Silver Bow County Superfund Division, Courthouse, Room 108, Eric Hassler, Superfund Operations Manager, 406-497-5042, ehassler@bsb.mt.gov

- Butte-Silver Bow County, Weed Control, 25 Front Street, Butte, MT 59701, John Moodry, Director, 406-497-6462, <u>imoodry@bsb.mt.gov</u>
- Butte-Silver Bow County Commission, 155 Granite Street, Butte, MT 50701, 406-497-6219, commissioners@bsb.mt.gov
 - District 1 Shawn Fredrickson
 - District 2 Michele Shea
 - District 3 Hattie Thatcher
 - District 4 John Sorich
 - District 5 Justine Fortune
 - District 6 Jim Fisher
 - District 7 Josh O'Neill
 - District 8 John Riordan
 - District 9 Eric Mankins
 - District 10 Bill Andersen
 - District 11 Cindi Shaw (Chair)
 - District 12 Dan Callahan
- Butte-Silver Bow County Health Department, 25 West Front Street, Butte, MT 50701, Karen Sullivan, Health Officer, 406-497-5003, ksullivan@bsb.mt.gov

Appendix D

Stakeholder Group Contacts

- Berkeley Pit Public Education Committee, 155 West Granite Street, Butte, Montana 59701
- Big Brothers/Sisters, 405 W. Park, Butte, MT, 406-782-9644, info@bbbsbutte.org
- Butte Citizens for Preservation and Revitalization, P.O. Box 164, Butte, MT, info@buttecpr.org
- Butte Historical Society, P.O. Box 3913, Butte, MT, 406-491-1259
- Butte Local Development Corporation, 65 E. Broadway St, Floor 5, Butte, MT 59701, 406-723-4349, www.bldc.net
- Butte-Silver Bow Chamber of Commerce, 1000 George Street, Butte, MT 59701, 800-735-6814, bsbchamber@gmail.com, chamber@buttechamber.org
- Citizens Technical Environmental Committee, 27 West Park Street, PO Box 0593, Butte, MT 59703-0593, <u>ButteCTEC@hotmail.com</u>. David Williams, President; Bill McGreggor, VP; Janice Hogan, TAG administrator; Dr. John Ray, Board member
- Clark Fork Coalition, PO Box 7593, Missoula, MT 59807, 406-542-0539, info@clarkfork.org
- Clark Fork River Tech Advisory Committee. P.O. Box 224, Deer Lodge, MT 59722, 406-502-1570 x2506
- Clark Fork Watershed Education Program, Montana Tech Inst. for Educational Opportunities, 1300 West Park Street, Butte, MT 59701, 406-490-5191
- **Exchange Club**, P.O. Box 430, Butte, MT, <u>info@butteexchangeclub.org</u>
- Food Bank, 1019 E. 2nd Street, Butte, MT, 406-782-381, buttefoodbankmt@yahoo.com
- Habitat for Humanity, 66 W. Park, Suite 211, Butte, MT, 406-782-8579, info@habitatswmt.org
- Joe Griffin, former DEQ project officer/activist, 406-560-6060, jgriffin.redmountain@gmail.com
- Kiwanis, Butte-Silver Bow, P.O. Box 4296, Butte, MT, www.silverbowkiwanis.org
- Mainstreet Uptown Butte, George Everett, 66 W. Park St., Suite 201, P.O. Box 696, Butte, MT 59703, 406-565-2249, geverett@montana.com, www.mainstreetbutte.org

- National Affordable Housing Network, P.O. Box 632, Butte, MT, 406-782-8579, nahn@nahn.com
- **Pit Watch,** Butte-Silver Bow Planning Department, 406-497-6264, info@pitwatch.org
- Restore Our Creek Coalition, Northey Tretheway, 406-498-3274, <u>ntretheway59701@yahoo.com</u>
- Rotary Club, 3400 Elizabeth Warren Ave, Butte, MT, 406-494-2394
- **Senior Citizens (Belmont),** 615 E. Mercury, Butte, MT, 406-723-7773, belmontseniors@gmail.com
- **State Historic Preservation Office**, Pete Brown, 1301 East Lockey Avenue, P.O. Box 201201, Helena MT 59620, 406-447-8357, mtshpo@mt.gov
- Upper Clark Fork River Basin Remediation & Restoration Advisory Council, Department of Justice, P.O. Box 201401, Helena, MT 59620, 406-444-2026, contactdoj@mt.gov

Appendix E

Local Media Contacts

Television

- KTVH (NBC), channel 12, 100 West Lyndale, Helena, MT 59601, 406-457-2700, www.ktvh.com
- KXLH (CBS), Helena, channel 9, PO Box 7479, Helena, MT 59604, 406-457-2700, news@kxlh.com
- KXLF (CBS), channel 4, 1003 South Montana Street, Butte, MT 59701, 406-782-0444, News@kxlf.com
- **KTVM** (NBC), channel 8, 750 Dewey Blvd, PO Box 3118, Butte, MT 59701, 406-494-7603, news@ktvm.com
- KUSM TV (public television), Montana State University, Visual Communications Building 183, Bozeman, MT 59717, 406-994-3437, kusm@montanapbs.org

Newspapers

- Montana Standard, Butte Office, 25 West Granite Street, Butte, MT 59701, 800-877-1074, editor@mtstandard.com
- Butte Weekly, Robin Jordan, PO Box 4898, Butte, MT 59702, 406-782-3820, butte.news@butteweekly.com
- Silver State Post, Jesse Mullen, PO Box 111, Deer Lodge, MT 59722, info@adedpro.com
- Anaconda Leader, Kathie Miller, Editor, 121 Main Street, Anaconda, MT 59711, 406-563-5283, leadernews@anacondaleader.com
- Missoulian, Keila Szpaller, Editor 500 South Higgins, Missoula, MT 59802, 406-523-5200, 800-366-7102, newsdesk@missoulian.com
- Helena Independent Record, Jesse Chaney, Editor, PO Box 4249, Helena, MT 59604, 406-447-4074, jesse.chanev@helenair.com

Radio

- KBOW/KOPR Radio, PO Box 3389, 660 Dewey Boulevard, Butte, MT 59701, 406-494-7777 mail@kbowkopr.com
- MTPR, Montana Public Radio, University of Montana, 32 Campus Drive, Missoula, MT 59812 406-243-4931, news@mtpr.org, Nora Saks, 978-996-5766, nrv.saks@gmail.com

Appendix F

Meeting Locations, Administrative Record, Information Repositories, Websites

Meeting Locations

- Montana Tech Library Auditorium, 1300 West Park, Butte, MT, 406-846-3680
- Butte Archive, 17 West Quartz Street, Butte, MT, 406-782-3280

Administrative Record

- EPA Records Center, 10 West 15th Street, Suite 3200, Helena, MT 59626, 406-457-50
- Montana Tech Library, 1300 West Park, Butte, MT 59701, 406-496-4281 (physical location)

Information Repositories

- Montana Tech Library, 1300 West Park, Butte, MT 59701, 406-496-4281 (physical location)
- EPA website, http://www.epa.gov/superfund/silver-bow-butte
- CTEC website, www.buttectec.org

The Montana DEQ Remediation Division also has its own information repository for the site. It is located at 1225 Cedar Street, Helena, MT 59620, 406-444-6444, 800-246-8198.

Appendix G

EPA's Environmental Justice Action Plan



ACTION PLAN BUTTE, MT / REGION 8



Environmental Justice

EPA is committed to promoting and supporting environmental justice (EJ) in all its programs and activities.

The purpose of this Environmental Justice Action Plan (EJ Plan) is to establish EJ goals, objectives and considerations for site activities of the Butte Priority Soils Operable Unit (BPSOU) and the West Side Soils Operable Unit (WSSOU) at the Silver Bow Creek/Butte Area Superfund Site.

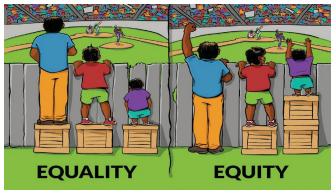
This plan was developed collaboratively by EPA and long-time EJ advocate and community partner, Dr. John Ray. EPA welcomes input from the community and other stakeholders on this plan.

The EJ Plan will become an addendum to the updated BPSOU Community Involvement Plan and to the WSSOU Community Involvement Plan when it is developed.

What is environmental justice and what does it include?

On February 11, 1994, through Executive Order 12898, President Clinton declared that: "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the United States."

Today, EPA defines environmental justice as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal and commercial operations.



Interaction Institute for Social Change | Artist: Angus Maguire. https://interactioninstitute.org/illustrating-equality-vs-equity/

EPA's goal is to provide an environment where all people enjoy the same degree of protection from environmental and health hazards; and equal access to the decision-making process to support and maintain a healthy environment in which to live, learn, and work.

EPA's Office of Land and Emergency Management in their *Integration of Environmental Justice into OSWER Policy, Guidance, and Regulatory Development* states "Environmental Justice issues should be considered at all stages of policy guidance and regulation development, beginning with preliminary efforts." (OSWER Directive No. 9200.3-17)

Goals for Environmental Justice Activities in Butte, MT

EPA's goals are to embrace all residents and stakeholders in Superfund decision making in Butte and the surrounding area (the area covered by the expanded Residential Metals Abatement Program (RMAP) and to:

- Assess risks and design remediation programs concerning harmful effects of Contaminants of Concern (COC's) on all citizens living in Butte, MT.
- Identify and notify the community of EJ concerns in Butte and the surrounding area.

- Familiarize and inform the public on a regular basis of the environmental justice activities being conducted in Butte and the surrounding area.
- Promote a clean and healthy natural environment in Butte and Silver-Bow County.

EPA will partner with community organizations and interested individuals to help achieve this EJ Plan's goals and to facilitate effective implementation. Specifically, EPA will partner with community organizations and interested individuals in Butte to:

- Identify issues related to environmental justice and the impact of remediation decisions and activities on vulnerable communities in Butte and the surrounding area.
- Develop and disseminate information regarding the impact of remediation decisions and activities as well as steps that individuals can take to protect themselves and their families from exposure to the COCs (e.g. arsenic and lead).
- Develop and disseminate information that focuses on vulnerabilities of low-income residents regarding services, such as the RMAP, that is available to make our lives safer from the possible effects of exposure to the COCs.
- Provide feedback opportunities for communities in Butte and surrounding areas to EPA and partners regarding the implementation and effectiveness of the EJ plan.

Profile of Potentially Impacted Area

EPA's publicly available, nationally consistent screening and mapping tool is called EJSCREEN and can be found at www.epa.gov/ejscreen. An EJSCREEN report is attached that helps describe the area potentially impacted by site activities for the Butte Priority Soils Operable Unit (BPSOU).

As indicated in the report for the BPSOU area, the overall low-income population in the area is 55% (compared to 34% for the State of Montana).

EPA's EJSCREEN tool defines low income as the percent of a population in households where the household income is less than or equal to twice the federal "poverty level."

Community Involvement Plan

EPA's Community Involvement Plan for Butte Priority Soils Operable Unit, dated *November 2003*, will be updated to incorporate the EJ Plan and include the EPA's commitment to all low-income citizens that they are represented in a meaningful way and have full opportunities to participate in the remedial design process surrounding the BPSOU and the WSSOU.

EPA's Community Involvement Handbook states that it is important to consider if there are hard to reach people in the community, such as people who may speak languages other than English or community members who may not trust the government because of legal status or other concerns.

If the site is in a community that is likely to have environmental justice concerns, additional efforts should be made to involve segments of the community that are not effectively reached by conventional approaches.

The EPA's Butte and West Side Soils site teams will embrace this approach in their community involvement activities. Assessing and addressing environmental justice concerns is one of the overarching themes to keep in mind when planning and conducting community involvement and outreach.

As described in the Handbook, Site teams should consider tailoring community involvement approaches to reach out more effectively to specific populations.

Some examples include:

- Using translation or interpretation services
- Partnering with local community groups or community leaders
- Employing nontraditional media outlets for outreach
- Identifying non-government locations to hold public meetings
- Scheduling community involvement activities at times other than during subsistence fishing, hunting, or agriculture seasons
- Continuing to distribute paper copies of outreach materials when members of the community lack access to electronic forms of communication.



THE SUPERFUND REMEDIAL PROCESS

ASSESSMENT



Discovery of Contamination



Preliminary Assessment



Site Inspection



National Priorities List (NPL) Site Listing

Community involvement and planning for a site'

s redevelopment are integral to the entire

Five-Year Reviews

CHARACTERIZATION



Remedial Investigation/ Feasibility Study &

Proposed Plan

SELECTION OF REMEDY



Record of Decision

CLEANUP



Remedial Design



Remedial Action

POST-CONSTRUCTION



Operation and

Maintenance



NPL Deletion

Considerations Prior to Implementing Environmental Justice Activities

As part of the development of the environmental justice action plan in Butte, MT and in collaboration with interested organizations and individuals, EPA and partners will:

- Specify and delineate the goals for reaching out to the low-income communities in Butte.
- Agree on the roles to be played by community partners and interested individuals as well as the EPA.
- Identify specific activities and how EPA and partners will interface with the low-income communities in Butte.
- Develop and articulate a common understanding of EJ goals and participant opportunities in the development and evaluation of EPA project plans in the BPSOU and WSSOU.
- Articulate a methodology for reaching out to all community members and determine the most effective venues for reaching out to low-income communities in Butte.
- Develop a timeframe for EJ activities and outreach to the community.

Citizens Technical Advisory Group

In all the above activities, EPA will work alongside the local Citizens Technical Advisory Group, CTEC, to ensure EJ information and activities are available to all citizens of Butte, MT.

"Making environmental justice concerns an integral part of all EPA activities in Butte and the surrounding area"





Picture of Butte and the Berkeley Pit in the mid-2000s (photo provided by Nikia Greene)

Site Activities

EJ site activities could include any of the following:

- Tailoring cleanup activities to address the needs of low-income citizens.
- Involving all citizens in Superfund remedial design decision making in Butte.
- Considering the impact and cleanup of contaminants of concern in Butte on all citizens through health studies and risk assessments that consider EJ concerns.
- Promoting educational outreach about human health protection throughout the community in Butte.
- Helping the local health department promote and foster environmental justice.
- Identifying opportunities for financial support through, for example, environmental justice grants in Butte.
- Adding this EJ Action Plan for BPSOU and the West Side Soils Operable Unit into the updated BPSOU Community Involvement Plan and the upcoming West Side Soils Community Involvement Plan.

- Continuing to include an environmental justice assessment/evaluation a part of all Five-Year Reviews of the BPSOU and WSSOU Superfund sites.
- Designating at least one EPA Montana Office employee as a member of the Region 8 Environmental Justice Action Team.
- Integrating environmental justice into all site activities, as appropriate.

"Tailoring cleanup activities to address the needs of all citizens."

Involving Communities in Butte in Superfund Decision Making

This effort includes outreach activities and ensures opportunities exist for low-income citizens to serve on existing and future community groups, such as the CTEC which assists EPA in developing the expanded RMAP Plan and the decision documents for the WSSOU.

"Promote the overall health of Butte Silver Bow by addressing an important component of that health—a clean and healthy natural environment."



Picture of RMAP workers in Butte, MT in early 2000s, cleaning-up attic dust photo provided by Nikia Greene





Picture of the Butte Berkeley Pit taken in mid-2010 photo provided by Nikia Greene in 2014

Superfund Cleanup Considerations

This involves evaluating the adverse and disproportionate effects on low-income citizens that is not experienced to the same extent by non-low-income citizens.

EPA and partners will focus on the special needs of low-income citizens. So, for example, a low-income citizen may not have access to Butte Silver Bow's website to learn about the RMAP and understand the adverse effects or what you can do about it.

EPA and partners may reach out by mail, go door to door, provide EJ information and contact information at local low-income community service centers, to name a few.

Examples of Environmental Justice Successes in Butte:

- Residential Metals Abatement Program (RMAP). RMAP has designed and implemented specific, tailored appeals to low-income citizens to participate in the program. The RMAP has been successful in reaching out to low-income residents.
- Butte-Silver Bow Health Department outreach to low- income citizens was successful as well.
- Be Contaminant Smart EPA Brochure

Attachment(s)

- 1. BPSOU Area EJSCREEN Report
- 2. Be Contaminant Smart EPA Brochure



Picture of a meeting in Butte provided by Nikia Greene

EPA Contact Information

Nikia Greene	Dana Barnicoat	Corbin Darling	Jean Belille
Remedial Project Manager	Community Involvement Coordinator	Environmental Justice Coordinator	Environmental Justice Team Member
EPA Region 8	EPA Region 8	EPA Region 8	EPA Region 8
406.457.5019	406.461.5493	303.312.6426	303.312.6556
greene.nikia@epa.gov	barnicoat.dana@epa.gov	darling.corbin@epa.gov	belille.jean@epa.gov





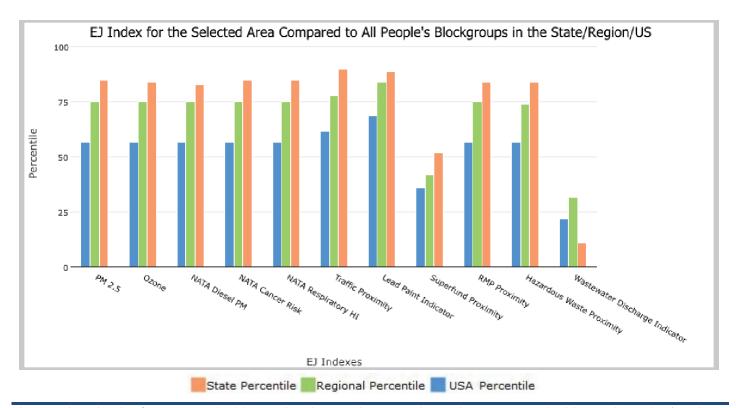
EJSCREEN Report (Version 2019)



the User Specified Area, MONTANA, EPA Region 8

Approximate Population: 14,158 Input Area (sq. miles): 5.69

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile			
EJ Indexes						
EJ Index for PM2.5	85	75	57			
EJ Index for Ozone	84	75	57			
EJ Index for NATA* Diesel PM	83	75	57			
EJ Index for NATA* Air Toxics Cancer Risk	85	75	57			
EJ Index for NATA* Respiratory Hazard Index	85	75	57			
EJ Index for Traffic Proximity and Volume	90	78	62			
EJ Index for Lead Paint Indicator	89	84	69			
EJ Index for Superfund Proximity	52	42	36			
EJ Index for RMP Proximity	84	75	57			
EJ Index for Hazardous Waste Proximity	84	74	57			
EJ Index for Wastewater Discharge Indicator	11	32	22			



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

August 20, 2020 1/3



EJSCREEN Report (Version 2019)



the User Specified Area, MONTANA, EPA Region 8

Approximate Population: 14,158 Input Area (sq. miles): 5.69



Sites reporting to EPA				
Superfund NPL	1			
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0			

August 20, 2020 2/3



EJSCREEN Report (Version 2019)



the User Specified Area, MONTANA, EPA Region 8

Approximate Population: 14,158 Input Area (sq. miles): 5.69

Selected Variables		State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA	
Environmental Indicators								
Particulate Matter (РМ 2.5 in µg/m³)		5.82	71	6.4	48	8.3	10	
Ozone (ppb)		39.2	55	49.2	12	43	30	
NATA [*] Diesel PM (μg/m³)		0.113	52	0.423	<50th	0.479	<50th	
NATA [*] Cancer Risk (lifetime risk per million)		18	15	23	<50th	32	<50th	
NATA* Respiratory Hazard Index		0.24	21	0.31	<50th	0.44	<50th	
Traffic Proximity and Volume (daily traffic count/distance to road)		190	77	460	58	750	55	
Lead Paint Indicator (% Pre-1960 Housing)		0.29	95	0.22	96	0.28	92	
Superfund Proximity (site count/km distance)		0.12	96	0.11	95	0.13	94	
RMP Proximity (facility count/km distance)		0.49	31	0.62	14	0.74	11	
Hazardous Waste Proximity (facility count/km distance)		0.42	39	0.63	25	4	14	
Wastewater Discharge Indicator (toxicity-weighted concentration/m distance)		0.00061	97	80	64	14	75	
Demographic Indicators								
Demographic Index	33%	24%	82	26%	72	36%	55	
Minority Population		13%	70	24%	35	39%	26	
Low Income Population		34%	85	29%	89	33%	83	
Linguistically Isolated Population		0%	84	2%	56	4%	45	
Population With Less Than High School Education		7%	75	8%	70	13%	52	
Population Under 5 years of age		6%	54	7%	42	6%	50	
Population over 64 years of age		17%	33	13%	55	15%	46	

^{*} The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

August 20, 2020 3/3

Be Contaminant Smart



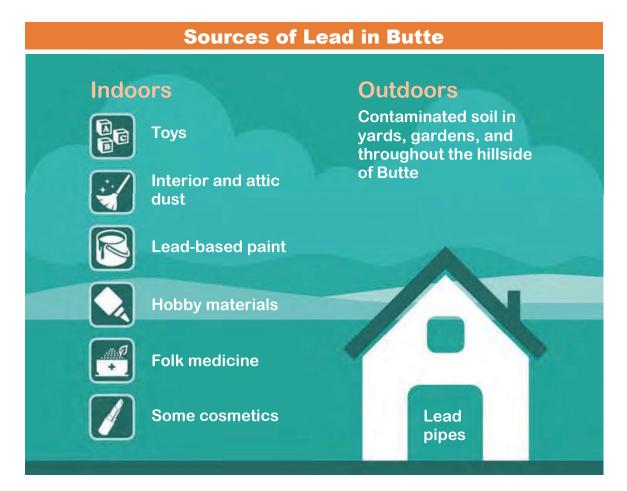
Help protect yourself, your family, and your community from mining-related contamination in Butte, Montana

Be Safe and Avoid Mining Impacts

Land in and around Butte has been impacted by over a century of mining, leaving potentially harmful contamination. Cleanup measures are in place to ensure that people are protected from mining contamination and to promote comprehensive public health and wellness. **You can help!** There are steps you can take to protect yourself and your family.

Lead

Lead is the primary contaminant of concern in Butte. It is a naturally occurring element in the earth's crust and is found in higher soil concentrations in Butte because of historic mining activity. There are also many possible sources of lead in the home.



Arsenic and Other Metals

Arsenic and, to a lesser extent, copper, aluminum, cadmium, iron, mercury, and zinc are also contaminants found in Butte. Like lead, they are naturally occurring elements in the earth's crust and found in higher concentrations in Butte because of historic mining activity.

Exposure Pathways

Exposure pathway is the term used to describe how people come in contact with a contaminant. In Butte, the exposure pathways for lead, arsenic, and the other contaminants of concern are similar. They include breathing, touching, and eating. For lead, exposures can also occur to the fetus during pregnancy causing reduced growth and premature birth.



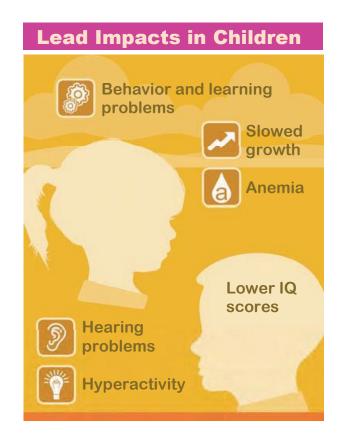
Sampling and testing are the only way to know if your soil is contaminated.

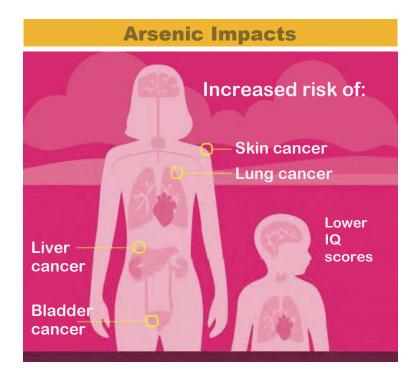
Understanding Health Impacts

Lead is a poisonous metal that can cause learning, hearing, and behavioral problems. While it has beneficial uses, it can be toxic to humans and animals and can cause adverse health effects.

Lead can accumulate in our bodies over time. It is stored in bones along with calcium. **Children are more at risk from lead!** Exposure to lead can harm a child's brain, kidneys, and other organs. Children 6 years and younger are most susceptible since their nervous systems are still developing.

Even low levels of lead in the blood of children can result in serious problems. Children with elevated





blood-lead levels usually do not look or act sick. The only way to know if your child has lead poisoning is by getting a blood test.

Like lead, exposure to arsenic can be bad for your health. Arsenic is a known carcinogen and can impact the skin, bladder, liver and lungs. Some studies have also shown that arsenic exposure in children can result in lower IQ scores.

Working Together

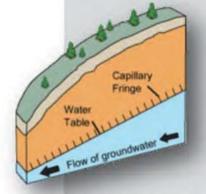
People are working together in Butte to ensure residents are protected from lead and arsenic and other potentially harmful contamination. Community groups, the City and County of Butte-Silver Bow, the Montana Department of Environmental Quality, and the U.S. Environmental Protection Agency Superfund Program are cooperating to address the contamination and promote education and blood-lead testing to protect human health and the environment.

The Plan For Protection: Water

Drinking Water

Water from Butte faucets is not contaminated and comes from sources outside of Butte, including the upgraded Basin Creek Reservoir. It is safe to drink and routinely tested.





Groundwater

In certain areas of Butte, groundwater is contaminated. Use of this groundwater is restricted to prevent exposure and it is not allowed to be used for drinking. The contaminated groundwater is captured and treated before it is discharged into streams.

Surface and Storm Water

Water that flows through Butte in creeks after rain and snow melt can transport surface contamination that is potentially harmful to aquatic life. The plan is to manage this water to reduce spreading contamination around Butte.



The Plan For Protection: Soil

Removal

- Millions of cubic yards of mine tailings and contaminated soil in Butte have been removed to prevent human exposure.
- Removals include contaminated yard soils and interior sources of lead such as lead paint and attic dust through Butte-Silver Bow's Residential Metals Abatement Program (RMAP).
- Removal actions are ongoing in Butte.

The RMAP Will:

- Sample and analyze your home and yard.
- Clean up contaminated attic dust, indoor dust, yards and lead paint if needed.
- Provide these services free and with minimal disruption to the home occupant.



Learn more about the program by calling 406-497-5040 or visiting the RMAP website.

Capping

- Potentially hazardous contaminated soil that is not removed is covered with a protective layer of clean soil.
- These "caps" are maintained by Butte-Silver Bow County and are monitored using the Butte Reclamation and Evaluation System to ensure they are protective.
- The Butte Reclamation and Evaluation System is:

Implemented in cooperation with the Clark Fork Watershed Education Program.

Responsible for evaluating all reclaimed areas (25 percent of all sites evaluated annually).

Responsible for correcting protective cap problems under EPA approved work plans.

The Plan For Protection: Programs

Blood Lead Screening

 Available to all county residents at no charge through But te-Silver Bow's Women, Infants, and Children Program (406-497-5060).



Public Education

 Projects are ongoing in Butte through community outreach by public, private, and non-profit groups.



Butte-Silver Bow Women, Infants, and Children Program

- Offers and encourages free blood-lead testing at the County Health Department.
- Reports all elevated results to the RMAP for further evaluation.
- Provides a range of resources to improve health and nutrition to women, infants, and children up to 5 years of age.



Be Contaminant Smart: Family

Contamination from historic mining will remain in Butte even after cleanup is complete. In addition to the cleanup measures, there are things you can do to for your family to be contaminant smart.

Choose a Healthy Diet

- Eat iron-rich foods. Normal iron levels protect the body from lead. Good sources of iron are lean meats, fortified cereals, and dried fruits.
- Eat calcium-rich foods. Calcium reduces lead absorption. Good sources of calcium are green leafy vegetables, milk, and cheese.
- Eat regularly. Children with empty stomachs absorb more lead. Provide children 4 to 6 small meals during the day.

Properly Prepare Garden Produce

- Keep preparation surfaces clean.
- Wash produce to remove soil.
- Throw away the outer leaves of leafy vegetables and peel root crops to remove the skin and any residual soil.

Test Your Kids for Lead

 Enroll in the blood-lead testing program with Butte-Silver Bow's Women, Infants, and Children Program by calling 406-497-5060.

Stay Informed

- Read and follow the suggestions in the EPA
 Guide Fight Lead Poisoning with a Healthy Diet.
- Learn and educate others about lead, arsenic, and other contaminants in Butte.



Be Contaminant Smart: Home

Safety starts at home and there are important and simple practices you can follow to keep your family healthy.

Keep Things Clean

- Keep your home clean and dust-free. This will cut down on the amount of contamination present in the environment.
- Wash hands and toys frequently to help prevent spreading germs and cut down on colds.



 Keep painted surfaces in good condition and clean around painted areas where friction can generate dust, such as around doors, windows and drawers.

Understand and Identify Potential Sources

- Identify and limit exposure to products that may contain lead. These may include toys, cosmetics, crafts, and other items.
- If buying a home built before 1978, find out if it contains lead-based paint. A seller must disclose any known lead-based hazards.

Don't Create Unnecessary Exposures

 Practice safe do-it-yourself renovations. Read and follow guidance in the EPA pamphlet Renovate Right.

Stay Informed

- Read and follow the suggestions in EPA's brochure Protect Your Family from Lead in Your Home.
- Contact Butte-Silver Bow's Residential Metals Abatement Program to have your home tested for lead and arsenic (406-497-5040).

Be Contaminant Smart: Outside

Gardening is a fun and healthy hobby and there are contaminant smart tips to help keep gardening safe.

Don't Let Contamination Into Your Home

- Leave dirty shoes at the door.
- Reduce dirt brought in by pets.
- Wash children's hands, bottles, pacifiers and toys often especially if they contact soil.
- Avoid contact between gardening clothes and furniture.
- Wash garden produce thoroughly to remove soil completely.

Garden Carefully

- Wear gloves while gardening and when harvesting produce.
- Add organic materials, like compost, manure, leaves, or grass clippings to your garden. Organic compounds bind lead and make it less available to contaminate plants.
- Add mulch to the garden to reduce dust and prevent soil from splashing onto plants during irrigation or rainstorms.
- Locate your garden as far as possible from busy streets, highways, or old buildings. Traffic can spread dust contaminated with lead and old buildings may shed lead paint.
- Encourage kids to play away from the garden.
- Select plants with shallow roots to ensure that roots do not reach contaminated soil. Increase planting of fruits and vegetables that grow on vines and on fruit trees.
- Grow crops in containers filled with clean soil or build raised beds using safe materials.



Be Contaminant Smart: Taboos

Finally, there are some things to avoid to be contaminant smart and keep your family safe.

STOP!

- DO NOT knowingly consume lead, arsenic or other potentially harmful contamination.
- DO NOT let children chew or put paint chips in their mouths.
- DO NOT let children eat dirt.
- DO NOT try to remove lead-based paint yourself. Call the RMAP or use an EPA certified or approved contractor. Read and follow the guidance of EPA's Renovation, Repair and Painting Program.
 - DO NOT allow children to play in known tailings or contaminated soil.
 - DO NOT have hobbies that use lead.



Remember, the Butte-Silver Bow RMAP is your best resource for help with lead paint identification and removal and for dealing with attic dust. Their assistance is provided at no cost to you.

Contacts for More Information

Citizens for Labor and Environmental Justice

- www.facebook.com/Citizens-for-Labor-and-Environmental-Justice-860260360719942/
- 406-496-4228

Citizens Technical Environmental Committee

- www.buttectec.org
- 406-723-6247

City and County of Butte-Silver Bow

- www.co.silverbow.mt.us
- Health Department, 406-497-5020
- Women, Infants and Children Program, 406-497-5060
- Residential Metals Abatement Program, 406-497-5040

Montana Department of Environmental Quality

- www.deq.mt.gov/Land/fedsuperfund
- 406-444-6444

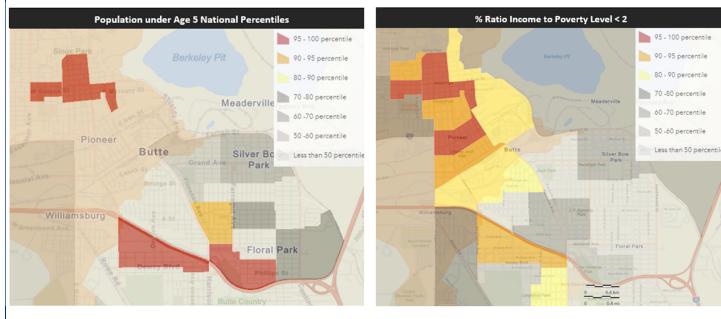
U.S. Environmental Protection Agency

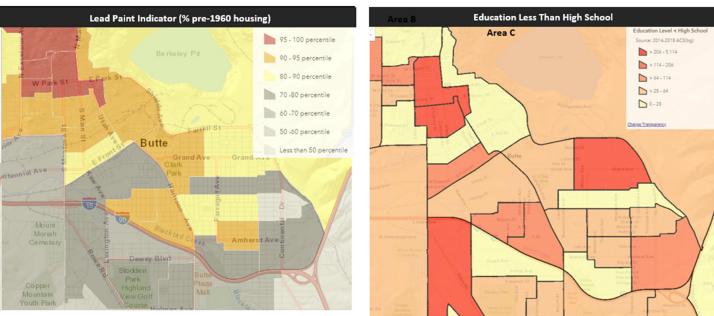
- www.epa.gov/mt
- 406-457-5000

Appendix H

Examples of Environmental Justice Maps Using EJ Screen

Examples of Potentially Useful EJScreen Maps for the Silver Bow Creek/Butte Area NPL Site





Many mapping layers available on *EJScreen* may be useful to stakeholders in providing community-specific demographic and environmental information to help focus outreach efforts.

EPA encourages its use.

www.epa.gov/eiscreen