

2022 Project Update

ANACONDA SMELTER SUPERFUND SITE

EPA Region 8, Montana Office

April 2023

The Anaconda smelter complex was a key component of Montana's mining and smelting history for almost a century (see box at right). It became a U.S. Environmental Protection Agency (EPA) Superfund site in 1983. The site is now in the remedial action (cleanup) phase; and, after decades of hard work, the goal to complete construction for all approved work plans is in sight.

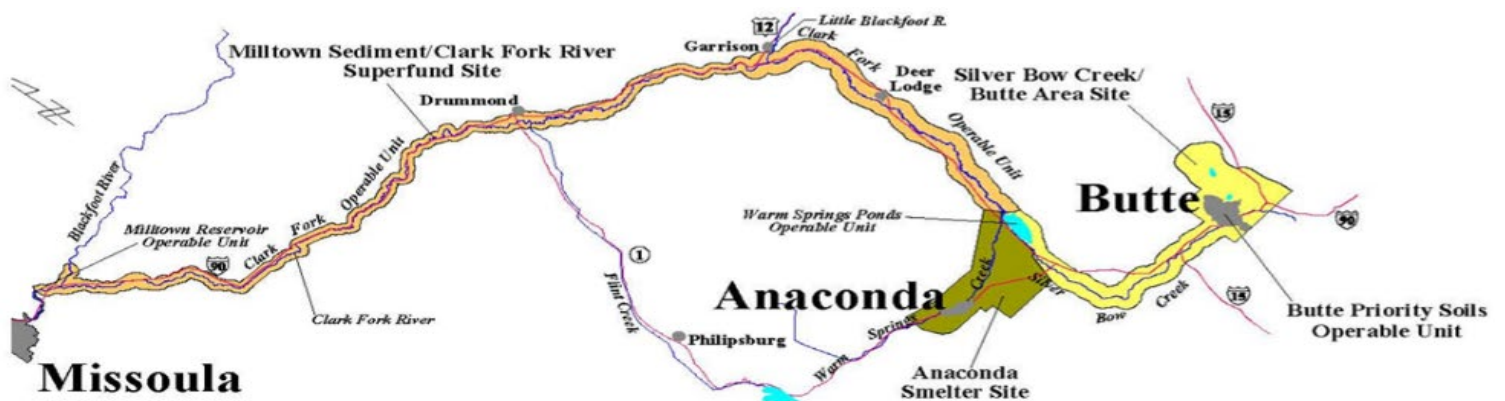
EPA, the Montana Department of Environmental Quality (DEQ), and the Atlantic Richfield Company made significant progress in the last year, including finalization of two significant documents that are important for the future of the site and the community:

- A long-awaited consent decree that governs the final cleanup work.
- An amendment to the 1994 prospective purchaser agreement with the State of Montana, Anaconda-Deer Lodge County, and the Old Works Golf Course Authority Inc., as purchasers. The agreement gives liability protection to the purchasers.

This fact sheet provides a summary of the work completed in 2022 and planned for 2023. For more information, please visit EPA's [website](#) or contact one of the people listed on the last page.

Site Overview

- One of three Superfund sites in the Clark Fork drainage (see map below).
- Roughly **300 square miles** of land impacted by smelter emissions and ore-processing wastes.
- Includes Anaconda and Opportunity.
- Copper concentrating and smelting began in 1884.
- Purchased by Atlantic Richfield in 1977. Operations ended in 1980.
- Major features remaining are the 585-foot tall brick smelter stack and the slag pile.
- Human-health and ecological risks from arsenic- and metal-laden wastes.
- Over 260 million cubic yards of mill tailings, furnace slag, and flue dust spread over 20,000 acres of soils.
- Large portions of local aquifers were also polluted.
- Added to EPA's National Priorities List in 1983.
- The potentially responsible party, Atlantic Richfield, has been actively involved in investigations and cleanup work.
- EPA is the lead agency.
- Montana DEQ is the support agency.
- Divided into smaller and more manageable operable units, subareas, and remedial design units to make cleanup and long-term management more efficient.



Anaconda Regional Water, Waste and Soils Operable Unit 4

This operable unit (OU) addresses all remaining contamination and impacts to surface and ground water, waste source areas, and non-residential soils not cleaned up under work in other OUs. The 300 square miles of land with elevated arsenic and metals in the OU have been divided into 15 remedial design units (RDUs) for cleanup.

Progress in 2022

Work done by Atlantic Richfield under EPA oversight included:

- **RDU1 Stucky Ridge Uplands and RDU 3 Smelter Hill Uplands.** Continued steep slope reclamation, removal and consolidation of contaminated soil, and in-place soil treatment. Roughly 360 acres were finished in RDU 1 and 570 acres in RDU 3.
- **RDU 6 South Opportunity Uplands.** Completed cleanup work for this RDU (11 acres).
- **RDU 9 Fluvial Tailings.** Continued soil treatment (240 acres).
- **RDU 12 Slag.** Graded roughly 600,000 cubic yards of slag on the north face of the Main Granulated Slag Pile and installed a 30-acre temporary soil cover.
- **RDU 10 Warm Springs Creek, West Galen Expansion Area, and Sitewide Stormwater Engineering Controls.** Completed maintenance work.

In addition, Natural Resource Damage Program work in the RDU 1 state section and RDU 15 Mt Haggin Uplands was determined to have been completed as performance standards were met.

Next Steps—2023 and Beyond

- Continue cleanup in RDUs 1, 2, 3, and 9.
- Construct sediment retention ponds in RDU 1.
- Perform ongoing maintenance activities sitewide.

Remedial Design Unit (yet to complete)	Acres		
	Total	Done	% Complete
1. Stucky Ridge Uplands	3,868	3,833	99
2. Lost Creek Uplands	1,468	775	53
3. Smelter Hill Uplands	3,354	2,663	79
6. S. Opportunity Uplands	1,250	1,250	100
9. Silver Bow Creek Fluvial Tailings	5,015	4,965	99
12. Slag	197	30	15
West Galen Expansion Area	6,367	6,247	98
15. Mt Haggin Uplands	1,009	1,009	100
Total	22,528	20,772	92%



Photos of cleanup work on slag and steep slopes and of engineering controls (stormwater runoff controls).

The excavated or treated soil from OU4 could fill a line of 10-yard dump trucks stretching from Anaconda to Washington, DC and back.



Community Soils Operable Unit (OU 16)

Community Resources in Anaconda

Community Protective Measures Program

The Community Protective Measures Program (CPMP) provides:

- Home inspections and information packets
- Renovation kits and loans of high-efficiency vacuums
- Clean soils for vegetable gardens and play areas

Blood Lead Testing and Attic Dust Sampling

Anaconda Deer Lodge County offers free blood lead testing to all residents. Attic dust sampling is also available at no cost for residents of homes built before 1980.

Test by Request

Property owners can have their yards tested for arsenic and lead at no cost.

Contacts

For more information on any of these resources, contact:

- **Carl Nyman**, 406-563-7019, cnyman@adlc.us
- **Linda Moodry**, 406-563-7476, lmoodry@waterenvtech.com
- **Luke Pokorny** (test by requests only), Atlantic Richfield Liability Manager, 406-723-1832, luke.pokorny@bp.com

OU16 includes residential yards, commercial properties, and former railbeds in Anaconda, Opportunity, and rural areas.

Progress in 2022

Work conducted by Atlantic Richfield under EPA and DEQ oversight included:

- Completed soil sampling of 215 residential properties, 7 commercial properties, and 18 alleys.
- Completed cleanup of 186 residential properties.

The county began its attic sampling and remediation program in June 2022. Out of 127 requests for sampling, 25 did not require cleanup, 38 were cleaned up or are in the process, and 64 are awaiting cleanup.

Next Steps—2023 and Beyond

- Continue soil sampling and cleanup for residential and commercial properties and unpaved alleys.
- Continue attic sampling and cleanup.
- The last call for residential and commercial/industrial soil sampling is August 1, 2024.
- Soil cleanups will be completed by December 31, 2025.



Year	Properties		
	Sampled	Qualifying for Cleanup	Cleaned Up
2012-2015	88	55	-
2016	498	480	40
2017	496	414	318
2018	312	251	325
2019	336	243	338
2020	220	152	207
2021	221	144	190
2022	222	93	186
Total	2,393	1,832	1,604

Photos of typical large and small cleanups in OU 16, many of which required hand tools to navigate tight spaces around structures and mature vegetation.

The Consent Decree

After years of negotiation, the ***Final Site-Wide Consent Decree for the Anaconda Smelter National Priorities List Site*** was signed on December 16, 2022, following a public comment period. Under the consent decree, Atlantic Richfield agreed to complete its cleanup of the site. This includes cleanup of residential yards in Anaconda and Opportunity, cleanup of soils in upland areas above Anaconda, and the eventual closure of the remaining slag piles. This is work that began under EPA administrative orders. **The estimated cost of the remaining work, including operation and maintenance to protect the cleanup over the long-term, is \$83.1 million.** Atlantic Richfield will pay \$48 million to reimburse the EPA Superfund Program for response costs and will pay roughly \$185,000 to the U.S. Forest Service for future oversight of work on lands that agency administers.

The consent decree follows other important settlements with Atlantic Richfield over the past two decades that have **substantially improved the environment and restored valuable natural resources in the Upper Clark Fork basin.** It is the product of a successful federal-state partnership to secure cleanup of a major hazardous waste site.

Revegetation has been so successful that motorists have complained about elk crossing the roads instead of dust from the dry ponds.



Community Outreach

Completed

EPA and DEQ prepared [three fact sheets](#) in 2021 and 2022: *2020 Project Update*, *A Closer Look at Smelter Slag*, and *2020 Five-Year Review*.

Ads were run in the *Anaconda Leader* and *Montana Standard* for the release of the fact sheets, the prospective purchaser agreement, the updated community involvement plan, and the virtual public meeting and public comment period for the consent decree.

Upcoming

EPA and DEQ will continue to create fact sheets on topics of interest to the community and **we welcome your suggestions.**

Ads will be placed in the *Leader*, as needed, to announce milestones, significant documents, and upcoming public meetings. No public meetings are currently anticipated, but they will be held, as needed, based on public interest.

Need More Information?

Technical Assistance Grant Group

- **Arrowhead Foundation**, P.O. Box 842, Anaconda, Montana, 406-563-5538, www.anacondasuperfund.com

U.S. Environmental Protection Agency

- **Bryan Lobar**, Remedial Project Manager 406-457-5040, lobar.bryan@epa.gov
- **Dana Barnicoat**, Community Involvement Coordinator, 406-560-6261, barnicoat.dana@epa.gov

Montana Department of Environmental Quality

- **Gordon Levin**, Project Officer, 406-444-6569, gordon.levin@mt.gov
- **Kevin Stone**, Public Information Officer, 406-444-6469, kevin.stone@mt.gov

Anaconda-Deer Lodge County

- **Carl Nyman**, Environmental Director, 406-563-7019, cnyman@adlc.us

Updated Community Involvement Plan

In May 2022, EPA released the updated [community involvement plan](#) that guides how EPA will engage and inform the community on what is happening.

Interviews with individuals who responded to our request for feedback helped us determine what the community wants to know, what information delivery methods work best, and how often information should be provided.

The plan is available on EPA's [website](#).