

## Would You Like to Learn More About the Anaconda Site?

Check out EPA's latest annual update fact sheet online for eight pages of action-packed pictures and short updates about what is going on in your community to protect human health and the environment.

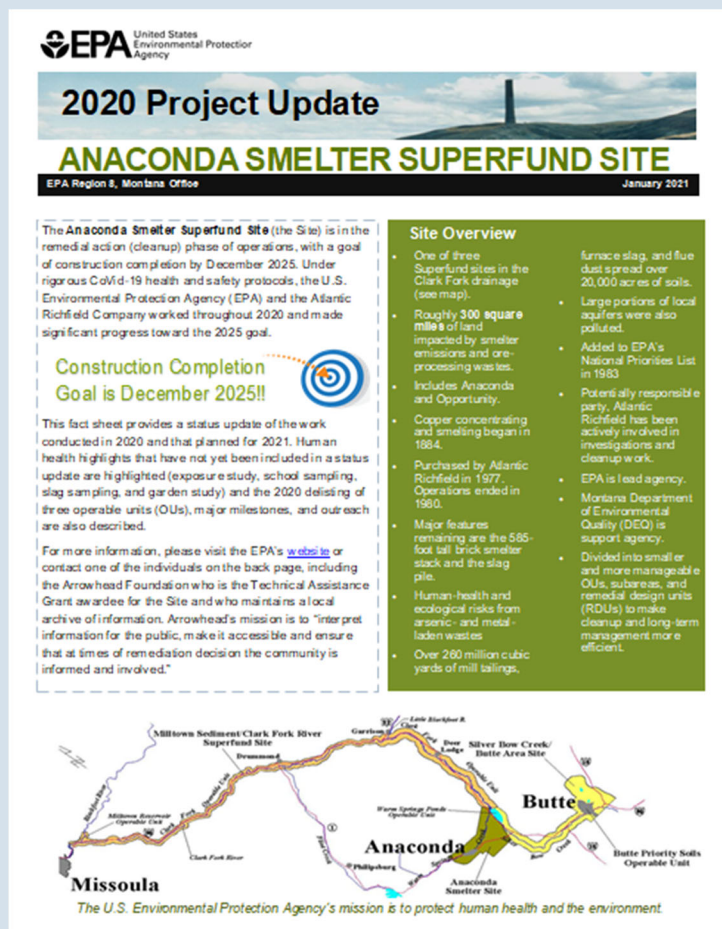
[www.epa.gov/superfund/anaconda-co-smelter](http://www.epa.gov/superfund/anaconda-co-smelter)

## Be Part of the Community Involvement Plan Update

In spring 2021, EPA will be updating the community involvement plan that guides how EPA will engage and inform the community on what is happening with the Anaconda Smelter site.

The update will include phone interviews with interested individuals to best determine what the community wants to know, what information delivery methods work best, and how often information should be provided.

If you are interested in being interviewed for the update, please email Dana Barnicoat at the address provided below, or leave him a phone message.



**2020 Project Update**  
**ANACONDA SMELTER SUPERFUND SITE**  
EPA Region 8, Montana Office | January 2021

The Anaconda Smelter Superfund Site (the Site) is in the remedial action (cleanup) phase of operations, with a goal of construction completion by December 2025. Under rigorous COVID-19 health and safety protocols, the U.S. Environmental Protection Agency (EPA) and the Atlantic Richfield Company worked throughout 2020 and made significant progress toward the 2025 goal.

**Construction Completion Goal is December 2025!!**

This fact sheet provides a status update of the work conducted in 2020 and that planned for 2021. Human health highlights that have not yet been included in a status update are highlighted (exposure study, school sampling, slag sampling, and garden study) and the 2020 de-listing of three operable units (OUs), major milestones, and our each are also described.

For more information, please visit the EPA's [website](#) or contact one of the individuals on the back page, including the Arrowhead Foundation who is the Technical Assistance Grant awardee for the Site and who maintains a local archive of information. Arrowhead's mission is to "interpret information for the public, make it accessible and ensure that at times of remediation decision the community is informed and involved."

**Site Overview**

- One of three Superfund sites in the Clark Fork drainage (see map).
- Roughly 300 square miles of land impacted by smelter emissions and ore-processing wastes.
- Includes Anaconda and Opportunity.
- Copper concentrating and smelting began in 1904.
- Purchased by Atlantic Richfield in 1977. Operations ended in 1980.
- Major features remaining are the 565-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.
- Potentially responsible party, Atlantic Richfield has been actively involved in investigations and cleanup work.
- EPA is lead agency.
- Montana Department of Environmental Quality (DEQ) is support agency.
- Divided into small or and more manageable OUs, subareas, and remedial design units (RDUs) to make cleanup and long-term management more efficient.

**Map:** Shows the Anaconda Smelter Site location relative to Missoula, Butte, and the Clark Fork River. Labels include: Milltown Sediment Clark Fork River Superfund Site, Anaconda Smelter Site, Butte Priority Soils Operable Unit, Silver Bow Creek/Battle Area Site, Lake Arrowhead, Deer Lake, Clark Fork River, Anaconda, Opportunity, and Phillipsburg.

*The U.S. Environmental Protection Agency's mission is to protect human health and the environment.*

## Still Need More Information?

Feel free to call or email one of the people listed below.

### Technical Assistance Grant Group

- Arrowhead Foundation, P.O. Box 842, Anaconda, Montana, 406-563-538, [www.anacondasuperfund.com](http://www.anacondasuperfund.com)

### U.S. Environmental Protection Agency

- Charlie Coleman, Remedial Project Manager, 406-457-5038, [coleman.charles@epa.gov](mailto:coleman.charles@epa.gov)
- Dana Barnicoat, Community Involvement Coordinator, 406-560-6261, [barnicoat.dana@epa.gov](mailto:barnicoat.dana@epa.gov)

### Montana Department of Environmental Quality

- Joel Chavez, Project Officer, 406-444-6407, [jchavez@mt.gov](mailto:jchavez@mt.gov)

### Anaconda-Deer Lodge County

- Carl Nyman, Superfund Coordinator, 406-563-7019, [cnyman@adlc.us](mailto:cnyman@adlc.us)

The Arrowhead Foundation has an online directory of Superfund documents available for public review. You can visit the Arrowhead office (118 E. 7th Street in Anaconda) in Anaconda) or their website:

[www.library.anacondasuperfund.com](http://www.library.anacondasuperfund.com).

# 2020 Five-Year Review

## ANACONDA SMELTER SUPERFUND SITE

April 2021

The U.S. Environmental Protection Agency (EPA) issued its sixth five-year review of clean-up actions for the Anaconda Smelter Site on September 25, 2020. The review evaluated completed and ongoing construction activities to assess if they protect human health and the environment.

As part of the five-year review process, people who have been working at the site, local officials, and interested members of the public were interviewed to get their thoughts on the clean up. An ad announcing the upcoming interviews was run in the *Anaconda Leader*.

The resulting five-year review report is available online at EPA's website for Anaconda (see below) and at the Arrowhead Foundation office library (see last page). This fact sheet provides a brief summary of the scope and findings of the review.

The five-year review included the following activities:

- Community notification and interviews
- Evaluation of risk and applicable or relevant and appropriate requirements
- Document and data review
- Site inspections

EPA often divides a site into smaller areas called "operable units" to address common issues and speed investigation and cleanup. The five different areas that were included in the five-year review are:

- Mill Creek
- Flue Dust
- Old Works/East Anaconda Development Area
- Community Soils
- Anaconda Regional Water, Waste & Soils

## The Five-Year Review

- An EPA checkup at Superfund sites where waste has been left in place as part of clean up
- Confirmation that the clean up continues to be protective or identification of issues that need to be addressed to make that true
- A chance for the public to tell EPA about site conditions that concern them

The review found that the completed cleanup activities are protective of current and potential land uses. A program to inform and educate residents on ways to reduce exposure to potentially contaminated soils and dust is in place. Operation, maintenance, and monitoring are being conducted and can identify potential issues and provide opportunities to address these issues in a timely manner








EPA website for the Anaconda Smelter:  
[www.epa.gov/superfund/anaconda-co-smelter](http://www.epa.gov/superfund/anaconda-co-smelter)



# Components of the Five-Year Review

## Cleanups Reviewed

- Mill Creek.** Mill Creek residents exposed to contaminated soil and dust were permanently relocated in 1987. Atlantic Richfield continues active monitoring and maintenance and institutional controls, such as the County's *Development Permit System* and fencing, limit exposure to surface soils. The David Gates power generation station (see picture) is an example of beneficial use in this area.
 
- Flue Dust.** Flue dust was treated to meet standards for arsenic, cadmium, and lead and put in a secure repository (see picture). There is no exposure to buried waste and site access is controlled by fencing, gates, and security. Atlantic Richfield completed construction of the leachate collection and evaporation system in 2019 and it is fully operational. The remedial action completion report was approved in July 2020. Operation and maintenance will be done in accordance with the July 2020 operation and maintenance plan.
 
- Old Works/East Anaconda Development Area.** With the exception of uncovered waste left in place for historic preservation (see picture), all wastes have been capped. Caps are monitored and maintained, and institutional controls (such as trails, barriers, and signs) limit exposure. The operations and management plan for the Old Works Golf Course was completed in 2019 and the land management plan will be finalized in 2021.
 
- Community Soils.** Construction to cleanup arsenic and lead in residential soils (see picture) should be complete by 2025. Interim controls include the County's *Development Permit System* and *Community Protective Measures Program* (an educational program to inform residents about risk related to remaining contaminants). In 2020, EPA signed an Explanation of Significant Differences that addressed attic dust contamination through a long-term, dust-abatement program. Remediation continues, and the completed remedy will be addressed in the next five-year review.
 
- Anaconda Regional Water, Waste and Soils.** Work continues to reduce bioavailability of lead in soil to birds. EPA consulted with the U.S. Fish and Wildlife Service and Atlantic Richfield will conduct additional bird monitoring in this area. Final operation and closure plans for the Main Granulated Slag and West Stack Slag were approved in June 2020. These plans upgrade the best management practices and provide a process for the development/closure of the slag piles. Remediation continues and the completed remedy will be addressed in the next five-year review.
 

The institutional controls implementation and assurance plan was finalized and approved by EPA in 2020 and Anaconda/Deer Lodge County finalized their institutional controls program in June 2020.

There are now institutional controls in place statewide.

**The Remedy Is PROTECTIVE**

## Questions Asked for the Technical Assessment

- A. **Is the remedy functioning as intended by the decision documents?** Yes. The remedies to address smelter waste, contaminated soil, and dust are eliminating direct exposure and minimizing migration of contaminants to groundwater and surface water. Remediation continues through removal, excavation, treatment, and capping. Best management practices and engineered controls minimize contaminant migration. Issues that need to be addressed are identified in the table at right.
- B. **Are the exposure assumptions, toxicity data, cleanup levels, and remedial action objectives used still valid?** The Montana surface water criteria for cadmium (acute) has changed and EPA and the Montana Department of Environmental Quality are expanding the surface water remedy for the Anaconda Regional Water, Waste and Soils to address impacts from high flow and storm events. Goals to reduce exposure to contaminated soil, dust, and waste have been reached where cleanups are complete and are progressing in other areas. Enforced institutional controls will ensure the remedy remains protective.
- C. **Has any other information come to light that could call into question the protectiveness of the remedy?** Reviewers found no such information.

## Issues to Address

### Anaconda Regional Water, Waste and Soils

**Issue:** Sediment from the Main Slag Pile is being deposited below the road east of the pile.  
**Follow-up Action:** Cleanup and evaluate the need for additional best management practices.

**Issue:** Elevated levels of metals were detected in soil around the Main Slag Pile.  
**Follow-up Action:** Sample and assess risk to see if additional action is needed.

**Issue:** Wind-blown slag is present north of the northern channel.  
**Follow-up Action:** Use best management practices to reduce dust migration and include them in an updated operation and closure reclamation plan.

**Issue:** People are trespassing on the slag.  
**Follow-up Action:** Improve engineering controls to prevent or minimize trespassing.

### Old Works/East Anaconda Development Area

**Issue:** People are trespassing on the capped red sand area next to the golf course along a paved recreational trail.  
**Follow-up Action:** Improve engineering controls to prevent or minimize trespassing.

