Superfund Priority “Anaconda”

April 2018
Site Overview

• Anaconda Company Smelter was placed on the NPL in 1983.
• Cleanup began in 1986.
• The site covers over 300 square miles and initially divided into 16 Operable Units (OUs) that have been combined into the following 5 active OUs*:
  • OU 15 – Mill Creek. Former suburban community located adjacent and downwind of the smelter and impacted by high arsenic levels in soils and dust.
  • OU 11 – Flue Dust. This by-product of copper smelting containing very high levels of metals and arsenic, stockpiled at nine locations in the East Anaconda Yards and on Smelter Hill.
  • OU 7 – Old Works/East Anaconda Development Area (OW/EADA). Historic milling and smelting areas located immediately east of Anaconda, including former smelter properties conveyed from Atlantic Richfield to Anaconda-Deer Lodge County (ADLC) for redevelopment.
  • OU 16 – Community Soils (CSOUS). Soils and dust within residential and commercial properties, including Anaconda, Opportunity, and adjacent rural areas within the site.
  • OU 4 – Anaconda Regional Water, Waste & Soils (ARWW&S). All remaining waste areas, including the Anaconda Ponds, Opportunity Ponds, Slag and Smelter Hill as well as the adjacent 300 square miles of soil, surface and ground water impacted by the smelter.

*shown in the order that the record of decision (ROD) for the OU was signed

<table>
<thead>
<tr>
<th>OU</th>
<th>Original Year</th>
<th>Amended Year</th>
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<tbody>
<tr>
<td>15</td>
<td>1987</td>
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<tr>
<td>11</td>
<td>1992</td>
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<td>7</td>
<td>1994</td>
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<tr>
<td>16</td>
<td>1996</td>
<td>2013</td>
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<tr>
<td>4</td>
<td>1998</td>
<td>2011</td>
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Human Health Assessment

• The community requested that a health study be conducted in Anaconda.
• EPA has partnered with the Agency for Toxic Substances and Disease Registry (ATSDR) and Montana Department of Public Health and Human Services and ADLC Health Department to address health concerns.
• ATSDR is a public health agency, authorized by Congress to assess whether people have been exposed to hazardous substances from Superfund and other sites.
• We make recommendations to reduce harmful exposures from Superfund sites and protect health.
• ATSDR has extensive experience in evaluating whether arsenic and lead in a community present a health risk.
• ATSDR is familiar with the Anaconda Smelter site and has previously conducted work here.
Human Health Assessment

• Community listening sessions will be conducted in late April or early May to determine community health concerns.

• In keeping with its legal authority, ATSDR focuses on the health effects of human exposure to spills and releases of hazardous substances at Superfund and other sites. If we learn of community health concerns that are outside of our mission, we still help by identifying other organizations that can better address those concerns.

• If supported by community concerns, blood lead and urine arsenic data may be collected this summer/fall.

• Additional public meetings would be conducted later in the year to discuss findings.

• Results of a health assessment would be presented in a report in 2019.
School Sampling Status

• Sampling of school soils and dust was requested by the Anaconda School District and County.
• Over spring break 2018, EPA conducted interior dust sampling at Head Start, Lincoln elementary, Moodry middle, Anaconda high, Memorial gym, and administration building.
• Other school properties will be sampled later this spring.
• Atlantic Richfield will conduct soils sampling later this spring.
• Results will be available by the end of this school year.
• Any cleanup required will be conducted summer 2018 prior to school starting in the fall.
Other ADLC Superfund Punch List Issues

• All yards uniformly cleaned up to 12 inches.
  • EPA will ensure all residential yards in the Smelter Superfund District are addressed to 12 inches.

• Soil color matches what is being removed.
  • EPA will work with AR to address individual concerns regarding soil quality.

• Schools must be a priority, as well as residential properties, parks, public spaces, and commercial properties.
  • EPA has prioritized sampling of schools in 2018 (see previous slide).

• All attics cleaned up.
  • EPA will ensure all residential attics in the Smelter Superfund District are addressed
  • EPA supports ADLC’s effort to negotiate with AR for an RMAP program in Anaconda.

• Metals abatement program with broad-based funding to address lead paint and other human health hazards.
  • EPA will assist ADLC in pursuing alternative funding sources (AR, HUD, or other Congressional grants) for addressing non-Superfund contamination (i.e., lead paint).

• A blood lead screening and testing program.
  • EPA will work with ADLC to develop a community blood screening program.
Other ADLC Superfund Punch List Issues (continued)

• Clean utility corridors.
• Money for infrastructure development and Superfund-related engineering design on contaminated properties.
  • EPA will provide engineering support to ADLC on Superfund-related designs.
  • EPA supports ADLC’s effort to negotiate with AR, funding for infrastructure development on the conveyed properties.
• Clear and concise Superfund liability protections.
  • EPA will develop informational materials that describe completed remedies and clearly discuss Superfund liability protections and any Superfund requirements for developers.
• Clear, expedited process to modify Superfund restrictive covenants.
  • EPA supports modifications to restrictive covenants on conveyed properties that do not adversely affect the remedy.
• Scientific answers to common questions and concerns from the public.
  • EPA/ATSDR will conduct a public health study in 2018 (see previous slide).
• Analysis and evaluation of potential auto-immune system effects, including multiple sclerosis (MS) and Chronic Obstructive Pulmonary Disease (COPD).
  • EPA/ATSDR will conduct public health study in 2018 (see above).
• Perpetual repository for risk assessments, health studies and related information.
  • EPA will develop an informational repository in Anaconda in 2018.
Christian v. Atlantic Richfield Co

- Lawsuit by homeowners seeking restoration damages under Montana law
- Proceeds received must be used to restore the property
- Montana Supreme Court found that CERCLA did not bar application of Montana’s state restoration law and the case will proceed to trial
- EPA has significant concerns that the landowners’ proposed response actions could interfere with EPA’s remedy and potentially exacerbate contamination. EPA has undertaken an ongoing and extensive process to select remedies protective of human health and the environment, and will continue to monitor those remedies every five years after completion to ensure they remain protective
- CERCLA prohibits parties from taking response actions at Superfund sites without EPA’s authorization
- Impact of performing work on a CERCLA site could make landowners financially responsible for any damage to the existing remedy and for the management and disposal of contaminated media (e.g., soils)
- It is important landowners fully understand the implications of their actions
Cleanup Accomplishments

Since cleanup began in 1986, EPA has overseen numerous removal and remedial cleanup actions

- 10 million cubic yards of tailings, mine wastes, and contaminated soils have been removed and placed in engineered repositories.
- 500 million cubic yards of waste over 5000 acres have been capped in place.
- 12,500 acres of land have been reclaimed.
- 140,000 feet of engineered storm water controls have been built.
- 30,000 feet of stream floodplain have been stabilized or restored.
- 800 acres of wetlands have been created or restored.
- 800 residential and commercial properties have been cleaned up.
- All domestic wells and water supplies within the site have been tested and replaced or treated if necessary.
Delisting

We can to begin delisting this year parts of the site.

- **OU 15 – Mill Creek.** Cleanup is complete. Anaconda-Deer Lodge County is working with developers to reuse the site.
- **OU 11 – Flue Dust.** Cleanup is complete. Atlantic Richfield is developing a plan to minimize and manage leachate generated from the repository.
Remaining Cleanup Work

• **OU 7 – Old Works/East Anaconda Development Area.** Atlantic Richfield is working with landowners to cleanup the remaining three parcels. A consent decree or UAO will direct the long-term management and redevelopment of this area.

• **OU 16 – Community Soils.** Atlantic Richfield continues to implement the current residential cleanup of lead in soil and dust at the site. A consent decree or UAO will direct the completion of remaining residential and commercial cleanup and implementation of institutional controls.

• **OU 4 – Anaconda Regional Water Waste & Soils.** Atlantic Richfield continues to implement the current cleanup of waste areas and upland soils at the site. A consent decree or UAO will reflect the final cleanup actions and possible waiver of State surface water standards as well as the long-term monitoring and management of the site.
Where We Are Going – Consent Decree

- A consent decree implements the requirements in the Record of Decision.
- The parties who would negotiate a consent decree are U.S. DOJ/EPA, Atlantic Richfield and the State of Montana.
- Anaconda-Deer Lodge County, representing the community, will be participating in the CD negotiations.
- In 2016 negotiations on a CD were ongoing but did not come to fruition.
- EPA will not negotiate on protecting human health and environment.
- Though often a settlement will provide certainty for the PRP and assistance for the community in different areas.
- A consent decree would be agreement among the parties on how to move forward with the remaining cleanup and resolves legal disputes.
- A CD would allow for a robust public comment period.
Where We Are Going – Unilateral Administrative Order

- The Atlantic Richfield Company would be responsible for managing and maintaining all remedies including the Old Works Golf Course.
- ADLC would still be responsible for properly developing conveyed properties in accordance with restrictive covenants.
- Atlantic Richfield would be responsible for implementing site-wide institutional controls (county site-wide institutional controls would not be required for remedy).
- Atlantic Richfield would be responsible for cleaning up all remaining residential soils and attic dust.
- A Unilateral Administrative Order (UAO) does not provide any funding to ADLC.
- An UAO does not provide agreement on the cleanup and pushes legal disagreements off indefinitely.
- There will be public input for cleanup decisions.
## Where We Are – Schedule with Milestones

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Decision or Action</th>
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<tbody>
<tr>
<td>Spring 2018</td>
<td>Initiate negotiations</td>
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<tr>
<td>Summer 2018</td>
<td>Deadline for agreement in principle between all parties</td>
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<tr>
<td><strong>If agreement reached:</strong></td>
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<tr>
<td>Fall 2018</td>
<td>Develop and complete decision documents</td>
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<tr>
<td>Fall 2018</td>
<td>Public comment/involvement</td>
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<tr>
<td>Fall/Winter 2018</td>
<td>Negotiate CD and Agreement with ADLC</td>
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<tr>
<td>December 2018</td>
<td>CD and ADLC Agreement signed</td>
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<tr>
<td>2019-2025</td>
<td>Remedy implementation under CD and agreement</td>
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<tr>
<td><strong>If agreement is not reached or negotiations fail:</strong></td>
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<tr>
<td>Fall 2018</td>
<td>Develop and complete decision documents</td>
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<tr>
<td>Winter 2018</td>
<td>Issue UAOs to complete remedial actions</td>
</tr>
<tr>
<td>2019-2025</td>
<td>Remedy implementation under UAO</td>
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Community Engagement and Collaboration

• EPA Regional Administrator has visited Anaconda on multiple occasions to listen to the community

• How can stakeholders and the community participate?
  • Technical Assistance Group
  • Superfund Task Force
  • Site work groups (public health study)
  • Participate/review and comment on decision documents
  • Contact Chris Wardell, Community Involvement Coordinator
  • Contact Charlie Coleman, Remedial Project Manager

• Website information
  • https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0800416
Finishing up....

EPA is establishing the goal of completing major construction for the Anaconda Smelter Site no later than the end of 2025.

• Our goal is to have an agreement in principle by the end of July 2018.
• With an agreement in principle, EPA’s goal is to have a consent decree by December 2018.
• If we are unable to reach an agreement in principle, EPA will proceed with a UAO by the end of 2018.
• EPA will need the assistance of the state, city-county government, potentially responsible parties, and the community in order to reach a CD.
• Under a UAO we will work with all parties but issue orders unilaterally consistent with the ROD.
• EPA plans to delist OUs 11 and 15 by the end of 2018.
Questions