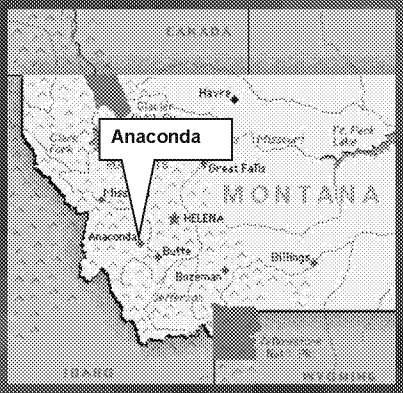
Anaconda Smelter NPL Site Proposed Plan

Anaconda Regional Water, Waste, and Soils OU Proposed Plan for a ROD Amendment



Site Background

- PRP – Atlantic Richfield Company (AR)
- Site listed in 1983
- RODs completed for five operable units (OUs)
  - Mill Creek (1988)
  - Flue Dust (1991)
  - Old Works/East Anaconda Development Area (1994)
  - Community Soils (1996; amended 2013)
  - Anaconda Regional Water, Wastes and Soils (1998, amended 2011)
- All work since Flue Dust completed through CERCLA section 106 orders

Settlement Overview

- October 11, 2018 - Conceptual Settlement Framework for final Anaconda Smelter CD
- June 2019 - Proposed Plan to be issued
- December 2019 – Final CD to be lodged

[Date
Time]

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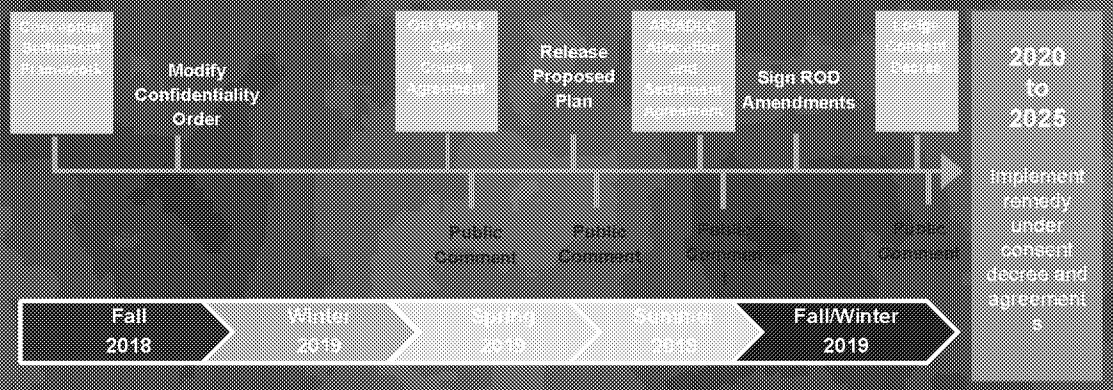
Negotiation Schedule



AR=Atlantic Richfield
ADLC=Anaconda-Deer Lodge County

Proposed Changes to the Surface Water Remedy

- Expand and enhance the current soil remedy to minimize contamination to surface waters
- Provide a process to waive State of Montana acute and chronic total recoverable water quality standards for copper, cadmium, lead and zinc, if necessary, and
- Replace with Federal water quality standards

Public Input

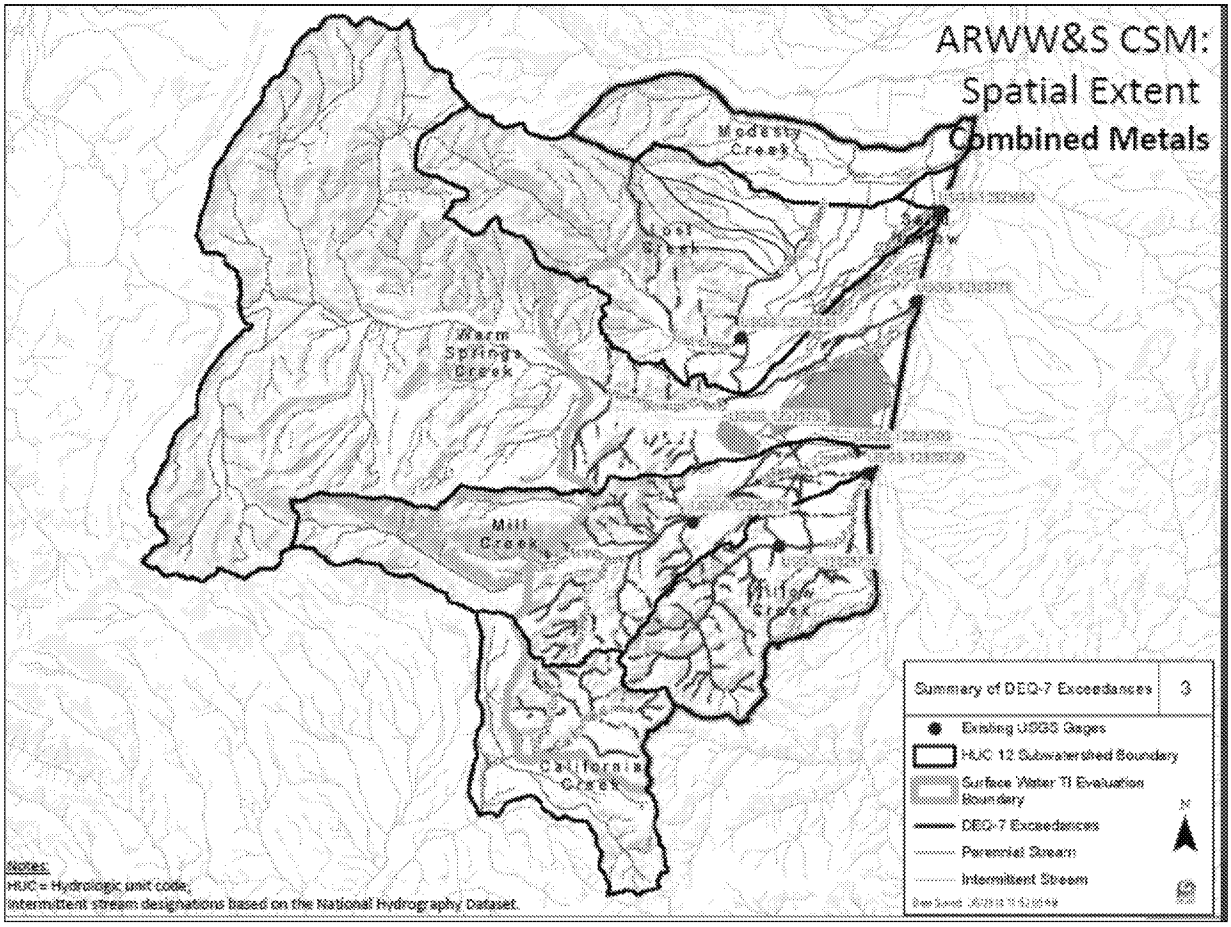
- Original Proposed Plan was released in 2017
- To be revised based on public comments received:
  - No waivers until all work is complete
  - Need to evaluate impacts to endangered species (i.e., bull trout)

ARWW&S OU Remedy

- ROD (1998) addresses the major waste disposal areas (tailings, slag), sitewide soils, surface water and groundwater
- ROD amended in 2011 to expand the remedy for soils, ground and surface water, which included lowering and waiving the standard for arsenic
- Cleanup began in 2000 with over 12,000 acres remediated to date

Remedy for Surface Water

- Minimize transport of contaminants to surface water to meet State of Montana surface water standards
  - Montana standards are based on Federal aquatic life water quality criteria, but use total recoverable metals concentrations instead of dissolved
- Return waters of the state to beneficial use
- Iterative process for remedial actions: work, then monitor, then additional work or TI evaluations if standards not achieved


ARWW&S CSM:
Spatial Extent
Combined Metals
Modesty Creek
Lost Creek
Warm Springs Creek
Mill Creek
California Creek
Summary of DEQ-7 Exceedances
3
Existing USGS Gages
HUC 12 Subwatershed Boundary
Surface Water TI Evaluation Boundary
DEQ-7 Exceedances
Perennial Stream
Intermittent Stream
Notes:
HUC = Hydrologic unit code;
Intermittent stream designations based on the National Hydrography Dataset.

Why Changes are Needed

- Based on the existing data, in 2012 AR informed EPA and DEQ that planned response actions would not meet State of Montana total recoverable metals surface water performance standards
- AR requested that a TI evaluation be completed to lead to a possible waiver of standards
- EPA and DEQ agreed; AR conducted TI evaluation with agency oversight

Surface Water TI Evaluation Analysis

- Surface water treatment not technically practicable (2011 evaluation)
- Removal of soil in well-vegetated areas eliminated as resulting in greater harm
- Remaining work limited to storm water engineered controls, BMPs, and steep slope reclamation

Preferred Alternative

- Expand and enhance the current soil remedies, including:
  - Additional storm water controls and BMPs
  - Enhanced steep slope reclamation
- Develop process to waive Montana surface water total recoverable standards for Cu, Cd, and Pb, if necessary
- Replace with federal water quality standards that are based on dissolved analysis
- Continue to monitor surface water quality