



# Anaconda Smelter Superfund Site

February 2008

**Superfund Annual Update - 2007**

## New Documents Available

Several new final designs were approved in 2007:

- **RDU 5-E** —Active Railroad / Blue Lagoon
- **RDU 6** — South Opportunity
- **RDU 15** — Mt. Haggin

These and many more technical documents and fact sheets are available through the Anaconda Environmental Education Institute at the Community Center (118 East 7<sup>th</sup> Street) for the public to review.

Agency officials tour Clark Fork River sites and meet with Anaconda-Deer Lodge County Officials in April 2007.



## Do You Need More Information?

Copies of most project documents, including EPA fact sheets with easy-to-read, detailed information on specific areas can be found at the Anaconda Environmental Education Institute (AEEI) offices located at **118 E. 7<sup>th</sup> Street**. Please call any of the individuals listed below, if you have questions or need information.

- **EPA:** **Charlie Coleman**, Remedial Project Manager, 457-5038, or **Wendy Thomi**, Community Involvement Coordinator, 457-5037
- **Montana DEQ:** **Larry Scusa**, Project Officer, 841-5036
- **Anaconda-Deer Lodge County:** **Jim Kuipers**, Technical Advisor, 782-3441
- **Anaconda Environmental Education Institute:** **Milo Manning**, Technical Advisor, 563-5538
- **Atlantic Richfield Company:** **Trey Harbert**, Project Manager, 723-1816

### INSIDE

Overview

2007  
Construction  
Cleanup  
Update

Work  
Planned for  
2008

New Project  
Documents

Site Contacts



Design and construction of cleanup projects at the Anaconda Smelter Superfund Site continued, as scheduled, throughout 2007. Work included preparation of construction design documents, sampling and cleanup of residential yards, and construction projects needed to achieve the U.S. Environmental Protection Agency's (EPA's) goals of protecting human health and the environment.

Cleanup construction continued at the remaining three operable units (OUs) of the Anaconda Smelter Superfund Site, as well as finalizing remedial designs. In addition, several data collection activities were completed to fill data gaps and complete designs of remedial and long-term monitoring programs.

Some of this year's highlights include:

- Ongoing residential soil removal and backfill.
- Continued capping of the Opportunity Ponds (The Ponds) with soil. Continued disposal of Silver Bow Creek streamside tailings, and began the importation of Milltown sediments.
- A significant increase in activity in land reclamation in the West Galen remedial design unit (north of Anaconda).
- Sampling interior and attic dust and soil at depth in residential yards.
- Clean up at the Old Works Industrial Area and Arbiter Industrial Complex.
- Continued dust mitigation efforts at all construction sites, including air monitoring to ensure that state air quality standards are not exceeded.
- Collection of more surface water and ground water data in the South Opportunity and Dutchman Creek areas (*see photos above*) to better define arsenic contaminant plumes, enabling EPA and the Montana Department of Environmental Quality (DEQ) to work with Atlantic Richfield (AR) to develop long-term plans to monitor arsenic-impacted waters.



DEQ collecting stream flow data.



CDM processing surface water samples.



## 2007 Cleanup Construction Update

Cleanup construction work for 2007 continued at three OUs at the Anaconda Smelter Site. These are: Anaconda Regional Water Waste and Soils OU, Old Works OU, and Community Soils OU.

### Anaconda Regional Water Waste and Soils OU

In 2007, most cleanup work in this largest active OU focused on The Ponds and West Galen. The Ponds will be called the Atlantic Richfield Land Management Area when cleanup is completed.

#### The Ponds

2007 was a very busy year at this Waste Management Area (WMA), and the remedial action is now over 50 percent complete. Construction occurred on three fronts:

- **Jordan Construction** continued developing the east and south borrow areas, constructing soil covers in the C1 and B2 cells, constructing haul roads, and developing constructed wetlands. They continued dust monitoring and management activities, such as placement of polymers, and excavated and transported nearly 80,000 cubic yards of fluviially-transported mine wastes and placed them in the WMA.
- **Blonick through MT DEQ** continued to transport mine waste from Silver Bow Creek to the WMA, either by haul truck (Subarea 4) or railcar (Subarea 2). Wastes were placed in the B cells and the repository.
- **Montana Rail Link (MRL)** began transporting Milltown Reservoir sediments via rail car to the WMA for disposal by Envirocon in October. Almost 200,000 cubic yards were placed in the D2 cell.



Excavator unloading rail cars

#### West Galen

This area is a soil-treatment area (on private property northeast of Anaconda) that was contaminated by historic smelter emissions. The remedy is to revegetate barren or sparsely-vegetated soil by tilling lime into low pH soils followed by planting of a custom seed mix. Western Reclamation completed a total of 350 acres in 2005 and 2006, and treatment was completed at 1,080 acres in 2007.

### Old Works OU

Remediation of several parcels at the Arbiter Industrial Complex began in 2007 and included grading, installation of stormwater controls, and placement of industrial covers. Once remediation is complete, these properties will be ready for redevelopment.

#### Drag Strip

A six-inch soil cover was placed over approximately 125 acres of the Drag Strip area where previous efforts to establish vegetation had been unsuccessful. This soil layer was then fertilized and seeded with a custom seed mix.

### Dust Monitoring

Particulate air sampling near The Ponds was started by AR in 2006. The 2006 data show no exceedences of state or federal ambient air quality standards (either 24-hour or annual averages). For the first nine months of 2007, most results were also below ambient air quality standards. The exception was on August 13 and was attributed to upwind wildfires. Data are not yet available for the last three months of 2007.

Anaconda-Deer Lodge County, with funding from EPA, began supplemental ambient air monitoring in May 2007. Their program uses portable air monitors which collect data on a continuous 24-hour/7day a week basis (rather than AR's every three day sampling). The monitors are co-located with AR's to compare the data collected by each. So far, the results from both sets of monitors are similar.

In 2008, the monitors may be moved to other locations to measure real-time concentrations of PM10 of all dust storms and to assess the one-hour concentrations during these intense, short duration events.



Portable air monitors

### Community Soils OU

As the current residential soils project winds down, new investigations were conducted in 2007 to develop the Institutional Controls.

#### Residential Soils Sampling and Cleanup

To date, AR has sampled approximately 1500 yards and cleaned up 350 yards exceeding action levels. In 2007, AR sampled about 60 yards and cleaned up 16.

#### Additional Residential Soils Sampling

EPA collected 221 subsurface soil samples at 108 residences in Anaconda. Most yard contamination in Anaconda was caused by smelter emissions that settled on the ground surface during smelter operations. Construction and landscaping activities may have buried contaminated surface soils, creating higher concentrations of arsenic in some subsurface soils.

Data from the samples will help EPA develop a Community Protective Measures Program to manage potential exposure to subsurface contamination and characterize its extent. A summary of the data will be available to the public soon.



2007 subsurface yard sampling

#### Interior Dust Sampling

Atlantic Richfield prepared an Interim Interior and Attic Dust Sampling and Analysis Plan. They used the plan to sample approximately 50 homes in the Anaconda area to analyze levels of arsenic and lead in attics and inside homes. A summary of the data will be available to the public soon.

## Work Planned for 2008

### Anaconda Regional Water Waste and Soil OU

**The Ponds.** Continue placement of Milltown Sediments, placement of Streamside Tailings materials, and development of borrow areas into constructed wetlands. Initiate shakedown period of Groundwater/Surface Water Management System.

**West Galen.** Continue soil treatment on approximately 1,000 additional acres.

**South Opportunity.** Land reclamation will be performed on 130 acres of MT Highway 1 and Mill Creek Road. These areas have been a source of fugitive dust emissions during extreme wind conditions.

### Old Works OU

**Sewage Treatment Plant Parcel.** Initiate cleanup of the Anaconda-Deer Lodge property.

**Arbiter Industrial Complex.** Work continues.

### Community Soils OU

**Residential soil cleanup.** Complete cleanups including vacant lots, in Anaconda and surrounding areas.

**Adjacent to Railroads.** Complete cleanup of undeveloped lots.

**Railroads.** Initiate placement of engineered cover on railroad grade through Anaconda.

