

## Do You Need More Information?

If you need more information on the work at Anaconda Smelter Superfund Site, you can visit Milo Manning in the offices of the Anaconda Environmental Education Institute. Part of Milo's job as the Technical Assistance Grant (TAG) Coordinator is to provide a place for the public to come and learn more about the Superfund work at the Anaconda Smelter Site. He also has copies of most project documents, including EPA fact sheets with easy-to-read, detailed information on specific areas. **Milo is located in the Community Center at 118 E. 7<sup>th</sup> Street, Anaconda (563-5538).**

You can also contact EPA, the Atlantic Richfield Company, or Montana DEQ directly at:



- **EPA:** Charlie Coleman, Remedial Project Manager, 457-5038, or Wendy Thomi, Community Involvement Coordinator, 457-5037
- **Atlantic Richfield Company:** Steve Ferry, Project Manager, 723-1818
- **Montana DEQ:** Kevin Kirley, 841-5035; Joe Griffin, 841-5042; and Catherine LeCours, 481-5040

## New Project Documents Available to the Public

Several new site documents were produced in 2005 and are now available to the public:

- **Third Five-Year Review Report**
- **RDU 1 - Stucky Ridge Subarea 4 and Final Design Report/ Remedial Action Work Plan**
- **RDU 2 - Lost Creek Final Design Report/ Remedial Action Work Plan**
- **West Galen Final Design Report/Remedial Action Work Plan**
- **Nazer Gulch Debris Removal Construction Completion Report**
- **Stucky Ridge RDU 1 - Engineered Controls Remedial Action Construction Completion Report**
- **East Anaconda Yards - Beryllium Removal Action CCR**

These documents (and many more) past decision documents are available at the Community Center at 118 East 7th Street.

## Opportunity Citizen's Group

On December 5, 2005, the Opportunity Citizens Protection Association (OCPA) and the Clark Fork River Technical Assistance Committee (CFRTAC) hosted a public meeting to discuss water quality issues in Opportunity. Panelists included Elizabeth Erickson, Water and Environmental Technologies; Jim Kuipers, CFRTAC; Robin Saha and students, University of Montana; Steve Ferry, Atlantic Richfield; and Charlie Coleman, EPA. Approximately 100 people attended the event. A second meeting to address dust issues is planned for March 2006.

*Photo credits: Ken Brockman, US Bureau of Land Management; Shawn Bisch, Pioneer Technical Services, Inc.; and Stuart Jennings, Montana State University*

# Anaconda Smelter Superfund Site

February 2006

Annual Site Update - 2005

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Design and construction of cleanup projects at the Anaconda Smelter Superfund Site continued, as scheduled, throughout 2005. Work included preparation of construction design documents, sampling and cleanup of residential yards, and construction projects needed to achieve EPA's goals of protecting human health and the environment.



Placing Cover Soil

K Brockman

## Work Planned for 2006

2006 promises to be another busy year for remedial action construction. Several projects are planned, including:

- **Opportunity Ponds.** Continue haul road construction and development of borrow pits around the Opportunity ponds. Continue to receive materials from the Streamside Tailings Operable Unit (SSTOU) and place in the B cells. Initiate capping activities in the C and D cells.
- **Railroad Remediation.** Begin remediation of several abandoned railroads and adjacent lots in Anaconda through the removal of wastes, and construction of industrial or vegetated soil covers. Begin removal of the West Valley line after abandonment.
- **Residential Yard Remediation.** Continue residential yard remediation within Anaconda and the Smelter Area of Concern.
- **Attics.** Sample attics for attic dust as requested by concerned citizens.
- **West Galen/Stucky Ridge.** Continue work initiated in 2005 to treat upland soils in these areas.
- **Old Works Industrial Area.** Continue installation of industrial covers on parcels within the Industrial Area drainage.

## New Work Started in 2005

### West Galen Activity

In the spring of 2005, EPA and the Montana Department of Environmental Quality (DEQ) approved the *West Galen Final Design Report/Remedial Action Work Plan*, which provides for the reclamation of ~4,300 acres north of Lost Creek and west of the community of Galen.

The West Galen area has been divided into two Remedial Action Areas based on land ownership:

- An area comprised solely of land owned by the largest landowner in the area (Ueland Ranches, Inc.)
- An area comprised of land owned by all other landowners

The Atlantic Richfield Company has contracted with Western Reclamation to perform the remedial construction on Ueland Ranch land. Work on that portion of the West Galen Area began in the fall of 2005. It included the treatment of soils with an alkaline amendment to varying depths, depending on low pH/acidity.



Applying fertilizer

K Brockman

### Anaconda Ponds Maintenance

Annual inspections of the previously reclaimed Anaconda Ponds dike faces indicated that some erosion was occurring, which was affecting vegetation quality in localized areas. To correct this problem, repairs to these dike faces were initiated in summer 2005.

Soil was hauled from a borrow area on Smelter Hill and placed on selected areas. These soils were then fertilized and seeded with grasses.



Anaconda Ponds maintenance

K Brockman

### Stucky Ridge

Work at Stucky Ridge continued in 2005 and included:

- Regrading of the drainage and installation of additional dozer basins in steep slope areas where erosion continued to be a problem
- Planting of additional grasses, shrubs, and trees in these erosion prone areas
- Maintenance on storm water controls
- Approximately 233 acres have been completed.

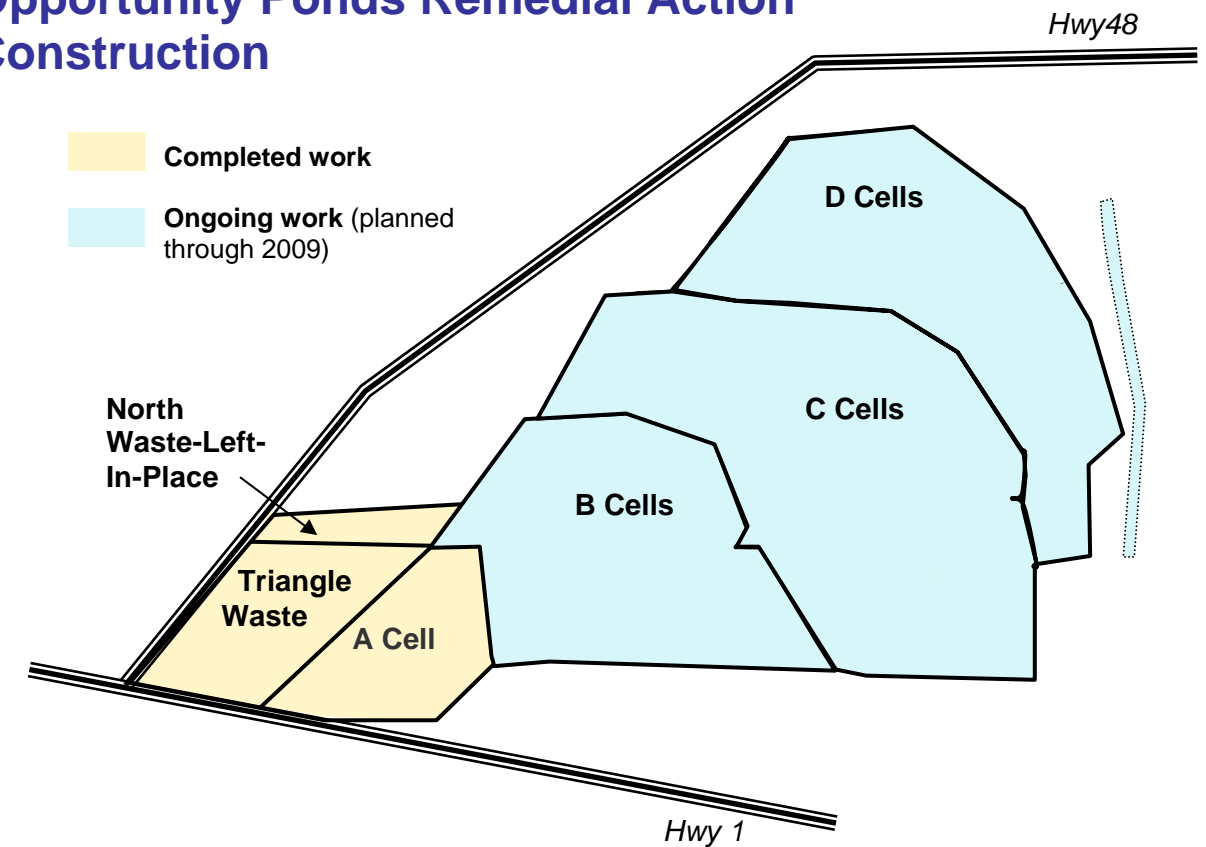
While work on a project area near the Moto-X track was completed, new construction areas on adjacent properties to the west are expected to be initiated in 2006.



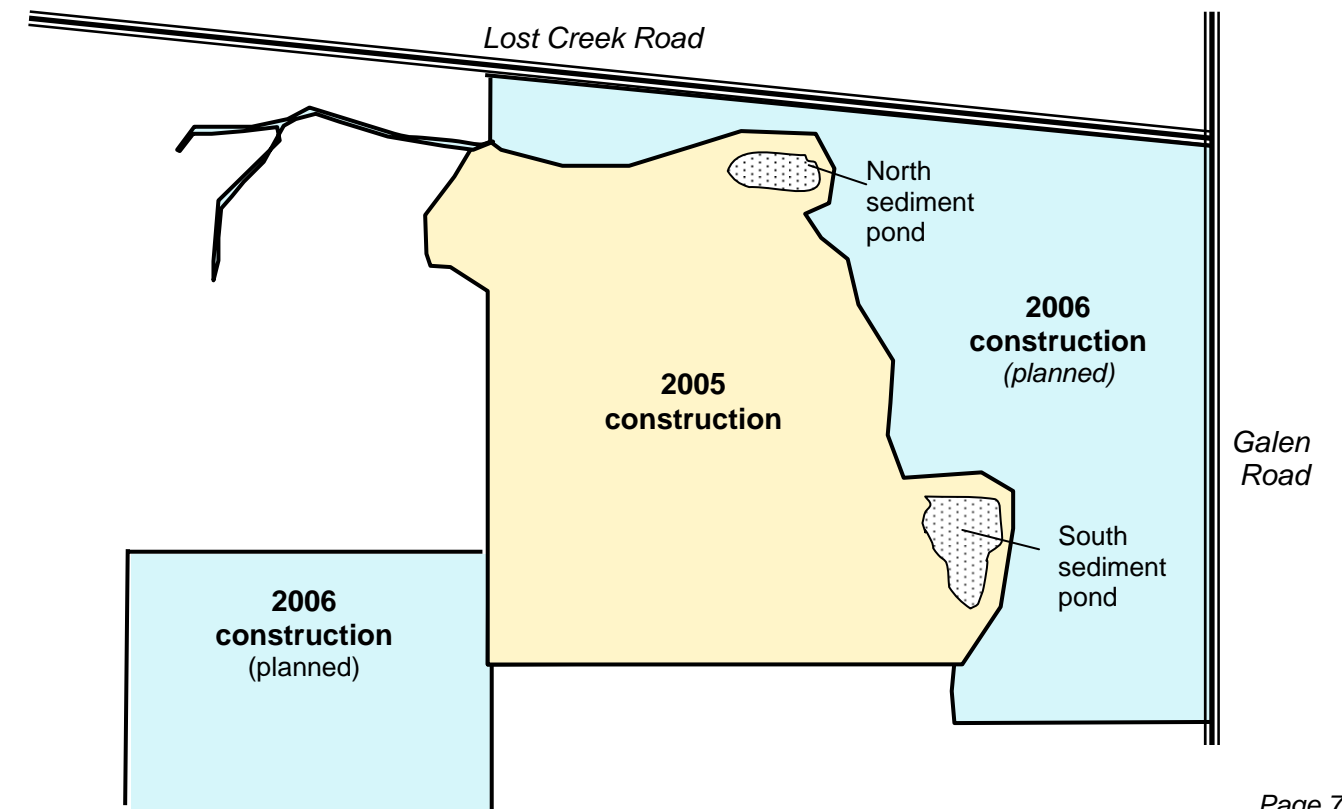
Constructing dozer basins

S Jennings

## Opportunity Ponds Remedial Action Construction



## Stucky Ridge Remedial Action Construction



## Five-Year Review Summary Form

### Issues:

Nine general deficiencies and/or concerns were identified:

- Areas of poor vegetation at the Drag Strip Subarea of the Old Works/East Anaconda Development Area OU
- Areas of poor vegetation with the temporary covers at the Red Sands Subarea of the Old Works/East Anaconda Development Area OU
- Areas of poor vegetation with the Anaconda Ponds dike faces at the Anaconda Regional Water, Waste & Soils OU
- Potential for buried hazardous waste and beryllium in the East Anaconda Yard Subarea of the Old Works/East Anaconda Development Area OU
- Lack of contaminant characterization of uncapped portion of the East Anaconda Yard Subarea of the Old Works/East Anaconda Development Area OU
- Lack of a final disposition plan for leachate from the Smelter Hill Repository Complex;
- Concern with exposure to attic dust in residential areas
- Concern with the long term funding and implementation of institutional controls through Anaconda-Deer Lodge County
- Concern with air and ground water quality in the community of Opportunity

None of the deficiencies currently cause the remedies to be unprotective

### Recommendations and Follow-up Actions:

The following actions are required to correct these deficiencies and/or address concerns to ensure that the protectiveness is maintained in the future:

- Provide additional maintenance of the vegetation at the Drag Strip Subarea
- Evaluate redevelopment potential and use of temporary covers at the Red Sands Subarea
- Provide additional maintenance of the dike face soil covers at the Anaconda Ponds
- Investigate the potential for additional buried hazardous waste and/or beryllium at the East Anaconda Yards Subarea and/or evaluate the need for additional institutional controls
- Characterize contaminants within the uncapped portion of the East Anaconda Yards and/or evaluate the need for additional institutional controls
- Determine the final disposition of repository leachates
- Develop protocol to address potential exposure to attic dust
- Develop long term implementation and funding plan for institutional controls
- Provide air and ground water monitoring in the community of Opportunity



## Ongoing Remedial Action Work

### Residential Yards

Residential yard removals began in Anaconda in spring 2004, after two years of sampling and design work. Based on the design requirements, certain contaminated soils are excavated and taken to the Opportunity Ponds for disposal. Clean soil is brought in from a borrow area east of Opportunity to backfill the excavations. Yard reconstruction is finished with sod for lawns, gravel for driveways, or topsoil for gardens.



**Residential yard – before and after clean up**

S Bisch

Cleanup by Atlantic Richfield to date includes 111 Anaconda residential yards in 2004 and 101 residential yards in Anaconda and 11 yards regionally in 2005. In 2006, cleanup is planned for 34 regional yards (mostly in the Aspen Hills area) and 23 Anaconda yards. Sampling is ongoing, so these numbers could increase based on additional yards exceeding the action level that have not been sampled yet. Residents who would like their yard sampled should call Michelle Markle at Atlantic Richfield in Butte at 723-1832.

### Opportunity Ponds

Haul road construction on the Opportunity Ponds (RDU 8) tailings impoundment (which began in 2004) continued into 2005. The roads are needed to transport materials to Opportunity Ponds Waste Management Area (WMA). These materials include sediments from SSTOU and Milltown and cover soil from several borrow areas located north, east, and south of the WMA.



**Building haul roads and spreading cover**

K Brockman

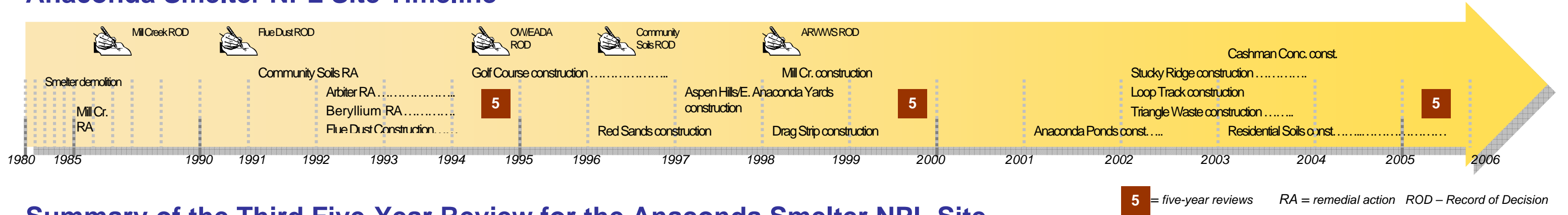
One new borrow area, permitted under DEQ's Open Cut Program, began development in 2005 (East borrow area). The A9 cell treatment was also completed and seeded in fall 2005. Transportation and disposal of SSTOU materials by both rail and truck continued through 2005. A dewatering trench was constructed along the toe of the Opportunity ponds. Temporary dewatering is necessary to allow the mining of borrow in this area of shallow ground water. This water is being siphoned over to the Warm Springs Ponds. After construction is completed, these borrow areas will be reclaimed as wetlands. Work will continue on the haul roads and borrow in 2006 as well as initiation of capping activities in the C and D cells.

### Dust Concerns?

Area residents may have noticed an increase in dust at the Opportunity Ponds. This dust primarily comes from areas that have not been remediated. In response to residents' concerns, EPA will evaluate temporary measures for controlling this dust. EPA requires strict dust control measures for the construction areas. This includes watering of roads and borrow areas, mulching of treatment areas, and (when necessary) work stoppages.

If you observe dust problems, please contact EPA's oversight personnel:  
Ken Brockman 491-1933 or Larry Smith 949-1239.

# Anaconda Smelter NPL Site Timeline



## Summary of the Third Five-Year Review for the Anaconda Smelter NPL Site

If contamination remains in place, Superfund requires that EPA conduct reviews of completed remedial actions every five years to determine if the work is protective of human health and the environment. This is known as the *five-year review* process. In August 2005, EPA completed the third five-year review of the Anaconda site. Previous reviews were conducted in 1994 and 1999.

The review addressed only those portions of the site where remedial construction has been completed *and* where EPA has determined the remedy is operational and functional. For each of those portions, a remedial action summary, five-year review finding, technical assessment, identification of any issues and/or recommendations, and a protectiveness statement was produced.

The results of the review indicate the remedies are protective of human health and the environment. Remaining remedies to be implemented are also expected to be protective of human health and the environment. Generally, areas that have been remediated are functioning as designed, and for the most part were managed and maintained in an appropriate manner. A few deficiencies that do not immediately impact the protectiveness of the remedy were noted.

The adjacent table summarizes the results of the review for the seven OUs included in the process. The entire five-year review document is available to the public at the locations listed on the back page of this fact sheet.

Operable Unit	Remediation (of Principal Threat Waste)	Current Status	Future Work	Protective
<b>Flue Dust</b>	Flue dust was treated to below TCLP standards and moved to a RCRA-designed repository in 1994.	The three repositories continue to be monitored with active maintenance (leachate collection and disposal, ditch cleaning, vegetation repair and ground water monitoring). Site access is controlled through fencing, gates, and security patrol.	The repositories will continue to be evaluated under the Smelter Hill Facility RDU (RDU 14) of the ARWW&S OU.	<b>Yes</b>
<b>Arbiter</b>	Arbiter process waste was removed and placed in a RCRA-designed repository in 1994.			
<b>Beryllium</b>	Beryllium was removed and placed in a RCRA-designed repository in 1994.			
<b>Old Works/ East Anaconda Development Area</b>	All waste materials and/or contaminated soils, with the exception of the Industrial Area, have been covered or treated to below the appropriate action levels.	Constructed covers and revegetated areas are monitored with active maintenance. Institutional controls (primarily the DPS) ensure the remedies are protected and site development is done in a manner protective.	Remedial action in the Industrial Area will include removal, cover, and/or revegetation of remaining waste and contaminated soils. Construction is underway and should be finished by the next five-year review. Remedies will continue to be evaluated under the Old Works RDU (RDU 13) of the ARWWS.	<b>Yes</b>
<b>Mill Creek</b>				
<b>Community Soils</b>	About half of the 300 residential yards identified for remediation have been cleaned up to date. This addressed immediate threats by removing the most contaminated soils in residential areas and replacing them with clean backfill.	Remaining yards will be finished in 2006. Current residential areas within the site will continue to be monitored through ICs (primarily the CPMP) to evaluate potential exposure. Construction began in 2005 and should be completed in 2006/2007.	Future residential areas will be monitored and remediated, if necessary, through the DPS, to ensure development is protective. Remedial action within commercial areas adjacent to the railroad will include removal, cover, and/or revegetation of waste and contaminated soils. The remedy will be evaluated under the ARWWS OU.	<b>(in completed areas)</b>
<b>ARWWS</b>		Remediation is complete at the Anaconda Ponds (RDU 4) and Cashman Concentrate (RDU 11).	Construction at the remaining RDUs is expected to be completed over the next ten years.	

Atlantic Richfield is preparing the remedial design for this last OU. EPA will review these designs, as well as site management and ongoing operations and management, to verify that the final remedy is protective and achieves remedial action objectives. This includes: reviewing data from all projects, inspecting the performance of past projects, and designing for improvements (as needed). EPA is also working with the community and local officials during the process. These activities essentially duplicate (and exceed) those of the five-year review.

RDU = Remedial Design Unit      DPS = Development Permit System      ARWWS = Anaconda Regional Water, Waste, and Soils  
CPMP = Community Protective Measures Program