US Environmental Protection Agency
10 West 15th Street, Suite 3200
Helena, Montana 59626

EPA's Cleanup Objectives in Neihart

- Prevent exposure to elevated lead levels in residential soil, dust, and road base.
- Control the spread of those materials by wind and water erosion.
- Prevent contamination of cleaned areas by indiscriminate use of mine wastes as construction fill.
- Remove the Neihart Tailings from the Belt Creek flood plain.

Interior Dust

The interior dust risk pathway was evaluated in the risk assessment and found to be insignificant. Interior dust concerns are generally linked to sites with large smelters that operate for many years. In the future, however, the Cascade County Health Department *may* elect to perform interior sampling (e.g. attic dust) if such sampling is warranted.

Site Contacts

- **Scott Brown, EPA**, 406-457-5035 brown.scott@epa.gov 10 W. 15th St, Ste 3200 Helena, MT 59626
- **Catherine LeCours, MT Department of Env. Quality (DEQ),** 406-841-5040 clecours@mt.gov 1100 N. Last Chance Gulch Helena, MT 59620

Document Repositories

Public documents related to the site are available at:

- **EPA,** (see address at left)
- **Cascade County Health Department,** 115 4th St South, Great Falls, MT
- **Belt Creek Ranger Station**, (north of Neihart)

Are You Getting the Information You Need?

In preparation for the ROD, EPA will be updating the Community Involvement Plan for the Site. The plan outlines the steps EPA uses to ensure the issues and needs of the community are identified and addressed during investigation and cleanup. The current plan is available for viewing at the document repositories.

EPA is interested in hearing comments on how we provide information to local residents and landowners. If you have any comments or concerns you would like to share that would help us improve our plan, please **call or email Scott Brown** (see *Site Contacts* at left).

EPA Issues Its Proposed Plan for Clean Up of Soils in Neihart, MT

Site Timeline

- **2001**. The Carpenter-Snow Creek Superfund site (includes the Neihart OU) was added to EPA's National Priorities List of Superfund sites.
- **2002 and 2003**. EPA sampled soils, surface water, sediments, and tailings in Neihart to define levels of contamination.
- **2004**. Removals were conducted to eliminate very high lead levels.
- **2005.** Remedial Investigation completed, which further characterized the nature and extent of contamination.
- **2006.** Human Health Risk Assessment defined the remaining potential risks.
- **2006**. Feasibility Study compared the potential cleanup options.
- **October 2006**. Proposed Plan describes EPA's Preferred Alternative for cleanup. Public comment period ends November 20.
- **Spring 2007**. Record of Decision documents the cleanup details.
- **Summer 2007**. Conduct additional residential sampling.
- **Winter 2007/2008.** Prepare construction plans.
- **Spring 2008**. Conduct final cleanup.

On October 18, 2006, EPA issued the Proposed Plan for Neihart Operable Unit (OU) 1. This fact sheet summarizes that plan and the opportunities for public review and comment.

What is a Proposed Plan?

The Proposed Plan is the document that describes EPA's preferred method of cleaning up a site. It is the final document prior to issuance of the Record of Decision (ROD) for cleanup.

The plan does the following:

- Provides basic site background information
- Highlights key points from the technical documents
- Presents and compares several alternatives
- Describes the preferred cleanup alternative
- Explains why EPA has chosen the preferred alternative
- Solicits public review and comment so that EPA's final cleanup decision will be fully informed

Do You Want to Learn More or Provide Comments on the Proposed Plan?

A 30-day comment period for the proposed plan will run from October 20 to November 20, 2006. Interested individuals are encouraged to provide their thoughts, ideas, or comments to EPA during that time period. EPA will review and consider all comments before making its final cleanup decision in the ROD.

There are several ways to learn more about the Proposed Plan and to provide comments:

- **Read more about it.** This fact sheet summarizes the Proposed Plan. Copies of the plan are available for viewing at the Belt Creek Ranger station and the Cascade County Health Department.
- **Attend the public meeting**. EPA will hold a public meeting to discuss the plan (see below). Everyone is welcome!
- **Provide oral comments.** If you attend the public meeting, you can provide comments verbally. A stenographer will be present to record oral comments for the public record.
- **Provide written comment.** You may provide comments to EPA Project Manager Scott Brown in writing by letter or email (see back page).

Proposed Plan Public Meeting

Monarch/Neihart Senior Center
(on US Hwy 89 in Neihart)
October 25, 2006— 6:30 pm to 8:00 pm

Questions and Answers About EPA's Proposed Plan for Cleanup in Neihart, Montana

What Type of Sampling and Analysis was Done?

EPA collected over 500 samples in 2002, 2003, and 2004 to characterize the nature and extent of mining-related contamination. Samples included mine waste, surface water, sediment, groundwater, and soils. The results are reported in the Remedial Investigation report.

The initial sampling identified areas of elevated lead and arsenic in yards and alleys. EPA sampled 105 residential and public-use properties and then conducted soil removal actions in 2004 to address the most highly-contaminated areas. Lead concentrations in these removal areas were as high as 44,000 ppm.

Later sampling characterized the extent of the remaining contamination. In yards, lead concentrations ranged from 22 to 2,700 parts per million (ppm), with an average of 447 ppm. Elevated lead was also identified in the unpaved alley running from the Community Center to the north end of town.

Surface water contamination was identified in Broadwater, Compromise, and Rock Creeks. However, surface water in Belt Creek and O'Brien Creek (the local drinking supply) was generally good. Four residential groundwater wells and three springs were also sampled. One well had a slightly elevated concentration of mercury, and two springs had elevated lead concentrations. This is not a concern, as drinking water sources do not include groundwater or seeps.

What Human Health Risks Were Identified?

EPA's human health risk assessment showed that **lead** and **arsenic** are the only contaminants that may contribute significantly to cancer or non-cancer risks. The primary concern driving the cleanup is exposure to elevated concentrations of lead which can cause long-term neurological effects, particularly in children.

In Neihart, **residential soils** are the primary pathway by which people may be exposed to mining-related contaminants. Exposure occurs when soil is **inhaled** (dust) or **ingested** (on unwashed vegetables, hands, toys, etc.). Other pathways (surface water, groundwater, or stream sediment) are not a concern. Exposure is a concern mainly for **full-time resident children at properties having lead concentrations greater than 1,200 parts per million (ppm)**—not part-time residents, workers, or recreationists. Those groups do not contact soils frequently enough to have elevated exposures. In Neihart, 13 properties are either known or expected to exceed 1,200 ppm of lead.

By removing the elevated concentrations of lead and arsenic in residential soils in Neihart, human health risks associated with mining-related contamination will be reduced to acceptable levels.

Lead and Arsenic

What Cleanup Alternatives Were Evaluated?

EPA evaluated four cleanup alternatives as part of the FS for the Neihart OU.

1	**No Action ($65,000).** Superfund requires this alternative to be considered.
2a	**Removal/Replacement/Disposal of all Contaminated Soil and Institutional Controls (ICs) ($1.8M).** Excavation of contaminated residential soil and non-paved road base material from Neihart and disposal of the excavated material in an engineered repository. ICs will protect the remedy.
2b	**Removal/Replacement/Disposal of all Contaminated Soil and ICs and Removal of Neihart Tailings ($3.8M).** Same as Alternative 2a, but includes excavation and removal of the Neihart Tailings.
3	**Removal/Replacement/Disposal of all Contaminated Soil and ICs ($0.7M).** Same as Alternative 2a, but only at properties that are occupied by children under seven years of age. Requires annual consultation with Cascade County to determine changes in demography and to collect soil samples.

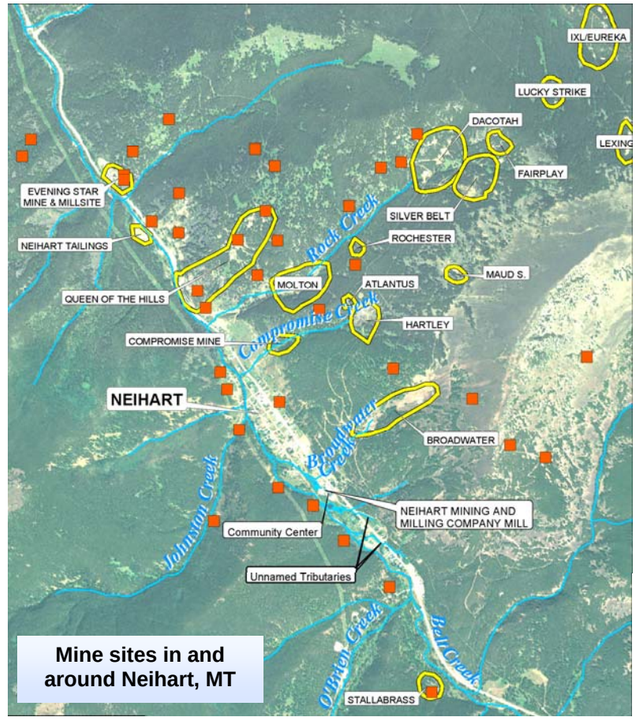
The primary difference between the alternatives is the amount of contaminated soil removed and the removal of the Neihart Tailings.

What Are Institutional Controls?

Institutional controls (ICs) are non-engineering actions, such as legal controls, that help minimize the potential for exposure to contamination through appropriate land or resource use. They are meant to supplement engineering controls. In Neihart, ICs could include zoning, easements, covenants, or information and educational programs.

Following EPA's remedial action to cleanup residential property having greater than 1,200 ppm lead in soil, the Cascade County Health Department and county commissioners will help determine what ICs are needed to prevent the importation of contaminated material into Neihart and how to ensure that residents are not exposed to contaminated material when implementing home construction and other projects.

The most likely application of ICs would be restrictions against the indiscriminate excavation and transport of mine wastes and contaminated soils into or out of Neihart. Much of the contamination being cleaned up in Neihart resulted from the practice of using mine waste from the dozens of nearby active and inactive mines (see map) as fill material.



Mine sites in and around Neihart, MT

Will My Yard be Cleaned Up?

Sampling events in Neihart have shown that elevated lead concentrations are a good indicator of the presence of mining-related soil contamination. Thus, EPA will use **lead concentrations** in soils (**1,200 ppm and greater**) as the basis for determining which yards will undergo cleanup. EPA will use existing sample data and will also conduct an additional residential sampling event in the summer of 2007. All residents whose yards qualify for cleanup will be contacted by EPA to discuss further details.

The preferred alternative will excavate approximately 7,300 cubic yards of residential soil and roadway material and 27,850 cubic yards of Neihart Tailings.

How Would A Cleanup Be Done Under The Preferred Alternative (2B)?

EPA has specific protocols for residential yard removals, and these will be followed at the Neihart OU. The contaminated soil will be removed using conventional earthmoving equipment, supplemented by hand shovels close to buildings, septic systems, trees, etc. Excavated areas will be backfilled with clean soil and graded. Vegetation that is removed will be replaced, along with any structural items, such as fences.

Homeowners will be consulted in advance to discuss the details of cleanup at each property, the schedule, and any specific homeowner needs. All details are agreed upon, in writing, prior to the start of construction. EPA's on-site representative will be happy to assist property owners with any questions or concerns during the construction. Participation in the cleanup is voluntary for each property owner, and there is no cost to the property owner for cleanup.