

## For More Information....

If you need more information on the work being conducted, please call or email one of the following EPA project staff (toll free):

- **Rosemary Rowe**, Remedial Project Manager, (866) 457-2690, rowe.rosemary@epa.gov
- **Wendy Thomi**, Community Involvement Coordinator, (866) 457-2690, thomi.wendy@epa.gov



## Come to a Public Meeting!

EPA will hold two meetings in Neihart and Great Falls to discuss the sample results and upcoming activities with the public.



### Great Falls Public Meeting

Wednesday, March 19, 2003  
6:30 to 7:30 pm  
Great Falls Public Library  
301 2<sup>nd</sup> Avenue North

### Neihart Public Meeting

Thursday, March 20, 2003  
1:00 to 2:00 pm  
Belt Ranger Station

These will be informal meetings, and we hope to have lots of discussion.  
Coffee and cookies will be served.



# Soil Sampling Results and Plans for Additional Work in Neihart Carpenter-Snow Creek Mining District Site

March 2003

In September and December 2002, the U.S. Environmental Protection Agency (EPA) collected soil/mine waste, surface water, sediment and groundwater samples at the Carpenter-Snow Creek (CSC) Mining District Site. The sampling focused on the town of Neihart.

## Background

The CSC Site was added to EPA's National Priorities List of Superfund Sites in September 2001. It contains 96 abandoned mines, 26 of which were identified by the Montana Department of Environmental Quality (DEQ) to be sources of arsenic, lead, and other contaminants.

The town of Neihart is located within the CSC Site, and has not been previously sampled. EPA conducted environmental sampling in September and December 2002 to provide the data necessary to answer three questions:

1. **Are there elevated levels of metals in Neihart?**
2. **Is there a potential threat to human health?**
3. **Is additional sampling needed to define the nature and extent of contamination?**

## Sample Locations

Prior to the sampling event, EPA sent written notification to property owners asking for permission to sample their yards and/or private wells. Forty-six property owners responded positively to that mailing. From those responses, EPA selected 13 Neihart locations that could provide the most useful data. These included 11 residences, the community center, and a commercial property. Four alley locations were also selected in the field, based on feedback from residents.

A total of 16 surface (0 to 2 inches) soil samples were collected at 13 Neihart sample locations, and a total of 17 subsurface soil samples were collected at 13 locations. Subsurface depths were 6 to 12 inches and 12 to 18 inches. At some properties, multiple surface and/or subsurface samples were collected.

Two residents volunteered to have their wells sampled, and groundwater samples were collected from each location.

Fourteen surface water and sediment sampling locations were selected to determine if concentrations of metals posed a human health threat to recreational users of the streams. The majority of samples came from Belt Creek. One sample came from Carpenter Creek and two from a large pond adjacent to the Community Center.



**Don't forget about the Public Meetings (see back page)!**

U.S. Environmental Protection Agency, Region 8 - Montana Office  
10 W. 15th St., Suite 3200  
Helena, MT 59626  
Attn: Wendy Thomi

Return Service Requested

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Helena, MT

## Results

The primary contaminants of concern for the CSC Site are arsenic and lead.

- **Soil/Mine Waste.** Arsenic concentrations in soils ranged from 8 to 390 parts per million (ppm). Lead concentrations ranged from 79 to 44,000 ppm. Arsenic and lead were above screening levels at four residential yards and two alley samples (see box at upper right).
- **Surface Water.** Contaminant levels were not above drinking water standards in any surface water samples. The highest levels of contamination were found in Carpenter Creek, where levels were found that EPA considers unhealthy for aquatic life. Cadmium, copper, lead, and zinc were higher than aquatic life standards downstream from Neihart.
- **Sediment.** Arsenic concentrations ranged from 3 to 40 ppm, and no samples were above the screening levels for arsenic. Lead concentrations ranged from 18 to 5,600 ppm, with two samples exceeding the recreational action levels of 2,300 ppm for lead. Those samples were from the mouth of Carpenter Creek and from Belt Creek below Carpenter Creek.
- **Groundwater.** Results from the two groundwater samples collected from residential wells indicate that none of the metals was present at levels above the human health drinking water standards.

## Screening vs. Action Levels

	<u>Arsenic</u>	<u>Lead</u>
Soil (ppm)		
CSC Screening level	120	400
MT action levels*	120 to 250	1,000

**Sediments (recreational) (ppm)**  
CSC Screening level      120      400

**Screening levels** are concentrations below which EPA believes there is no risk to health. Concentrations above screening levels warrant further investigation to determine if there is a risk and what should be done to eliminate that risk. **Action levels** are based on human health risk assessments using site specific information.

\*MT NPL sites (Butte, Anaconda, Basin, and Tenmile)

## Missing Your Sample Results?

Results of the sampling at each property were mailed to individual property owners in early March. If your property was sampled, you should have received your results by now.

If you believe your property was sampled and you have not received any results, please call Rosemary Rowe, EPA's Remedial Project Manager, at 1-866-457-2690 (toll free).



It is possible that your property was one where we received permission to sample, but did not collect samples as part of the 2002 sampling events.

## Need More Details?

Additional details on the scope and results of the 2002 sampling event can be found in EPA's *Final Data Summary and Evaluation Report, Residential Area Environmental Evaluation, Carpenter Snow Creek Mining District NPL Site, Neihart, Montana, February 2003*. This document is available to the public at the two document repositories:

**Belt Ranger Station**  
Neihart, Montana  
236-5511

**Great Falls Public Library**  
301 2<sup>nd</sup> Avenue N.  
Great Falls, Montana 59401  
453-0349

EPA encourages you to attend one of two public meetings in March (see back page). We will be available to answer any questions you might have.



## Upcoming Activities

The results of the 2002 sampling indicate that a potential threat to human health and the environment exists in the Neihart area, and EPA has received funding to initiate a **remedial investigation** to define the nature and extent of that contamination. This work will focus specifically on the Neihart area.

EPA will begin the following list of activities as additional funding becomes available:

- **Additional Sampling.** Residential yard sampling in 2003 (mine waste, surface water, sediment, and groundwater samples may also be collected).
- **Remedial Investigation Report.** Presents the results of the 2003 sampling along with previously conducted data. Compiles all relevant site information and provides an assessment of the nature and extent of communication.
- **Human Health and Environmental Risk Assessment.** Defines the potential for health risk from site contaminants.
- **Feasibility Study.** An analysis of potential cleanup options for a site, using information from the remedial investigation and the risk assessment. Uses criteria to weigh the merits of each option, including no action.
- **Proposed plan.** Describes EPA's plan for cleanup. Includes a period for public comment.
- **Record of Decision.** EPA's final decision for cleanup at the site. Includes a **Responsiveness Summary** which addresses the public comments.

Throughout this process, there will be ample opportunity for public meetings, discussion, and other communication, as needed.

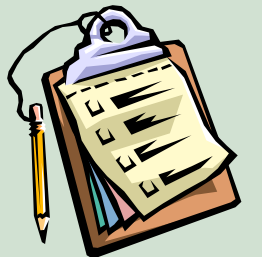


**Don't forget about the Public Meetings (see back page)!**

## Do You Want Your Soils or Well Water Sampled?

If you would like the soil or groundwater at your property to be sampled during the next round of activities, just call EPA's **Remedial Project Manager, Rosemary Rowe** toll free at **(866) 457-2690** and let her know.

Your name will be added to the list of potential sampling locations, and we will send you the form necessary to grant EPA permission to sample.



## Preventative Measures

If you are concerned about the potential for elevated levels of metals in your yard soils, there are several simple steps you can take to minimize potential exposures.

- Always wash hands before eating.
- Keep non-food items out of children's mouths.
- Reduce household dust by wet mopping and dusting with a damp cloth.
- Use a door mat for people to clean their shoes before entering the house.
- Wash root vegetables prior to eating.
- Test private drinking water wells for contaminants.
- Minimize contact with dirt.
- Maintain grass cover in areas where children play.
- Use clean sand in sand boxes or play areas.

