

**United States Environmental Protection Agency
Region VIII
POLLUTION REPORT**

Date: Thursday, October 7, 2004

From: Steven Way

To: Floyd Nichols, EPR-ER

Melissa Rosas, R8 EPA

Subject: Neihart Residential Soil Removal
Along Highway 89, Neihart, MT

POLREP No.:	2	Site #:	9X - OU 1
Reporting Period:		D.O. #:	
Start Date:	8/23/2004	Response Authority:	
Mob Date:		Response Type:	
Demob Date:		NPL Status:	NPL
Completion Date:		Incident Category:	
CERCLIS ID #:		Contract #	
RCRIS ID #:			

Site Description

The Carpenter Snow Creek - Neihart Residential Soil Site is located in Cascade County, and the City of Neihart, Montana. The Site is located along Highway 89 and consists of several residential properties in the south and north ends of town. Also, there are two historic mill sites that impact residential properties, and a tailings impoundment next to Belt Creek.

Description of Threat:

Historic milling activities have released lead and arsenic into the soil which are being spread in the Community by various means, including flooding along Belt Creek, annual runoff following heavy snow melting, plowing during winter, and excavation associated with construction of residences and roads has spread and exposed mine waste.

Removal Site Inspection Results:

See Polrep # 1. Generally, the high levels of soil contamination were found near the historical milling operations. Lead levels were found as high as 50,000 ppm (or 5%) during the removal. In addition, an evaluation of the historical Neihart Tailings impoundment identified that location as the most suitable location to place the contaminated soil from this action. Subsequently, flow analysis for Belt Creek indicated that flood stage conditions from a 100 year event are reasonably expected to be contained within the existing channel at the Neihart Tailings (USBR September 2004).

RESPONSE INFORMATION:

Properties have generally been included in the Removal Action if the average surface or near surface soil concentration exceeded 2800 ppm of lead, or if it exceeded 390 ppm arsenic. In addition to designated residential sites, the following non-residential areas were included: 1) an ore load-out/source area on a steep slope, at the north end of town, adjacent to the three of the residential properties; 2) the community center area; 3) a portion of the unpaved roadway, formerly a rail line leading away from the ore processing mill. A flood stage analysis was performed for Belt Creek at the tailings storage site.

Current Activities

Removal actions to date:

On August 23, 2004 EPA's removal contractor mobilized to the Site, and on October 5, 2004 all work was completed. Specific actions to date include the following:

- Removal of approximately 5,300 cubic yards of contaminated soil and mine waste was completed as of September 30, 2004.
- Contaminated material was placed on the Neihart Tailings Impoundment, and capped with one foot of

shale. A three-foot berm with rip/rap was constructed and surrounds base of the capped the material placed during this action.

- Average soil removal depths in residential properties were 18 to 24 inches for an estimated total of 3,300 cyds; excavation depths were deeper around the former ball mill area in the south residential zone.
- Residential lots were backfilled with the 3- inch minus shale to within 3 to 6 inches of final grade, and then topsoil was placed. Shale and topsoil were obtained from sources near Neihart. Drive areas were finished with gravel and compacted.
- The parking area immediately south of the Community Center was the first area excavated and filled to provide for a clean-soil storage for all of the removal.
- An additional estimated 2000 cyds of material was removed from the North Slope waste dump, which was part of those same residential lots. The lower slope behind homes had approximately 2 feet of mine waste removed to native material. The upper slope was re-contoured and stabilized with lesser material removed. North Slope stabilization behind homes was constructed with 2 to 3 feet diameter angular rock at the toe of slope with 8 to 12 inch rip/rap above that for the first 5 to 10 feet. Shale was placed above and over a portion of the rip rap. The upper slope was stabilized in similar manner, and a drainage ditch was constructed to capture run-off and direct it north off the lower slope. The majority of the upper mine waste dump remains on-site.
- Storage site (Neihart Tailings Impoundment): The existing historical tailings were sampled from surface to depth. Estimated average depth of historical material is 6 feet with a total volume of 10,270 cubic yards of tailings (This excludes the channel embankment material.)
- Storage site design/as-built: A three feet berm with rip/rap on the outside face was installed around the tailings impoundment on top of the historical material. The contaminated soil from Neihart was placed within the berm, graded to drain, and capped with a one foot lift of 3 inch minus shale.
- The bank cut for the historical low water crossing was filled on the west side to reduce the potential for high flows to overtop the channel. Temporary bridge over Belt Creek was removed on 10/4/04 without entering the creek channel; channel banks were reconstructed where the beams rested.
- Borrow material from the Star Group Mine (Caboose Mine Co.) and the Florence Mine (The Monarch Co.) was used for the Neihart tailings berm and rip rap and for a portion of the north slope. (Quantities are reported in the START final report.)

The excavated areas were sampled prior to being covered with clean fill, and generally, lead concentrations remained elevated above levels associated with final clean up values. However, the action has provided for clean cover and prevents further access for direct contact and migration off-site. (A final report will present the analytical results.)

Enforcement:
TBD

Planned Removal Actions

The work at this Site was performed consistent with the NCP and this Removal Action is considered to be complete as of October 5, 2004.

Key Issues

No key issues at this time

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
Intramural Costs				
Total Site Costs	\$0.00	\$0.00	\$0.00	0.00%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any

contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

response.epa.gov/NeihartResidential

POLREP #2 Last Updated 10/21/2004