United States Environmental Protection Agency
Region VIII
POLLUTION REPORT

Date: Thursday, September 6, 2007
From: Al Lange

To: Al Lange, EPA - Emergency Response

Subject: Final POLREP
California Gulch NPL (OU09-Lake Cnty Comm Health Prog)
210 Starr St. (et.al.), Leadville, CO
Latitude: 39.2578000
Longitude: -106.2929000

POLREP No.:	3	**Site #:**	08-29
Reporting Period:		**D.O. #:**	
Start Date:	7/17/2006	**Response Authority:**	CERCLA
Mob Date:		**Response Type:**	Non-Time-Critical
Demob Date:	8/23/2007	**NPL Status:**	NPL
Completion Date:	8/23/2007	**Incident Category:**	Removal Action
CERCLIS ID #:	COD980717938	**Contract #**	
RCRIS ID #:			

Site Description

At least 52 properties, located in the City of Leadville, Colorado, are addressed by this Removal. The Properties have areas where the concentrations of lead in soil exceed the soil action levels of 3,500 parts per million (ppm).

Nine of the Properties are within OU 9 of the California Gulch Superfund Site (Site) while one is at the Lake Fork Mobile Home Park. The Leadville area, including portions of OU9, was the site of extensive mining, milling, and smelting operations that began about 1860. Most mining operations ceased around 1900, although some facilities continued intermittent operations as late as the 1960s. Most of the mines within the Site boundary are presently inactive and all of the mills and smelters have been demolished. Site investigations showed the presence of heavy metals in soils and in waste piles in and around the current residential area of Leadville.

Current Activities

Since the initial access agreements were obtained from the property owners by ASARCO's contractor, EPA chose to have new accesses signed. This was initiated on July 11, 2006, at a meeting with those owners on a list supplied by MFG, Co. (ASARCO's contractor). Plats constructed by ASARCO were reviewed with the owners on-site and most were modified prior to being signed by the property owner and the OSC. All the properties are being videoed prior to the removal and will be re-done after the restoration (after there is plant growth). A final copy of the signed design plat with the lead concentrations at the base of the dig will be prepared and given to the owner along with a letter of certification of the removal completion and the make up of native grass or sod.

The initial action was a meeting on July 11, 2006, by the OSC and other EPA representatives with the owners of the properties as listed by ASARCO's contractor. At the meeting, some of the property owners signed a newer access form drawn up by the EPA. Some of the access agreements from 2006 were used in 2007, however, seven of the owners live away from Leadville and more time was required to get their signatures. One out-of-town owner could not be contacted and therefore his property was not remediated.

The OSC visited the owners of the signed access forms and constructed design plats which detailed the removal process to be accomplished by ERRS. START made digital videos prior to and after removals, and collected samples to determine the remaining Lead concentrations at the base of the excavations. Based on the sampling completed by ASARCO's contractor, six or twelve inches of contaminated soil were removed. Replacement was a combination of clean fill and top soil. The owners requested sod or a grass seed mixture that was developed from collecting area grasses. The sod or hydroseeded grass was initially watered by ERRS for period of ten days.

During the removal, the contaminated material was placed in the Iron Hat Quarry. The clean fill material was removed from the Leadville Silver & Gold Borrow Pit and screened to a minus two inch size.

The top soil came from an ASARCO pit located south of town and just southeast of the Leadville Rod and Gun Club. Samples of the top soil were sent to Colorado State University at Ft. Collins with the resulting analyses below:

Sandy Loam pH 5.9 Organic Matter 3.8 % Zinc 29.7 ppm
Salts 0.3 mmhos/cm Nitrate 2 ppm
Iron 96.3 ppm
Lime Low Phosphorus 4.9 ppm Manganese 125.7 ppm
SAR --- Potassium 158.0 ppm Copper 6.1 ppm

Initially, ten projects were designated as needing remediation. One was added during the summer, making a current total of eleven projects. There is a wide variability in the sizes of the projects from an oversized size lot (170 x 80') to a hot spot of 6 x 33'. Of the eleven:
Ten are completely done and sign off forms have been sent for signatures.
One owner was sent information but no response was forthcoming.

The approximate amounts of material removed and replaced is as follows:
Contaminated soil, grass, debris = 2920 yd3
Backfill = 1095 "
Top Soil = 900 "
Roadbase = 195 "
Sand, gravel, rocks = 85 "

Next Steps

At this time no future actions are planned for OU 9.

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