# Poorman/Balm Creek Mine Site
# Baker County, Oregon
# Fact Sheet

## YOUR INPUT IS REQUESTED

The U.S Department of Interior, Bureau of Land Management (BLM) is seeking public input on a proposed action to cleanup mine tailings and waste rock and to address physical hazards at the Poorman/Balm Creek Mine Site. This cleanup activity is part of the ongoing efforts to address abandoned mine sites located on federally administered land under the jurisdiction of BLM. The results of the sampling show that the tailings and waste rock contain metals concentrations that pose a risk to human health and the environment. BLM would like comments on the proposed cleanup option to consolidate the tailings in a repository, regrade and cover the waste rock, and cap the shaft.

Comments will be accepted from July 1, 2003 to August 1, 2003. Comments should be sent to the Community Relations Spokesperson (see name and address listed below). A Site repository has been established at the Baker County Library. A copy of the Engineering Evaluation/ Cost Analysis and the Community Relations Plan may be found at the repository. The Administrative Record for the Site is located at the BLM Vale District Office.

An open house will be held July 7, 2003, 1:00 p.m. through 4:00 p.m. (PST) at the BLM – Baker Field Office. All interested parties are encouraged to attend for commenting or inquiring.

### Site Description and Background

The Balm Creek Mine was most commonly known as the Mother Lode Mine. This Mine was a consolidation of the Mother Lode, Balm Creek, Gilkenson, and Poorman workings. The Site is located approximately 20 miles northeast of Baker City, Oregon and can be accessed by driving east on Highway 86.

The site consists of four sub-sites all located in the Balm Creek watershed Below the Site, Balm Creek flows south approximately seven miles to the Powder River, which then flows east to the Snake River.

Sites A and B are the Upper and Lower Poorman mine workings, respectively along Slide Creek. Site A consists of waste rock and an in-filled shaft. Site B consists of waste rock and an adit with seepage. At each of these sites, Slide Creek has bisected the waste rock dumps.

Site C is located on Balm Creek at the Balm Creek Mine. It consists of a shaft and headframe, a mill site foundation, waste rock and a tailings pond located adjacent to Balm Creek. The Balm Creek Mine shaft

discharges water. The fourth site is a tailings pond located approximately 1,500 feet south of the confluence of Slide and Balm Creeks. This pond is adjacent to Balm Creek and portions of the flow from Balm Creek enter the upstream of the pond, thus impounding water in the tailings pond.

Surface water and soil sampling was completed at the four sites and along Balm and Slide Creeks. Of the four sites, the tailings in the Pond are the greatest concern as they exhibit very high leachable copper and zinc concentrations, high acid base potential, and are already situated in the stream channel, and are inundated by normal flows of Balm Creek. Surface water concentrations in Balm Creek in this area exceed Oregon water quality criteria for copper, iron, manganese and copper.

**Cleanup Alternative Analysis**

An Engineering Evaluation/ Cost Analysis (EE/CA) was developed for the Site to assist in the screening of cleanup options. The EE/CA includes the results of the site characterization, a streamlined risk evaluation and cleanup alternative analysis.

Removal action objectives were established in the EE/CA. They were developed to ensure compliance with the State and Federal rules and regulations and to ensure that the actions are protective of human health and the environment. Based on this process, the following objectives were identified:

Reduce or eliminate the release of metals originating at the site to air pathways via fugitive dust emissions.

Reduce or eliminate the release of metals originating at the site to surface water.

Reduce or eliminate the release of metals during flood events.

Reduce or eliminate the potential for exposure to humans and wildlife from inhalation, ingestion or direct contact with contaminated surface soils.

Consider measures to minimize or avoid adverse impacts on historic and prehistoric resources at the Site, as required by the National Historic Preservation Act.

Based on the removal action objectives, general potential response actions and technologies were screened, leaving three alternatives that have been analyzed with respect to the evaluation criteria (effectiveness, implementability, and cost). The three considered alternatives are:

- In-Situ Stabilization and Surface Water Diversion
- Removal to an on-Site Repository
- Removal to a Hazardous Waste Landfill

In-Situ Stabilization is the only alternative that addresses waste rock and surface water diversion and

was retained in the preferred alternative. The on-Site Repository was selected as the preferred alternative for the management of all tailings.

**If you have any questions regarding the mine site or the proposed action, please contact:**

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Information Repository
Baker County Library
2400 Resort St.
Baker City, OR 97814

Hours:
Mon. – Thurs. (10:00 am – 8:00 pm)
Fri. – (10:00 am – 5 pm)
Sat. – (10:00 am – 4 pm)
Sun. – (12:00 pm – 4 pm)
Please ask front desk librarian for information.

Administrative Record
Bureau of Land Management
Vale District Office
100 Oregon St.
Vale, OR 97918

Open House
July 7th, 2003, 1:00 p.m. through 4:00 p.m. (PST)
BLM - Baker Field Office
Elkhorn Conference Room
3165 10th St.
Baker City, OR 97814

Internet

Some documents are available on BLM's Vale District web site @ http://www.or.blm.gov/Vale/