

NATIONAL PRIORITIES LIST (NPL)

Final Site

September 2005

STANDARD MINE | Gunnison National Forest, Colorado
*Gunnison County | 3rd Congressional District*** Site Location/Size:**

Standard Mine is a former hard rock mine located at 10,000 ft. in elevation in the Ruby Range of the Gunnison National Forest in Colorado. The former mine is located on several patented mining claims and the surrounding land. It is about 10 acres in size. The nearest municipality is the Town of Crested Butte, Colorado, located 10 miles southeast of Standard Mine.

 Site History:

Mining activity began at Standard Mine around 1874. However, the most significant operations began in 1931 with the mining of lead, zinc, silver, and gold. Operations ceased in 1966 and the mine was abandoned. The patented mining claims are owned by Standard Metals Corporation. The surrounding land is owned by the U.S. Forest Service (USFS). Contamination from former mining operations spills off the claims onto the USFS land.

The mine consists of many open, unmarked adits and shafts, giving access to 8400 feet of mine workings on 6 levels. The site also has a dilapidated mill and railroad tracks running 50 feet above the ground with rotting wooden support poles. The former mine is near a popular hiking trail and has no access restrictions. There is evidence of human activity at the site. Wastes at this mining site are estimated to be 53,560 cubic yards of waste rock and 29,340 cubic yards of mill tailings as well as seasonably variable amounts of water flowing out of the adits. Additionally, the USFS portion of land contains a non-engineered surface impoundment made entirely of highly mineralized waste rock. The unlined impoundment was built to collect metal-laden acid mine drainage containing cadmium, copper, lead, and zinc. There is evidence of overflow and seepage through the impoundment into Elk Creek, which runs directly adjacent to the mine. Elk Creek feeds into Coal Creek, which is a drinking water supply for the Town of Crested Butte four miles downstream from the former mine.

 Site Contamination/Contaminants:

Contaminants of concern associated with the former mine operations are metals – mostly cadmium, zinc, lead, and copper – significantly above background levels for the area. Sources of contamination to Elk Creek include: open adits that release acid mine drainage and an unlined surface impoundment (300 foot wide by 15 foot deep) that intermittently overflows and leaks contaminated water directly into Elk creek.

 Potential Impacts on Surrounding Community/Environment:

Wastes at Standard Mine continue to impact surface water in the area. Elk Creek is devoid of all aquatic life and feeds directly into Coal Creek. The Town's drinking water supply is taken from Coal Creek four miles downstream from the former mine. In the arid western parts of the United States, water rights are very important. This is the only permanent source of drinking water available to the town. Evidence of staining on the downgradient side of the surface impoundment and the creek bed itself indicates significant periods of overflow and seepage. Although the quality of the water during episodic overflow of the surface impoundment is unknown, contaminants are significantly above background levels at the intake. The drinking water system, however, currently does meet Safe Drinking Water Act standards.

Because the impoundment is constructed entirely of metal-laden waste rock, the acidic water in the impoundment further dissolves the metal compounds from the waste rock, weakening the structure over time. Therefore, there is particular concern about the potential catastrophic failure of the surface impoundment.

 Response Activities (to date):

To date, there have been no response activities. The former mine is remote and only accessible three months out of the year. The USFS conducted an Engineering Evaluation/Cost Analysis in 2002. The USFS is planning to cost share the cleanup effort but needs the site to be included in the NPL to prioritize their cleanup funding. The State, EPA, and USFS will be working together cooperatively on this site to address all of the environmental concerns.

[The description of the site (release) is based on information available at the time the site was evaluated with the HRS. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

For more information about the hazardous substances identified in this narrative summary, including general information regarding the effects of exposure to these substances on human health, please see the Agency for Toxic Substances and Disease Registry (ATSDR) ToxFAQs. ATSDR ToxFAQs can be found on the Internet at <http://www.atsdr.cdc.gov/toxfaq.html> or by telephone at 1-888-42-ATSDR or 1-888-422-8737.