

EPA REGION 6 CONGRESSIONAL DISTRICT 02

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Last Updated: April 2015

Effective October 1, 2015 this Site Status Summary will be replaced with a new site profile. The new site profile will be available at: www.epa.gov/superfund/cimarron-mining

## Current Status

- The New Mexico Environment Department (NMED) continues to perform operation and maintenance (O&M) activities in 2015, including monitoring ground water quality at select monitoring wells.
- The fourth Five-Year Review of the remedy was performed in 2013 and a Five-Year Review report was signed by EPA on September 18, 2013. The remedy was found to be protective. A copy of the Five-Year Review report was placed in the Site repositories for public viewing. The report can be viewed by contacting the Carrizozo Town Clerk, visiting the NMED Santa Fe office, the EPA Region 6 office in Dallas, TX, or view it on-line.

Two restrictive covenants were recorded by the town of Carrizozo in 2006. While the covenant for OU-1 prohibits drilling less than 100 feet below ground surface for obtaining ground water at OU-1, it does not restrict well drilling in general. It only serves to protect the present remedy in place. The covenant for OU-2 also protects the remedy by prohibiting drilling near the disposal cell on or near its perimeter.

## Background

The Cimarron Mining Corporation (Site) is located in Carrizozo, Lincoln County, New Mexico, and is approximately 100 miles south-southeast of Albuquerque. The Site has been divided into two operable units (OUs): the Cimarron Mill Site as OU-1 and Sierra Blanca Mill Site as OU-2. The Cimmarron Mill Site is approximately 0.6 acres in aerial extent and is located on the north side of

Highway 380. The Sierra Blanca Mill Site is 7.5 acres in aerial extent and is located east of U.S. Highway 54. The two mill sites operated from 1960 to 1982 with some temporary shutdowns. They are both inactive today.

The Cimarron Mill Site was originally owned by Zia Steel, Inc., and was used to recover iron and precious metals from ores. In 1979 the site was sold to Southwest Mineral



Corporation and soon thereafter cyanide was apparently used to extract precious metals from the ore. An eight (8) foot fence restricts access to the site. It is currently used as an auto repair shop and salvage yard.

The Sierra Blanca Mill Site was owned and operated by Scott-Tex, Inc. The site was used to recover a variety of metals from ore transported to the Site, although cyanide was apparently not used at this location. The mill shut down temporarily in the early 1970's. In 1979, the site was leased to American Minerals Recovery Corporation. The milling operation at the Cimarron Mill Site (OU-1) was relocated to the Sierra Blanca Mill in June 1982. The site is currently owned by the Town of Carrizozo. The site is fenced and presently not being used for residential or commercial purposes.

Approximately 1500 people live within a two-mile radius of the Site. People obtain drinking water from 29 municipal wells within three miles of the Site. The current land use for the surrounding area is residential, range land, agricultural, and some recreational.

The Contaminants of Concern are cyanide in ground water up to 4,330 parts per billion (ppb) at OU-1 and lead in soil and sediment up to 18,000 parts per million (ppm) at OU-2.

The record of decision (ROD) for OU-1 was issued by EPA on September 21, 1990 and required extraction of cyanide from the shallow ground water and discharge to the publicly owned treatment works (POTW). The ROD for OU-2 was issued by EPA on September 6, 1991 and required solidification and stabilization of contaminated soil and waste piles exceeding 500 ppm lead, with on-Site disposal.

Remediation of the contaminated soil, sludge, and sediments with lead content above 500 milligrams per kilogram (mg/Kg) resulted in the following: excavation, cement stabilization and onsite disposal of 182 cubic yards of waste from five material piles and 43 cubic yards of sediment from seven tanks and a cinder block trench; excavation and on-site disposal of 345 cubic yards of

contaminated sediment from the discharge pit and surface soil; removal and off-site disposal of process chemical drums, tanks and associated piping; backfilling of excavations (discharge pits, cinder block trench and surface soil areas) with on-site soil and covering with clean fill. Later another 299 cubic yards of contaminated soil were excavated, stabilized with cement and placed in the on-site disposal area. The disposal area was covered with a graded low permeability cap and revegetated.



The NPL Site Deletion for OU-1 (partial deletion – soil only) and OU-2 took place on August 31, 2000.

### Benefits -

- Drinking water for 1,000 residents drawn from public and private wells within three miles of the Site have been protected from Site contaminants.
- The remedy at Operable Unit 2 (Sierra Blanca) was successfully installed and the operable unit was deleted from the NPL on August 31, 2000.
- The former mill sites are available for re-use and redevelopment.

# Population Protected and Volume of Contaminated Media -

Population in July 2008: 1,047 Population change since 2000: +1.1% Approximately 1500 people live within a two-mile radius of the Site.

A shallow ground water aquifer, with poor water quality, and a deeper aquifer with better quality water lie beneath the Site at OU-1. The shallow ground water underlies approximately 2.3 acres of the Site at a depth of approximately 55 feet. It was contaminated with inorganics, including cyanide. EPA's remedial investigation indicated that there was a potential for limited migration of contaminated ground water to the lower aquifer. Therefore, remedial action was performed for the cyanide contamination in the shallow aquifer in order to reduce or eliminate the potential for contaminant migration to the deeper aquifer and to meet the State of New Mexico's ground water standard for cyanide.

Approximately 182 cubic yards of waste, 43 cubic yards of sediment and 644 cubic yards of sediment and soil were excavated, stabilized and disposed of on-Site.

# National Priorities Listing (NPL) History -

Site Hazard Ranking System (HRS) Score: 38.93

Proposed Date: June 24, 1988

Final Date: October 4, 1989

NPL Update: No. 7

Location: Cimarron Mill Site (OU-1) is located on Highway 380 in Carrizozo; the Sierra Mill Site (OU-2) is located approximately one mile south of OU-1

Photos: Cimarron Mining

Population: Approximately 1,000 people obtain drinking water from 29 municipal wells within three miles of the Site

Principal Pollutants: Cyanide in ground water at OU-1 and lead in soil and sediment at OU-2

### Site Map



### **Record of Decision**

CIMARRON MINING CORP.

Signed: September 21, 1990 ( Signed: September 6, 1991 (O	DU-1) U-2)
Ground Water (OU-1):	The Record of Decision (ROD) for OU-1 required extraction of cyanide from the shallow ground water and discharge to the publicly owned treatment works (POTW).
OU-1 Partial Site Deletion: (soil only)	August 31, 2000
Soil Treatment (OU-2):	The ROD for OU-2 required solidification and stabilization of contaminated soil and waste piles exceeding 500 ppm lead, with on-Site disposal
OU-2 Site Deletion:	August 31, 2000 Fed. Register/Vol 65, No. 170
Site Contento	

### Site Contacts

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