

NPL Partial Site Deletion Narrative

California Gulch Leadville, Colorado

On October 24, 2014, EPA deleted portions of the California Gulch Superfund site from the National Priorities List (NPL). This partial deletion applies to all of Operable Unit (OU) 4, Upper California Gulch; OU5, ASARCO Smelters/Slag/Mill sites; and OU7, Apache Tailing Impoundments.

The California Gulch site is located in Lake County, Colorado approximately 100 miles southwest of Denver. Located in a highly mineralized area of the Colorado Rocky Mountains, the California Gulch site covers 18 square miles of the watershed that drains along the California Gulch to the Arkansas River. Mining, mineral processing, and smelting activities have taken place at the site for more than 130 years.

According to the 1994 Consent Decree, the site was divided into 12 OUs. OU4, Upper California Gulch, is 2.4 square miles and is composed of waste rock piles and fluvial tailing. OU4 is divided into six sub-basins, Garibaldi, Whites Gulch, Nugget Gulch, AY Minnie, Iron Hill and South Area. OU5, ASARCO Smelters/Slag/Mill sites, is comprised of five smelter sites - Elgin Smelter, Grant/Union Smelter, Western Zinc Smelter, Arkansas Valley South Hillside Slag Pile (EGWA) and Arkansas Valley Smelter (AV) - and one mill, the Colorado Zinc-Lead Mill (CZL). The combined area of OU5 is approximately 70 acres. OU7, the Apache Tailing Impoundments, consists of four tailing impoundments located on the southern edge of the city of Leadville. The Apache Tailings Impoundments are located downstream from the Yak Tunnel Water Treatment Plant surge pond.

Several removal actions took place at OU4. Following the August 4, 1995 and July 19, 1996 Action Memorandums and the November 18, 1996 Amended Action Memorandum, Non-Time Critical Removal Actions at Garibaldi, the Agwalt Mine in Whites Gulch, and the Upper California Gulch surface water diversion were completed. These removal actions addressed the contamination at Garibaldi and the Agwalt mine. Other remedies at OU4 involved the creation of surface water diversions, removal of waste rock, regrading, and construction of diversion ditches. These remedies were designed to limit potential sources from contributing to surface water and ground water contamination at the site.

The EPA issued two Records of Decision (RODs) for OU5. The remedy selected for the AV/CZL sites included excavation of flue dust, consolidation of tailing and soils and placement of a vegetated soil cover over the consolidated pile, and implementation of institutional controls (ICs) to restrict land uses incompatible with the remedy. The remedy selected for the EGWA sites included implementation of ICs to maintain the effectiveness of the remedy by limiting access or use of the property. Lake County has implemented a local ordinance as an IC for the EGWA and AV/CZL sites to aid in the remediation.

Between 1996 and 2000, removal actions were conducted at OU7 including the removal of Tailing Ponds No. 2 and No. 3, consolidation of removed material from these two tailing ponds on the Main Impoundment, and placement of erosion protection along the toe of the southwest embankment of the Main Impoundment below the clay-tile and wooden box culverts outfalls. The 2000 ROD for OU7 intended to address air transport of tailing material, erosion of tailing material in local waters and potential source material contributing to surface water and ground water contamination at the site. The selected remedy for OU7 included surface water controls, application of source surface controls to prevent the migration of

contaminants, ICs to warn of hazards and limit access or use of the property, and long-term monitoring to assess the quality of surface water controls.

On December 22, 2010 for OU7 and April 15, 2013 for OU5, Lake County implemented ICs and on May 7, 2013, the city of Leadville implemented ICs. These ICs consist of local ordinances, resolutions amending the Land Development Codes and adopting regulations that protect engineered and non-engineered remedies at OU5 and OU7.

The EPA, with concurrence of the state of Colorado through the Colorado Department of Public Health and Environment, has determined that all appropriate response actions under CERCLA, other than operation, maintenance, monitoring and five-year reviews, have been completed. Therefore, the EPA is deleting OU4, Upper California Gulch; OU5, ASARCO Smelters/Slag/Mill sites; and OU7, Apache Tailing Impoundments of the California Gulch Superfund site from the NPL.