

NPL Site Narrative for Jacobs Smelter

JACOBS SMELTER Stockton, Utah

Conditions at Proposal (July 22, 1999): The Jacobs Smelter site covers over three acres in northeast and southwest Stockton, Utah. In 1998, the Utah Department of Environmental Quality collected 29 soil and sediment samples from residential yards, fields, and former smelting locations in the Rush Lake area of Tooele County situated to the south of Tab Hill. These samples were collected to determine if a threat to human health existed in the area from historical smelting operations. Analysis of the soil and sediment samples indicated levels of arsenic and lead to be present at very high concentrations of 30,400 milligrams per kilogram (mg/kg) and 68,400 mg/kg, respectively. The discovery of these concentrations prompted the need to further investigate the extent of arsenic and lead present in soils in this region of the Rush Lake Valley.

Historically, the Rush Lake/Stockton area was a major smelting center for this part of Utah, receiving and milling ore from most of the mines in the valley. As many as nine smelters could have operated in the Rush Lake Valley, but only four have been positively located: the Waterman, Chicago, Carson-Buzzo, and the Jacobs. All operated in the study area from the 1860s through the turn of the century refining gold, silver, copper, lead, and zinc. The nearest of these smelters to the study area was the Jacobs Smelter.

Subsequent investigations were performed by the Bureau of Reclamation in conjunction with several government contractors. These investigations included the collection of a total of 5,296 surface soil samples from 252 parks, residences, and lots in Stockton. Using an X-Ray Fluorescence Spectrometer in the field, the majority of samples were found to contain concentrations of arsenic above the analytical target level of 100 mg/kg, or the lead analytical target level of 400 mg/kg. Samples were sent for laboratory confirmation, and the data resulting from the laboratory analysis were used to delineate an area of observed arsenic contamination in surface soils encompassing at least three acres.

An evaluation of residences within the area of observed soil contamination indicates that there are an estimated 62 residences subject to arsenic concentrations exceeding the Cancer Risk Screening Concentration, Health Based Benchmark. In addition, there are 18 residences on which a release of lead has been documented.

Status (February 2000): In 1999, EPA's Emergency Response branch conducted removals of lead and arsenic contaminated soil exceeding removal action levels at approximately 30 residential properties within the town of Stockton. The Utah Department of Environmental Quality (UDEQ) recently conducted a Remedial Investigation/Feasibility Study (RI/FS), identifying approximately 130 additional residential properties for remediation. An additional RI/FS is currently being conducted by UDEQ outside of the town of Stockton to identify areas of contaminated soil. Union Pacific Railroad has recently completed a removal of contaminated soils along railroad tracks running through the site in accordance with an Administrative Order on Consent with EPA.

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 [ATSDR - ToxFAQs](http://www.atsdr.cdc.gov/toxfaqs/index.asp) (<http://www.atsdr.cdc.gov/toxfaqs/index.asp>) or by telephone at 1-888-42-ATSDR or 1-888-422-8737.