United States Environmental Protection Agency

OSWER/OSRTI
State, Tribal, and Site Identification Branch
Washington, DC 20460

NATIONAL PRIORITIES LIST (NPL)

****Final Site****

March 2008

WASHINGTON COUNTY LEAD DISTRICT-OLD MINES

Old Mines, Missouri

Washington County

Site Location:

The Washington County Lead District – Old Mines site includes soil and ground water contaminated with arsenic, barium, cadmium, and lead associated with historical mining practices in southeast Missouri. The site is located near the eastern Ozark Mountains in southeastern Missouri. Currently, the Old Mines site encompasses approximately 20 square miles in the northeastern portion of Washington County, Missouri.

Site History:

Washington County is part of Missouri's Old Lead Belt, where lead mining has occurred for hundreds of years. Additionally, this area is part of the barite mineralization district of Missouri. Barite mining boomed in 1926 as the mineral's use for oil drilling mud was discovered and for a number of years, Washington County was the world's leading producer of barite before declining in the 1980s. Many of the later large mining operations reworked lands that were previously hand mined for galena (mineral source of lead) or barite. Washington County contains more than 1,000 lead and barite mining, milling, or smelting sites.

Site Contamination/Contaminants:

The Old Mines site includes source piles, tailing ponds, and residences with elevated levels of lead throughout the area. The piles primarily consist of overburden and tailings from mineral mining and processing. Ground water serves as the source of drinking water for numerous private residences and businesses. There are more than 60 residential yards contaminated with lead above EPA's removal action level of 1200 parts per million. There are more than 129 private residential wells contaminated with lead significantly greater than EPA's Safe Drinking Water Act maximum contaminant level (MCL).

Potential Impacts on Surrounding Community/Environment:

Soil and groundwater in the area contains contaminants typically associated with historical mining districts, including arsenic, barium, cadmium, and lead. Soil contamination is present at significantly elevated concentrations at a number of residential properties. Lead has been detected in the ground water significantly greater than the MCL.

Response Activities (to date):

EPA is providing bottled water to more than 100 residences in the Old Mines area. Other response activities include excavation and removal of lead contaminated soil at 49 residential yards. A repository for the contaminated residential yard soil has been established at a former lead tailings impoundment in Washington County.

Need for NPL Listing:

The State of Missouri and EPA evaluated other cleanup programs and no other viable options were available. EPA received a letter of support for placing this site on the NPL from the State of Missouri.

[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.]

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.