

NPL Site Narrative for Oronogo-Duenweg Mining Belt

ORONOGO-DUENWEG MINING BELT Jasper County, Missouri

Conditions at proposal (June 24, 1988): The Oronogo-Duenweg Mining Belt is located in Jasper County, Missouri, and comprises a portion of the Tri-State Mining District of Missouri, Kansas, and Oklahoma. Two other Superfund sites in the district, Cherokee County in Kansas and Tar Creek in Ottawa County, Oklahoma, were placed on the NPL in September 1983. Superfund-financed remedial activities are ongoing at these sites.

Lead and zinc ores, as well as some cadmium ores, were mined, milled, and smelted throughout Jasper County from 1848 to the late 1960s. Mining efforts were originally performed by small independent companies that were later organized into larger mining operations.

Abundant mining activities occurred in an area of 2 by 10 miles between Oronogo and Duenweg, northeast of Joplin. The area is honeycombed with underground workings, pits, shafts (open, closed, and collapsed), mine tailings, waste piles, and ponds holding tailing waters. The Jasper County portion of the mining district contains many abandoned underground mine workings, and the land surface in many parts of the county is covered with an estimated 10 million tons of mining wastes.

The primary sources of contamination at the site are residual metal sulfides in abandoned mine workings and tailing piles that were left uncovered and unstabilized. Upon exposure to the atmosphere, these sulfides mobilize as dissolved compounds, increasing acidity. The resulting metal-laden acidic waters, referred to as acid mine drainage, contaminate ground water and fill mine shafts and subsidences; when the waters surface through springs, they combine with metal-laden run-off and contaminate rivers, creeks, and lakes.

Studies conducted by the U.S. Geological Survey (1977) concluded that ground water and surface water are contaminated with lead, cadmium, and zinc. An estimated 1,500 people obtain drinking water from private wells within 3 miles of the site.

Status (August 30, 1990): EPA plans to conduct a remedial investigation/feasibility study to determine the type and extent of contamination in Jasper County and identify alternatives for remedial action.

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.