

NATIONAL PRIORITIES LIST (NPL)

Final Site

September 2008

IRON KING MINE – HUMBOLDT SMELTER | **Dewey-Humboldt, Arizona**
*Yavapai County*** Site Location:**

The Iron King Mine and the Humboldt Smelter facilities have contaminated ground water and soil attributable to the mine and smelter sources. Both the mine and smelter are located in industrial, commercial, and/or residential areas of Dewey-Humboldt, Arizona. The Iron King Mine is located near the intersection of Highway 69 and Iron King Road. The Humboldt Smelter is located near the intersection of 3rd Street and Main Street.

 Site History:

The Iron King Mine was an active mine beginning in 1906 (when the mine produced fluxing ore for the Humboldt Smelter) until 1969. Ore from Iron King Mine was processed at the Humboldt Smelter, which operated from the late 1800s until the early 1960s. In addition to mining, activities at the mine facility included waste reduction and converting mine tailings to fertilizer. The waste reduction facility sorted wastes, sent recyclable materials off-site, and disposed of construction debris in an onsite collapsed mine shaft.

 Site Contamination/Contaminants:

The Iron King Mine facility covers 153 acres, the majority of which is covered by waste rock piles and tailings (the tailings pile measures approximately 62 acres). There are five retention ponds, at least five mine shafts, a large collapsed mine shaft, and numerous areas of stained soil. The smelter facility occupies approximately 189 acres and has approximately 763,000 square feet of tailings, 1,041,200 square feet of grey smelter ash, and 456,000 square feet of slag. Onsite ponds, pits, and lagoons were reportedly used for the leaching of minerals from mined ore. Arsenic and other metals have contaminated soil, sediments, surface water and ground water. Arsenic and lead have been found significantly above health based standards in the soil of several residential yards. Sampling results for several private drinking water wells and a municipal well show arsenic above EPA's Safe Drinking Water Act maximum contaminant levels (MCLs).

 Potential Impacts on Surrounding Community/Environment:

A significant residential portion of the Town of Dewey-Humboldt sits between the mine and the smelter. At this time, the full extent of soil contamination and possible ground water contamination has not been assessed.

 Response Activities (to date):

In 2005, a removal of contaminated soil from four residential properties was conducted under EPA oversight.

 Need for NPL Listing:

The State of Arizona referred the site to EPA because of lack of alternative funding for cleanup. EPA received a letter of support for placing this site on the NPL from the state.

[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.]