

NPL Site

September 2021

OLEM/OSRTI

Washington, DC 20460

CHEROKEE ZINC -WEIR SMELTER | Weir, Kansas

Cherokee County

Site Location:

The Cherokee Zinc-Weir Smelter site is located on the north side of the city of Weir, Cherokee County, Kansas, in the Arkansas-White-Red Region watershed.

▲ Site History:

The Chicago Zinc Works began smelting zinc in 1872 and chose Weir as their location due to nearby commercial coal deposits available to fuel the smelter, and the proximity to the Tri-State lead and zinc mining district. Chicago Zinc abandoned the smelter, and in 1896 the Cherokee Lanyon Smelter Company purchased the smelter and owned it until 1906. Other owners/operators of the smelter included the Weir City Zinc Works, the Cherokee Zinc Company Smelter, and the Weir Smelting Company. According to historical information, smelting operations closed in approximately 1909 when natural gas wells in other areas of Kansas made smelter operations from coal unprofitable.

Site Contamination/Contaminants:

Legacy contamination from this smelter has contaminated multiple residential yards. Lead is the primary metal of concern, but contamination also includes arsenic, cadmium, and chromium, which exceed health-based benchmark levels.

Potential Impacts on Surrounding Community/Environment:

Wetlands adjacent to the former smelter property are contaminated and there is potential for downstream migration of metals. More than 50 residential yards are contaminated with lead above the EPA Region 7 Removal Management Level (RML) of 400 mg/kg. On-going time-critical emergency removal action is not intended to address the longer-term response actions for source wastes, vacant residential properties, non-occupied residential properties, or other lower-priority properties.

Response Activities (to date):

In July 2013, the Kansas Department of Health and Environment (KDHE) referred the site to the EPA for federal action. To date, the EPA removal program has cleaned up 16 properties, with lead above RML. The removal assessment also concluded that soil, sediment, and surface water were likely contaminated with lead, arsenic, cadmium, and possibly selenium on or adjacent to the former smelter property. All short-term threats where known lead contamination poses a threat to the residents of Weir are being addressed by the removal action.

Need for NPL Listing:

The state of Kansas referred the site to the EPA because of the risk to human health and the environment posed by heavy metal contamination. The remaining lead-contamination must be further assessed and characterized to determine the extent of cleanup needed. Other federal and state cleanup programs were evaluated but are not viable at this time. The EPA received a letter of support for placing the 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. See 56 FR 5600, February 11, 1991, or subsequent FR notices.]

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. <u>ATSDR ToxFAQs</u> can be found on the Internet at https://www.atsdr.cdc.gov/toxfaqs/index.asp or by telephone at 1-800-CDC-INFO or 1-800-232-4636.