

NATIONAL PRIORITIES LIST (NPL)

Proposed Site

March 2010

ACMSMELTER AND REFINERY | Cascade County, MT

Site Location:

The site is a former metals refinery adjacent to the unincorporated community of Black Eagle along the Missouri River in Cascade County, Montana. The City of Great Falls is located across the Missouri River from the site.

Site History:

The Boston & Montana Consolidated Copper and Silver Mining Company began construction of the first smelter at the 427-acre metals refinery site in 1892, which was operated by many in the adjacent community of Black Eagle. Primary products from activities at the site were copper, zinc, arsenic, and cadmium. Operations began in 1893 when ore from mines in Butte, Montana was concentrated, smelted, and refined. Electrolytic and furnace refineries also operated at the site. The property was acquired by Anaconda Copper Mining Company in 1910. Copper was made into commercially useful shapes. Smelting and refining activities continued at the facility until the early 1970s. The property again changed hands in 1977 when these holdings were purchased by Atlantic Richfield Company (ARCo). The plant began closure in 1973. ARCo has conducted minor cleanup of the former facility, and the site has never been under an approved cleanup program with the EPA or state. Only a recycling facility and golf course currently remain on site.

Site Contamination/Contaminants:

The plant stack was designed to eject lead, arsenic, and other metals in wastes from the processes. As a regular practice, tailings, smelter wastes, slag, and flue dust were dumped into the Missouri River until 1915, when most wastes were to be deposited on-site. The state estimated 27.5 to 31 million tons of slag and tailings were dumped directly into the River. Contaminants associated with these sources included antimony, arsenic, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc.

Potential Impacts on Surrounding Community/Environment:

EPA 2007 and 2008 soil studies of residential yards in Black Eagle found approximately 45% of the yards sampled were elevated in lead, arsenic or both. Stack deposition from the smelter smoke stacks between 1893 and 1972 is most likely responsible. Gardening is a popular activity in the community. Residents reported that some of their housing was constructed using materials from the Site. In 2004, the Missouri River was found to be contaminated from dumping and on-site run-off. These wastes are wide spread and have been identified in the River at Ft Benton, 34 miles downstream from the site. The Missouri River is a fishery and the fish are used for consumption by residents.

Response Activities (to date):

There have been no response activities to date.

Need for NPL Listing:

ARCo has conducted minor cleanup at the site. Montana referred the site to EPA in 2002 and recently, Cascade County supported the NPL over any state program. Other federal cleanup programs were evaluated, but are not viable because of the complexity of the site and the need for enforcement mechanisms. EPA received a letter of support for placing this site on the NPL from the Governor and the state received a letter of support from Cascade County.

[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.