

NPL Site Narrative for Monticello Mill Tailings (USDOE)

MONTICELLO MILL TAILINGS (USDOE) Monticello, Utah

Conditions at proposal (July 14, 1989): The Monticello Mill Tailings Site covers 78 acres at the southern edge of Monticello in San Juan County, Utah. The area is in a sparsely populated part of southeastern Utah. The property to the south is controlled by the Bureau of Land Management. The U.S. Department of Energy (USDOE) now owns the site.

The mill opened in 1942, recovering vanadium from the uranium/vanadium ores of the Colorado Plateau. The Atomic Energy Commission, predecessor of USDOE, bought the site in 1948, recovering uranium until the mill closed permanently in January 1960. In subsequent years, the two agencies took various actions to dismantle the mill, stabilize the piles of tailings, clean up the ore-stock pile areas, and demolish and bury the mill foundation.

Ore processing activities at the mill generated large quantities of mill tailings that now cover approximately 68 acres. These tailings were segregated into four discrete piles on the basis of content and mill process: the carbonate pile, vanadium pile, acid pile, and east pile. The potentially radioactive contaminated materials (mill tailings and contaminated soils) total approximately 1.6 million tons, according to a 1984 USDOE report. In 1961, the tailings piles were covered with soil and revegetated. At least two piles have no liners.

The site is underlain by a shallow alluvial aquifer, which is contaminated with arsenic (0.19 mg/l), selenium (0.16 mg/l), uranium (12.8 mg/l), and vanadium (4.7 mg/l), according to a 1988 USDOE report. Within 3 miles of the site, municipal and private wells tapping a deeper aquifer provide drinking water to an estimated 1,900 people. A municipal well is less than 1,200 feet from the tailings piles. Montezuma Creek, which flows through the middle of the tailings piles, is also contaminated with arsenic, selenium, uranium, and vanadium, according to the 1988 USDOE report. The levels of some contaminants exceed water quality standards. The creek is used for irrigation within 3 miles downstream of the site.

Radon was present in the air near the piles in tests conducted in 1983-84 by a USDOE contractor. The nearest residential area is approximately 1,000 feet from the tailings piles, and agricultural land starts at 1,700 feet.

USDOE is investigating the site under the Formerly Utilized Site Remedial Action Program. Under a CERCLA Section 120 Interagency Agreement among EPA, USDOE, and the State, USDOE is required to investigate and clean up the site to meet CERCLA standards.

Status (November 21, 1989): EPA has commented on USDOE's draft report on a remedial investigation/feasibility study to determine the type and extent of contamination at the site and identify alternatives for remedial action. The final report is expected shortly.

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.