

NPL Site Narrative for Libby Asbestos

LIBBY ASBESTOS Libby, Montana

Conditions at Proposal (February 26, 2002): The Libby Asbestos site includes an inactive vermiculite mine located on Vermiculite Mountain in northwestern Montana, and portions of the town of Libby. The mine is approximately seven miles east northeast of the town. Although mining of Vermiculite Mountain dates back to the 1890s, large-scale mining was initiated by the Zonolite Company in the 1920s. W.R. Grace acquired the Zonolite Company in 1963 and continued mining operations until September 1990. The vermiculite mine has been operating under Montana Department of State Lands Operating Permit 00010 since 1972, under a State-approved reclamation plan. Of approximately 1200 acres of patented mining claims, 865 are known to be disturbed by mining activities.

The ore body from which the vermiculite ore was mined contains significant occurrences of amphibole asbestos. Processing of the vermiculite ore, with amphibole asbestos intermixed, caused high dust and airborne releases of fine asbestos fibers. These fine asbestiform fibers have been linked by the Agency for Toxic Substances and Disease Registry (ATSDR) to certain kinds of lung disease and abnormalities. Amphibole asbestos contamination associated with the ore processing has been found in processing plants, residential yards, and school yards in the town of Libby and between the mine and the town.

Residences, schools, and businesses received vermiculite free of charge from W.R. Grace. On residences, vermiculite was used in gardens and for fill in other parts of residential properties. Some school areas, such as running tracks and football fields utilized vermiculite as fill. EPA's Removal Program has sampled many of these areas and has conducted removal actions at most, if not all, schools and at some residences and businesses. Many residences and businesses still have substantial quantities of asbestiform fibers that may pose a threat to the inhabitants or workers. EPA is conducting on-going emergency removal actions to address asbestos contamination in yards, schools, and other processing areas in town.

In 1971, W.R. Grace constructed a 70-acre vermiculite tailings impoundment to provide for settlement of fine tailings slurries. The dam for the impoundment was constructed in stages and by 1980, it was approximately 135 feet from base to top. The impoundment was constructed in the natural drainage of Rainy and Fleetwood creeks. Since fall 1990, the tailings impoundment has not actively received fine tailings, but small amounts of tailings from the adjacent course tailings disposal area continue to enter the impoundment through natural erosion.

The Kootenai River, a tributary of the Columbia River, receives water from Rainy Creek approximately 2.5 miles downstream of the tailings impoundment. Rainy and Fleetwood creeks converge just upstream of the tailings impoundment. Extensive wetlands have emerged in and around the tailings pond. Rainy Creek appears to flow perennially at its confluence with Fleetwood Creek, just above the tailings impoundment. Rainy Creek was historically a fishery (including the tailings pond) until the property was closed due to contamination. In addition, there is a known bald eagle nest in the vicinity of Rainy Creek. Wetlands are prevalent within the tailings impoundment and along Rainy and Fleetwood creeks. Chromium, copper, and nickel were detected in sediments from a tailings impoundment.

Montana has designated this site as its highest priority site pursuant to CERCLA section 105(a)(8)(B) and section 300.425 (c)(2) of the NCP.

Status (October 2002): Since the Libby Asbestos Site was proposed to the NPL, EPA has continued emergency response activities and begun planning and implementing a Remedial Investigation. Work to remediate and restore source areas presenting emergency conditions continues and should be substantially complete by 2003.

Intensive community involvement activities during this period have continued. EPA's Citizen's Advisory Group meetings are held once a month, and the EPA Information Center continues to operate in Libby. EPA publishes a question/answer section on the Libby response and investigation in local newspapers weekly.

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.