An examination of sites receiving asbestos-contaminated vermiculite ore from Libby, Montana

National Asbestos, Exposure Review

Former Western Minerals Denver Plant, Denver, Colorado

Site Background

The former Western Minerals Denver Plant at 111 South Navajo Street in Denver, Colorado, began operating sometime prior to 1967. The plant operated until 1990, processing vermiculite mined in Libby, Montana. This vermiculite was contaminated with asbestos.

The facility exfoliated ("popped" or expanded) vermiculite to manufacture insulation and other products. Over 100,000 tons of vermiculite were processed at the Denver site.

Since 1990, the site has been occupied by Minnesota Corn Processors, a corn syrup manufacturer. The land around it is used primarily for light industry, with a community baseball field to the southeast. The nearest homes are approximately one-quarter mile away. According to the U.S. Census, almost 13,000 people lived within one mile of the site in 1990.

Recent EPA soil sampling at the site showed some Libby asbestos in several areas. Much of the site, however, is covered by buildings and an asphalt parking area. Adjacent properties, including the baseball field, were free of asbestos contamination. Asbestos was not detected in any of the air samples collected.

Conclusions & Recommendations

Former Workers

 Conclusion: Former Western Mineral Denver Plant workers were exposed to hazardous levels of Libby asbestos. People who lived with former workers were also probably exposed to hazardous levels from

- fibers carried home on workers' hair and clothing.
- Recommendation: Identify former workers and their household contacts (people who lived with them) to evaluate potential health effects.

Current Workers

- Conclusion: Limited areas at the site contain Libby asbestos in the soil and could pose a health hazard. Most areas are free of contamination, however, and currently people are not frequently in the contaminated areas. Future exposures remain possible if construction or other activities disturb the soil beneath the asphalt parking lot.
- Recommendation: Clean up soil that contains Libby asbestos and develop a plan to prevent future exposures.

Past Community

- Conclusion: Not enough information is available to determine whether people who lived near the plant were exposed to hazardous levels of Libby asbestos. However, community exposures were probably minor, especially compared to those for former worker exposures, and are unlikely to lead to adverse health effects.
- Recommendation: Review new information that becomes available to determine appropriate actions to protect public health.

Present Community

 Conclusion: Community exposure to remaining Libby asbestos onsite is currently minimal and does not appear to pose a health hazard. Currently not enough data



are available to determine whether people are being exposed to Libby asbestos from waste that may have been used in the community. In other communities, vermiculite waste has been used for a variety of purposes, such as fill, driveway surfacing, and soil amendments.

 Recommendation: Review new information that becomes available to determine appropriate actions to protect public health.

Consumer Products

 ATSDR did not evaluate products that contain Libby vermiculite, such as vermiculite attic insulation, as part of this project. Information concerning vermiculite attic insulation is available on ATSDR's Web site at www.atsdr.cdc.gov/NEWS/vermiculite051603.html and on EPA's Web site at www.epa.gov/asbestos/insulation.html The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency of the U.S. Department of Health and Human Services. ATSDR was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, also called the Superfund law). This law established ATSDR as the federal health agency to deal with environmental health issues at hazardous waste sites. The agency's mission is to prevent exposure and adverse health effects from a variety of hazardous substance sources.

Where can I find more information?

The public health consultation for the Denver site is available on the Internet at the following address: www.atsdr.cdc.gov/naer/denverco

The document also may be reviewed in person at the following locations:

Athmar Branch Library/Biblioteca Athmar 1055 S. Tejon St. at W. Mississippi Ave., Denver, CO Telephone/Teléfono: (303) 935-0721

U.S. Environmental Protection Agency (EPA) Records Center 999 18th St., North Terrace, 5th Floor, Denver, CO Telephone: (303) 312-6473

Public input and questions are encouraged. ATSDR responses will be provided in a separate document available to the public and not as an additional release of this site-specific health consultation. Comments on the health consultation must be submitted in writing by October 31, 2003. Mail comments to:

Chief, Program Evaluation, Records and Information Services Branch, ATSDR 1600 Clifton Rd., NE (MS E-60)
Atlanta, GA 30333

The names of those who submit comments will not be printed in a public document. They are, however, subject to release through requests made under the U.S. Freedom of Information Act.

For more information, please call ATSDR toll-free at 888-422-8737 and ask to speak with Jill Dyken, Environmental Health Scientist or Health Communications Specialists Maria Teran-MacIver or Debra Joseph. Callers should refer to the former Western Minerals Denver site.

