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

Exposure Review

Former Robinson Insulation Minot Plant, Minot, North Dakota

Site Background

The former Robinson Insulation Minot Plant operated from 1945 through 1983. The plant, located at 826 Fourth Avenue NE in Minot, North Dakota, processed vermiculite mined in Libby, Montana. This vermiculite was contaminated with asbestos.

The facility exfoliated ("popped" or expanded) vermiculite to manufacture insulation. Over 16,000 tons of vermiculite were processed at this site from 1967 through 1983.

In 1993, the Minot City Parks Department purchased the property from Robinson Insulation. The Parks Department used the two former processing buildings to store equipment. Land use immediately surrounding the site is a mix of commercial, industrial, and residential. At one time, residences were located directly across the street from the east side of the processing buildings. These homes, however, have been demolished. Currently, the nearest homes lie approximately 175 yards south of the former processing buildings. According to the U.S. Census, over 9,400 people lived within one mile of the site in 1990.

From June 2001 through April 2002, EPA collected hundreds of environmental samples at the site and at selected nearby locations. Results showed some residual Libby asbestos inside the former processing buildings, in soils at the site, and at several locations near the site. Under EPA supervision, the former processing buildings were torn down. Soils containing Libby asbestos were removed and replaced with clean fill. This cleanup was completed in December 2002.

Conclusions & Recommendations

Former Workers

- Conclusion: People who worked at the Robinson Insulation facility were exposed to hazardous levels of asbestos. People who lived with former workers were probably also exposed to hazardous levels from fibers carried home on workers' hair and clothing. Before the cleanup, Minot City Parks Department workers may have been exposed to Libby asbestos as well, although this exposure would have been much less than for workers at Robinson Insulation
- Recommendation: Identify former Robinson Insulation workers and their household contacts (people who lived with them) to evaluate potential health effects. The evaluation should include current and former Minot City Parks Department workers who worked at the site before it was cleaned up.

Current Workers

- Conclusion: Currently, the site poses no apparent public health hazard from asbestos.
- Recommendation: None. On-site exposure to Libby asbestos has been minimized because the site has been cleaned up.

Past Community

Conclusion: Not enough data are available
to determine whether people who lived near
the plant were exposed to hazardous levels
of Libby asbestos. However, community
exposures are likely to be have been low,
especially compared to those of former
workers, and are not likely 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 Libby asbestos from plant emissions or from onsite asbestos-contaminated materials poses no public health hazard. Currently not enough data are available to determine whether individuals are being exposed to Libby asbestos from waste that may have been used for a variety of purposes, such as fill, driveway surfacing, or 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

Where can I find more information?

The public health consultation for the Minot site is available on the Internet at the following address:

www.atsdr.cdc.gov/naer/minotnd

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

Minot Public Library 516 2nd Ave SW Minot, ND 58701 Telephone: (701) 852-1045

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 Environmental Health Scientist Jill Dyken or Health Communications Specialists Maria Teran-MacIver or Debra Joseph. Callers should refer to the former Robinson Insulation Minot site.

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.

