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

National Asbestos, Exposure Review

W.R. Grace & Company Santa Ana Plant, Santa Ana, California

Site Background

From 1972 through 1993, the W.R. Grace and Company site at 2502 South Garnsey in Santa Ana, California, processed vermiculite mined in Libby, Montana. This vermiculite was contaminated with asbestos.

The facility exfoliated ("popped" or expanded) vermiculite to manufacture insulation, fireproofing (brand name: Monokote), masonry fill, pool cushion, and various horticultural products. Over 400,000 tons of vermiculite were processed at this site.

While the facility no longer processes vermiculite, W.R. Grace still owns and operates the four-acre site. Land use immediately surrounding the site is a mix of commercial, light industrial, and residential. The nearest homes lie within one-quarter mile of the site. According to the US Census, over 35,000 people were living within one mile of the site in 1990.

Recent EPA environmental samples from the site showed low levels of Libby asbestos in soils in several areas. Much of the site, however, is paved. No vermiculite or vermiculite waste stockpiles are present at the site. Air samples collected inside the building detected no asbestos fibers. One of three dust samples collected inside the building indicated the presence of very low levels of Libby asbestos in surface dust.

Conclusions & Recommendations

Former Workers (prior to 1994)

 Conclusion: People who worked at the W.R. Grace plant before 1994 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.
- Recommendation: Identify former workers and their household contacts (people who lived with them) to evaluate potential health effects.

Current Workers (1994 to present)

- Conclusion: Based on available sampling data, the levels of residual Libby asbestos inside the former processing areas pose no apparent public health hazard to present or future workers. Outside much of the site is paved, so uncovered soil areas containing residual Libby asbestos are limited and do not appear to pose a health hazard. However, a public health hazard could be created in the future if the soil is disturbed through excavation or other sitedevelopment activities.
- Recommendation: Review new information about the site as it becomes available, and develop a management plan for preventing or containing future disturbances of on-site soils contaminated with Libby asbestos.

Past Community

- Conclusion: Although ATSDR continues to review information, currently not enough data are available to determine whether people who lived near the plant were exposed to hazardous levels of Libby asbestos.
- 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 in the community. In other communities, waste vermiculite has 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 Santa Ana site is available on the Internet at the following address:

www.atsdr.cdc.gov/naer/santaanaca

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

City of Orange Main Library 101 N. Center Street Orange, CA 92866 Telephone: (714) 288-2410

Santa Ana Public Library 26 Civic Center Plaza Santa Ana, CA 92701 (714) 647-5250

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 James Durant or Health Communications Specialists Maria Teran-MacIver or Debra Joseph. Callers should refer to the W.R. Grace & Company Santa Ana 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.

