

Vermiculite Northwest Spokane, Washington Fact Sheet – 2009 Update



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The Washington State Department of Health, in cooperation with the Agency for Toxic Substances and Disease Registry (ATSDR), conducted a health consultation to evaluate potential health risks associated with asbestos-contaminated vermiculite ore processed at the former Vermiculite Northwest property in Spokane, Washington. The ore was received from Libby, Montana.

The state health department's preliminary findings about health risks were shared with the community in an April 2004 fact sheet. Since that fact sheet was issued, the agency completed a health consultation report (July 2004). In addition, federal, state, and local agencies including state health have taken steps to address some of the possible past, present, and future exposures associated with the asbestos at the Vermiculite Northwest site.

What is known about Vermiculite Northwest?

The Vermiculite Northwest facility was located on about 1.5 acres at 1318 N. Maple Street in Spokane. It's an area of mixed commercial and residential land use. The facility processed vermiculite ore from the 1940s until it closed in 1974.

The ore used at the former Vermiculite Northwest facility was obtained from a mine in Libby, Montana, which was last owned and operated by the W.R. Grace Company. The ore that came from Libby was contaminated with asbestos. After it arrived at Vermiculite Northwest, it was processed in a furnace where it was heated until it expanded or "popped" like popcorn. This product was cooled and funneled into bags held by workers at the end of a chute.

The resulting product was a lightweight material ideal for insulation and other products. Processing vermiculite was an extremely dusty task; so workers were exposed to high levels of dust that contained asbestos.

What has been done to determine if the site poses a health threat?

Soil samples collected by the Environmental Protection Agency (EPA) in 2000 and 2001 showed that residual asbestos fibers remained at the former Vermiculite Northwest property as well as some adjacent properties. These properties are currently owned by Spokane County and make up the "site". Trace amounts of asbestos were also found in the yards of some nearby homes. Some limited air testing by EPA in 2002 while blowing leaves and digging trenches at the former Vermiculite Northwest property indicated that asbestos can be released into the air.

Improvements have been made in how soils are tested for asbestos since EPA did the residential sampling in early 2000. As a result, EPA will be conducting additional soil testing at residential properties in 2009. Those results will help determine whether the asbestos in soil could pose a health threat to residents.

Building removal and soil testing was completed at the site in 2007. The findings of this most recent testing led Spokane County to fence the site and cover the most highly contaminated part with asphalt to prevent potential exposures to asbestos fibers. Asbestos-containing material does not present a health hazard as long as it is covered. However, it could become a source of asbestos exposure in the future if the property is developed and the asphalt cap is removed or disturbed.

The portion of the site that is not covered with asphalt may also have lower levels of asbestos contamination. EPA will be working with Spokane County in 2009 to further investigate whether asbestos levels in uncovered soils at the site could pose a health threat, and will work with Spokane County for any necessary cleanup.

What is asbestos?

Asbestos is the name of a group of minerals that can separate into long, thin fibers. Asbestos fibers are strong and flexible enough to be spun and woven, and are resistant to heat, fire, and chemical and biological breakdown. Because of these qualities, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and cement products, for example), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings.

What are the health effects of asbestos exposure?

Breathing asbestos fibers can cause asbestosis — a disease that scars and stiffens the lungs and two types of cancer: lung cancer, and mesothelioma, a rare cancer of the thin lining surrounding the lung or abdominal cavity. These diseases do not develop immediately, but can show up 15 to 40 years after asbestos exposure.

Being exposed to asbestos, however, does not mean you will develop health problems. There are many things that contribute to the risk of developing disease. The most important of these are:

- How long and how frequently a person was exposed to asbestos
- How long it has been since the exposure to asbestos

- The amount of asbestos a person was exposed to
- The size and type of asbestos a person was exposed to
- Whether or not a person smokes cigarettes, since asbestos exposure increases the chances of a smoker getting lung cancer
- Whether or not other pre-existing lung conditions are present

A doctor can help you find out if you have health problems from asbestos exposure.

What are the health department's 2004 findings and what actions have they taken?

The health department evaluated whether the Vermiculite Northwest facility affected former workers and their families as well as the nearby community and found:

- A public health hazard exists for former workers in the Vermiculite Northwest facility. Some workers from the facility have been diagnosed with asbestos-related lung disease.
- People who lived with former workers may have been exposed to asbestos fibers carried home on workers' hair, skin, and clothing. Children who played on vermiculite and waste rock piles at the site were also probably exposed to airborne asbestos fibers. There is not enough information available to determine if these exposures were enough to affect people's health.
- People that lived near the facility while it operated (1940s to 1974) may have been exposed to asbestos from plant emissions. There is not enough information available to determine if these exposures were enough to affect people's health. However, several ongoing studies may provide this information in the future.
- Community exposure to asbestos at the former Vermiculite Northwest property

poses no public health threat. That portion of the site is covered with asphalt.

- Individuals within the community could be exposed to asbestos from vermiculite waste rock if it was used as fill material, for gardening, or for paving driveways. Currently, there is not enough information to determine how often this may have occurred.
- A potential health risk may exist for future onsite workers involved in site redevelopment. Small amounts of asbestos fibers released into the air by activities that involve excavation or soil disturbance may pose a health concern to future onsite workers.
- Future redevelopment activities at the site are not a public health concern to the surrounding residential areas if measures are taken to prevent the release of asbestos fibers during construction. Institutional controls, such as deed restrictions, will be placed on the Vermiculite Northwest property to ensure that appropriate measures are used during redevelopment.

The health department took steps to locate and educate former Vermiculite Northwest workers and their families about the asbestos and possible health risks by placing a notice in the local newspaper. Workers and their families that contacted the health department were provided with a packet of information about asbestos and its health effects.

The broader community received a fact sheet about the Vermiculite Northwest property in April 2004, explaining the health concerns regarding asbestos-contaminated vermiculite processed at the facility. Asbestos information was also given to local health care providers. The state health department continues to follow-up on asbestos testing and cleanup work being conducted by the environmental agencies.

What Health Actions Can I Take If I Have Been Exposed to Asbestos?

- **Do not smoke.** Cigarette smoke and asbestos together significantly increase your chances of getting lung cancer.
- Tell your personal or primary care physicians of past asbestos exposure.
- Reduce your future exposure to asbestos.
- **Get flu and pneumonia vaccinations every year.** Regular shots help reduce the chance of lung infections. Caregivers and all household members, whether or not they provide care, also should be vaccinated.

Helpful links:

To view the Department of Health's 2004 report on Vermiculite Northwest:
www.doh.wa.gov/consults

For information on asbestos:
www.doh.wa.gov/CommunityandEnvironment/Contaminants/Asbestos.aspx

For more health information, contact:

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