

Vermiculite scare is worrisome, but not a crisis

Everyone who has worked with grass, plants or flowers has used vermiculite. It is a common soil additive and conditioning material, used in almost every landscaping operation imaginable, including mulch for seed beds, as a medium for rooting plant cuttings and in potting plants.

Early this year, the U.S. Environmental Protection Agency (EPA) made public a troubling announcement. A large amount of the vermiculite used as a soil conditioner and for building insulation taken from a mine in Libby, MT, is contaminated with a particularly toxic form of naturally occurring asbestos called tremolite-actinolite.

No official ban

While he says there is no official product ban, recall or anything of the type, Paul Peronard, on-scene coordinator with the EPA in Denver, says, "I'd be concerned."

Vermiculite was discovered in Libby in 1881 by gold miners. In 1919, Edward Alley discovered its unique properties. In the 1920s, the Zonolite Company formed and began mining vermiculite. By 1963, W.R. Grace bought the Zonolite mining operations. The mine closed in 1990.

While in operation, EPA says, the vermiculite mine in Libby may have produced 80% of the world's supply of vermiculite.

"We think that the Zonolite product from the mine in Libby — and it is only this mine — might have as much as 2 to 3% asbestos in it. We also think that when it is stirred and used, it will release asbestos into the air," Peronard says. He emphasizes that the problem is associated only with products from the Libby operation.

The product could cause asbestosis, a restrictive lung disease which can be fatal. In addition, exposure to asbestos can cause lung cancers, including a cancer of the lung lining called mesothelioma. While lung cancer has a

number of associated causes, asbestosis is uniquely associated with exposure to asbestos. The combination of smoking and exposure to asbestos greatly increases the risk of developing one of these lung cancers.

The EPA is most concerned about people being exposed to airborne asbestos and breathing in the tiny fibers, "If you used the product once or twice, it's probably not a big deal," Peronard says. "If you used this brand (Zonolite) over a period of time, I don't have a solid answer," he says. However, his advice to anyone who suspects they might have a problem is to go to a physician and get their lungs checked.

There is some good news for landscapers, superintendents and grounds managers using vermiculite. Although people can be exposed to asbestos dermally (through the skin) or by ingestion (eating, drinking), these are not major exposure routes and do not pose nearly as great a risk as inhalation.

Outdoor use

Although there is no safe level of asbestos exposure, the fact that grounds crews usually use vermiculite outdoors and it is often used damp (so there is less likelihood of the material floating in the air) bodes well. Of far more concern, it appears, is the use of the material as insulation in homes and businesses.

Currently, the EPA is most concerned about people with Zonolite insulation in homes. W.R. Grace no longer sells the material and has not sold it for several years. However, Peronard notes that the material is still found in commerce. It still might be on the shelves at landscape supply stores or in bags in storage sheds. "We do know it was sold to other companies," he adds. "We don't have a handle on what is still on the shelf."

For more information, contact the EPA Information Center, at 406/293-6194.