

Naturally Occurring Asbestos February 24, 2010

In February 2010, a resident of White County contacted the U.S. Environmental Protection Agency (EPA) with concerns about exposure to naturally occurring asbestos in soil on recently cleared property in his neighborhood. His health concerns about the potential for exposure to naturally occurring asbestos in soil and air from the cleared property, and questions regarding current rules and regulations about naturally occurring asbestos, were referred by EPA to our agency. Naturally occurring asbestos is recognized as a potential public health concern, when asbestos-contaminated soil is disturbed and inhaled into the lungs.

In White County, naturally occurring asbestos has been detected in several locations, where it was historically mined and processed. In 1989, EPA banned all new uses of asbestos; uses established before this date are still allowed.

Asbestos is a fibrous mineral found naturally in some rocks and was processed and used as an insulating product because of its strength and ability to withstand heat. However, when asbestos fibers collect in the lungs, they irritate the lining and can cause scarring, chronic lung diseases, and lung cancer (mesothelioma). Not everyone exposed to asbestos during his or her lifetime will have health effects. Smoking tobacco greatly increases the risk of developing these diseases.

To address the resident's concerns, I reviewed available regulatory and public health information about naturally occurring asbestos, and information provided by the Georgia Environmental Protection Division (GEPD) to residents living adjacent to a former asbestos mine near his area.

In June 2009, GEPD sampled surface soil near the Sall Mountain Company asbestos mine in White County, including four samples from two county baseball fields adjacent to the site. The samples were collected and then analyzed for naturally occurring asbestos. The analysis results were sent to the property owners in August 2009. Of the eight samples collected, naturally occurring asbestos was detected in two of the four samples collected at the mine site. Naturally occurring

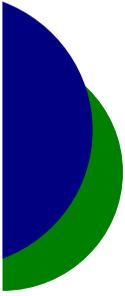
asbestos was not detected in any of the four samples collected from the baseball fields.

Exposure to naturally occurring asbestos can only happen when land is disturbed. Specifically, exposure occurs when asbestos fibers are separated from the minerals in soil and rock formations, and microscopic size fibers are released into air and inhaled into the lungs. Individuals living in areas of naturally occurring asbestos may be exposed to naturally occurring asbestos if soils are disturbed by activities such as:

- Digging activities in soil and rock containing asbestos such as grading or construction activities
- Outdoor home improvement activities (landscaping, driveway construction, etc.)
- Gardening or lawn maintenance in soils containing asbestos
- Disturbing asbestos in surface soil during play and recreation activities
- Vehicle traffic that disturbs soil
- Dust on clothing or shoes brought into the home

Naturally occurring asbestos is not regulated; however, federal laws regulate asbestos mining, transportation and commercial asbestos used in industrial processes and products. In Georgia, there are no regulations or ordinances for naturally occurring asbestos; however, there are regulations that govern land use more generally. City and county governments require building permits. Additional permitting may be required in environmentally sensitive areas, such as near watersheds.

Some states provide "best management practices" or ordinances for land use where naturally occurring asbestos exists. For example, in 2001, the California Environmental Protection Agency, Air Resources Board amended two previously existing Airborne Toxic Control Measures (ATCMs) to include naturally occurring asbestos. These ATCMs regulate construction activities further restricting the asbestos content of material used in surfacing applications such as unpaved roads, parking lots, driveways, and walkways, and require the



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implementation of mitigation measures to minimize emissions of asbestos-laden dust.

Fairfax County, Virginia developed regulations for construction activities in specific soils known to contain naturally occurring asbestos located in isolated regions of the county to reduce the potential for exposure. In Fairfax County, a compliance plan must be submitted and reviewed by the Fairfax County Health Department before beginning any construction activities. The purpose of a compliance plan is to maintain safe working conditions on the construction site and prevent migration of asbestos laden dust off the site.

The compliance plan must include standards of performance for asbestos containing soil sources and monitoring and reporting requirements.

Public Health Recommendations: There are no recommendations.