



## Powhatan Mining Company Site -- Investigation of Old Mining Facility Continues -- Woodlawn, Baltimore County, MD

U.S. Environmental Protection Agency, Region 3

December 18, 2009

### Former Powhatan Mining Company

The U.S. Environmental Protection Agency (EPA) is working with the Maryland Department of the Environment (MDE) to investigate a former asbestos processing facility located in Woodlawn, MD. The former Powhatan Mining Company building is being investigated to determine the extent of asbestos contamination, the structural integrity of the building and potential cleanup options.

Due to past asbestos processing, EPA is also testing the air and soil at the site and on nearby properties. EPA is doing the testing to learn whether past asbestos processing has contaminated the site and surrounding area.

### Work Done to Date

In September, EPA collected 8 air samples from inside and just outside (within 10 feet) of the old facility. EPA also collected 9 onsite soil samples within several feet of the building and a total of 16 soil samples from three nearby residential yards. These sampling results are now back from the lab.

### Results

**Air:** Results are measured in "fiber per cubic centimeter of air" or f/cc. 0.1 f/cc is the occupational permissible exposure level, mainly geared towards industrial operations. Typical ambient, outside air levels for asbestos in urban areas can range from non-detectable to about 0.005 f/cc with an average of about 0.0005 f/cc.

- As expected, samples taken from inside the old facility show elevated levels of asbestos. Samples collected when no activities were taking place in the building ranged from 0.003 to 0.21 f/cc. Samples collected in the front portion of the building with outdoor activities taking place ranged up to 0.077 f/cc.
- Outdoor air samples collected while disturbing the soil using routine activities for that area (such as walking, mowing, raking, gardening, etc) is called activity-based air sampling or **ABS**. Onsite outdoor ABS results found levels ranging from non-detect to 0.17 f/cc.
- Air samples collected outside with no activities taking place ranged from non-detect to 0.0025 f/cc.

**Soil:** In the past, before recent guidance, 1% asbestos in soils was considered by EPA to be elevated. However, current recommendations now call for conducting **ABS sampling**. This way, we see how asbestos is released from the soil into the air, where fibers could then be inhaled (because inhalation is the main concern with asbestos, not ingestion or dermal contact).

EPA collected soil samples to identify areas where elevated levels of asbestos may exist, to help determine if ABS air sampling was needed. Those soil sampling results are:

- Onsite soil samples collected within several feet of the building range from 2% to 8% asbestos.
- Residential yard soil samples show some detections of contamination, generally ranging from non-detect to 4%. The highest detection off-site was about 7%.

### **Indoor Dust and Solid Samples:**

- As expected, vacuumed dust and solid samples from inside the building (solid samples are collected by scooping debris into a bag) also revealed elevated levels; the highest solid sampling value at 26%.

### What do the Results Mean?

Since some of the residential soil samples show elevated levels of asbestos, EPA will be conducting additional testing. Both soil and Activity-Based air sampling will be conducted in various off-site locations and the samples tested for site-related asbestos.

EPA has been asking some nearby residential property owners if samples may be collected from their property.

- ✓ Residential participation is voluntary.
- ✓ Private property samples will not be collected without the owner's permission.
- ✓ Sampling costs will be the responsibility of EPA, not the residents.
- ✓ Property owners will receive a copy of their sampling results.

**Next Steps**

- This week, EPA is conducting a two-day ambient air sampling event that involves 12 sampling stations positioned at three different distances from the site.
- The air samples will be collected over an 8-hour period of time for two days (weather permitting).
- This sampling approach will help determine if the old facility is affecting local air quality or if asbestos detected in air samples is more likely due to normal, background levels resulting from naturally-occurring asbestos rock in the area.
- EPA will be performing Activity -Based air sampling in a few residential yards and may collect a few additional soil samples.
- The sampling schedule depends on weather conditions and permission to enter private property.
- The samples will be sent to a lab for analysis. EPA expects initial results back in 3 to 5 weeks, and confirmed results back in an additional few weeks.
- EPA will continue to work closely with MDE during this investigation.
- EPA considers individual private property information confidential; however, the overall sampling results will again be shared with the community.

**What is Asbestos?**

Asbestos is a naturally-occurring mineral that has been used for a wide range of manufactured goods, such as building materials, friction products like auto parts, and packaging.

Asbestos in soil does not pose a high level of risk unless the asbestos in soil becomes air-borne where it could pose potential health risks. We are all exposed to low levels of asbestos in the air we breathe. However, breathing air with elevated levels of asbestos contamination over a long period of time may cause serious lung problems and cancer.

EPA will work together with the federal Agency for Toxic Substance and Disease Registry (ATSDR) during this investigation. For more health-related information, please visit the ATSDR website: [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov).

**Brief Site Background**

- ❖ The former Powhatan Mining Company facility processed asbestos ore from the 1920s until the late 1970s. (The primary asbestos type processed is called anthophyllite.) Ore was obtained initially from mines in Maryland and later from sources around the country.
- ❖ In 1984, the Powhatan Mining Company declared bankruptcy.
- ❖ The Site is approximately one acre in size and is located off of Windsor Mill Road, within a residential area of northern Baltimore County.
- ❖ In April 2009, MDE requested EPA to conduct a site investigation and cleanup.
- ❖ Through the course of several site visits and the review of previous testing data, EPA determined that an investigation was warranted.
- ❖ EPA is currently conducting both soil and air sampling while evaluating the facility for potential cleanup options.

Southwest view of the building showing the former processing area.



**For More Information**

Visit EPA’s website at: [www.epaossc.net/powhatan](http://www.epaossc.net/powhatan)

Or contact:

- Trish Taylor or David Polish  
EPA Community Involvement Coordinators  
(800) 553-2509  
[taylor.trish@epa.gov](mailto:taylor.trish@epa.gov) or [polish.david@epa.gov](mailto:polish.david@epa.gov)
- Jack Kelly, EPA On-Scene Coordinator  
(215) 814-3112 or [kelly.jack@epa.gov](mailto:kelly.jack@epa.gov)
- Arthur O’Connell, Chief  
MDE Controlled Hazardous Substance (CHS)  
Enforcement Division  
(410) 537-3493 or [aoconnell@mde.state.md.us](mailto:aoconnell@mde.state.md.us)
- Karl Markiewicz, Ph.D.  
ATSDR, Senior Toxicologist  
(215) 814-3149 or [kvm4@cdc.gov](mailto:kvm4@cdc.gov)