

Letter Health Consultation

5th Offsite Residence Indoor Air Sampling

POWHATAN MINING COMPANY

WOODLAWN, BALTIMORE COUNTY, MARYLAND

MARCH 20, 2012

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Agency for Toxic Substances and Disease Registry
Division of Community Health Investigations (proposed)
Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

You May Contact ATSDR TOLL FREE at
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LETTER HEALTH CONSULTATION

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WOODLAWN, BALTIMORE COUNTY, MARYLAND

Prepared By:

Agency for Toxic Substances and Disease Registry
Division of Community Health Investigations (proposed)



Agency for Toxic Substances
and Disease Registry
Atlanta GA 30333

March 20, 2012

Mr. Jack Kelly
On Scene Coordinator
Removal Response Program (Mail Code 3HS31)
USEPA - Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

Dear Mr. Kelly:

Thank you for the opportunity for the Agency for Toxic Substances and Disease Registry (ATSDR) to provide technical assistance to the U.S. Environmental Protection Agency (EPA) for the past two years regarding the investigation of and demolition activities at the Powhatan Mining Company site in Woodlawn, Maryland. This site is a former asbestos manufacturing facility, and asbestos was found on site and in the soils of several nearby properties. Asbestos was also detected in the indoor air of a building on the site that was formerly used for both asbestos drying operations and for personnel to wash and change clothes after work at the facility. This letter health consultation provides ATSDR's public health conclusions and recommendations from our review of the recent indoor air and dust sampling for asbestos in a residence located behind the site and referred to in your email as "fifth offsite house".

The sampling was performed on February 24, 2012. Air samples were collected in 4 rooms on the main floor and 2 rooms in the basement. For carpeted rooms upstairs, a regular vacuum was used for about 5 minutes, and in both carpeted and hard-surface rooms an oscillating fan was moved around the room about 12 inches above the floor to suspend loose dust. Then, the oscillating fan was left running while collecting an air sample from a stationary monitor in each room. Four microvac surface dust samples were collected from various locations in the home including vent and duct work, a lamp, and electronic equipment.

You shared preliminary results with ATSDR on March 6, 2012. Two air samples detected one phase contrast microscopy equivalent (PCMe) chrysotile structure each, resulting in asbestos concentrations of 0.00061 structures per cubic centimeter (s/cc) for each. The other 4 air samples were non-detect for asbestos, with sensitivities of 0.00062 s/cc or lower. All four dust samples were non-detect, reported as less than 2,310 structures per square centimeter (s/cm²) with a sensitivity of 770 s/cm². The sampling methods used are adequate for determining if a health risk from asbestos exposure is possible.

Air sampling included mild agitation of dust and suspension during sampling using oscillating fans, such as might occur during normal activities in the home. Settled dust samples were collected from locations that would accumulate asbestos if significant amounts of asbestos were present in the home.

Mr. Jack Kelly – Page 2

Two of the air samples detected low concentrations of chrysotile asbestos, a type of asbestos different from the type processed at the former Powhatan Mining facility. However, all of the measured air concentrations and sensitivities are below the health-based benchmark concentration for residential reoccupancy developed by EPA Region 2 and partner agencies in the wake of the World Trade Center disaster¹. This value, 0.0009 PCMe s/cc, represents a theoretical excess cancer risk of no more than 1 in 10,000 people exposed continuously for 30 years. The surface dust samples were all non-detect, and the sensitivities were at levels not generally different from background levels in dust.²

ATSDR concludes that the asbestos levels in this home are below levels of health concern. However, due to the home's proximity to a former asbestos processing facility, possible residual levels of asbestos in area, and the low concentrations of chrysotile asbestos found in two of the air samples, the homeowner may consider implementing regular cleaning methods that will prevent any future buildup of dust that may contain low levels of asbestos. These include wet cleaning methods like damp dusting and steam cleaning as well as high efficiency particulate air (HEPA) vacuuming.

Thank you for including ATSDR in your site work. Please do not hesitate to contact me if you have any questions or concerns. I can be reached at (770) 488-0768 or by email at JDyken@cdc.gov.

Sincerely,

[signed]

Jill J. Dyken, PhD, PE
Environmental Health Scientist
Eastern Branch
Division of Community Health Investigations (proposed)

cc:

Lora Werner, ATSDR Region 3

¹ Contaminants of Potential Concern (COPC) Committee of the World Trade Center Indoor Air Task Force Working Group. World Trade Center indoor environment assessment: selecting contaminants of potential concern and setting health-based benchmarks. Contributors from U.S. Environmental Protection Agency, New York City Department of Public Health and Mental Hygiene, Agency for Toxic Substances and Disease Registry, New York State Department of Health, and Occupational Safety and Health Administration. May 2003.

² Millette JR and Hays SM. Settled asbestos dust sampling and analysis. Boca Raton: CRC Press, 1994.