

June 22, 2012

Dear Interested Party,

On April 8, 2011, a list of frequently asked questions (FAQs) regarding asbestos/fibers analysis was developed through the collaboration of the New York State Department of Health's (NYSDOH) Environmental Laboratory Approval Program (ELAP) and Bureau of Occupational Health (BOH), and the NYS Department of Labor (DOL). This FAQ was distributed to all ELAP-accredited asbestos laboratories, as well as posted on the DOL website due to a high level of interest from asbestos-related mitigation companies /consultants, training providers or other interested parties involved in the assessment, sampling and/or analysis of asbestos.

These FAQs, along with responses, were created to help clarify and interpret existing New York State guidance and regulations. However, since that time, we have received numerous inquiries regarding the State's interpretation of requirements pertaining to the testing for asbestos fibers in materials that contain vermiculite. *This informational letter is being sent to provide additional guidance and to revise FAQ # 10 regarding the State's interpretation of standard requirements pertaining to vermiculite.*

Additional Vermiculite guidance:

Material type	Testing Requirements	Explanation
<u>Vermiculite materials used for thermal systems insulation, surfacing materials and other miscellaneous ACM</u> <i>(including but not limited to: existing or new surfacing material, plaster, pipe lagging, and sprayed-on fireproofing)</i>	NYS ELAP Certification Manual Item 198.1 (PLM Friable) may be used.	Since vermiculite materials used for thermal systems insulation, surfacing materials and other miscellaneous ACM (<i>such as existing or new surfacing material, plaster, pipe lagging, and sprayed-on fireproofing</i>) can be more constrained than loose fill, there is less of a public health concern pertaining to airborne asbestos fibers following disturbance.
<u>Vermiculite attic fill, block fill and other loose bulk vermiculite materials</u>	<i>Because there is no currently approved analytical methodology to reliably confirm vermiculite as non-asbestos containing, these materials <u>must be assumed to be contaminated with asbestos and therefore designated as ACM.</u></i>	Vermiculite attic fill, block fill and other loose bulk vermiculite materials cause a greater public health concern for the disturbance and release of asbestos fibers following disturbance.

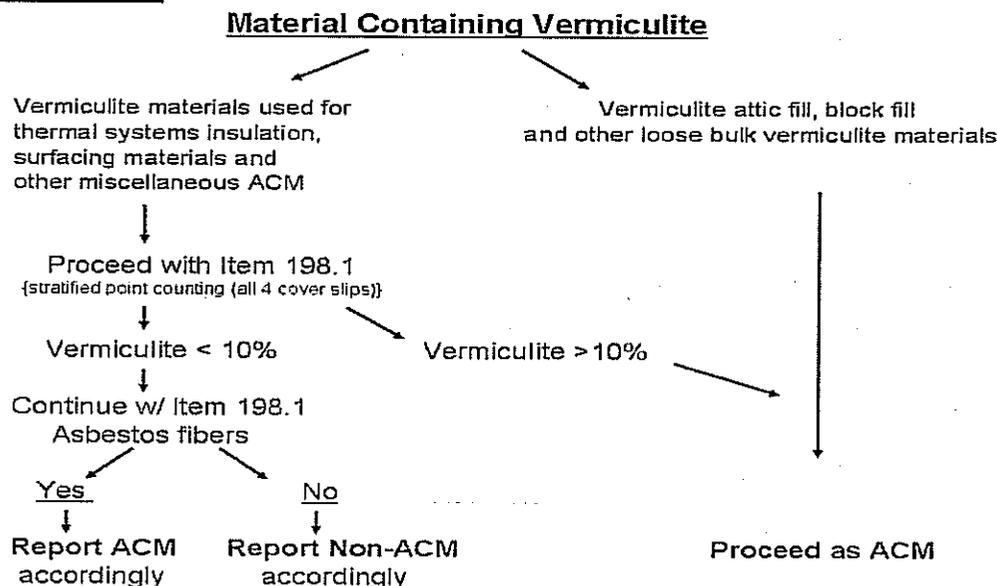
Evaluation of Vermiculite Materials:

Required evaluation criteria of vermiculite materials used for thermal systems insulation, surfacing materials, and other miscellaneous ACM:

Determine percentage of vermiculite using Item 198.1 - stratified point counting (all four cover slips).

- 1) If vermiculite is calculated to be less than (<) 10% of the entire material composition and no asbestos fibers are detected, the material may be reported as non-ACM.
- 2) If ***any asbestos fibers are identified***, analysis must proceed according to Item 198.1 PLM and reported as ACM according to Section 6.3.
- 3) If vermiculite is calculated to be 10% or more (>) of the material, the material must be reported as ACM.

Vermiculite decision tree:



Based upon the above guidance, please find below a revised 2012 FAO # 10:

How can I tell if vermiculite contains asbestos or what sampling methods should be used?

According to the EPA, you should assume that vermiculite insulation contains asbestos. It is recommended that you do not disturb it; or use a certified professional if it needs to be disturbed or removed. According to NYS Industrial Code Rule 56, vermiculite is a suspect miscellaneous asbestos-containing material. Since there is currently no approved analytical methodology to reliably confirm vermiculite as non-asbestos containing, one must assume that vermiculite is contaminated with asbestos and proceed accordingly. However, because vermiculite's asbestos contamination typically ranges from 1% to 5%, vermiculite's contribution to asbestos content of vermiculite materials used for thermal systems insulation, surfacing materials and other miscellaneous ACM (e.g., pipe lagging, sprayed-on fireproofing) may be assumed to be less than 1% if the vermiculite constitutes less than 10% of the total material. Please refer to the appropriate regulation, guidance, manual or methods as necessary for further information. For more information see the EPA website at http://www.epa.gov/asbestos/pubs/verm_questions.html.

If you have any additional questions, please do not hesitate to contact the appropriate State program listed below:

NYS DOH Environmental Laboratory Approval Program : (518) 485-5570 or elap@health.state.ny.us
NYS DOH Asbestos Worker Training Program : (518) 402-7940 or boh@health.state.ny.us
NYS DOL- Division of Safety & Health
Engineering Services Unit - For ICR 56 or Variance inquires: (518) 457-1536 or ESU.SH@labor.ny.gov



Asbestos

You are here: [EPA Home](#) [Chemical Safety and Pollution Prevention](#) [Pollution Prevention & Toxics](#) [Asbestos](#) [Vermiculite](#)
Protect Your Family from Asbestos-Contaminated Vermiculite

Protect Your Family from Asbestos-Contaminated Vermiculite

EPA Action in Libby,
Montana

This fact sheet contains answers to some commonly asked questions about asbestos contamination in vermiculite and vermiculite products.

EPA Region 8 has been working closely with the Libby community to clean up contamination and reduce risks to human health.

Click the following links for printer-friendly versions, in English and Spanish, of the EPA fact sheet "[Protect Your Family from Asbestos-Contaminated Vermiculite](#)" (PDF) (4 pp, 121K, [about PDF](#)) | [en español](#) (PDF) (5 pp, 126K, [about PDF](#)).

If you have vermiculite insulation from Libby in your home, you should be aware of steps you can take to protect yourself and your family from exposure to asbestos.

More Information on
Vermiculite

- [Why should I be concerned about asbestos-contaminated vermiculite insulation?](#)
 - [What is vermiculite?](#)
 - [How can I tell if my insulation is made from vermiculite?](#)
 - [How can I tell if my vermiculite insulation contains asbestos?](#)
 - [Is my family at risk of exposure to asbestos if we have vermiculite insulation?](#)
 - [Will I or members of my family become ill if any of us has personally removed or handled insulation that contained asbestos?](#)
 - [What should I do if I have vermiculite insulation?](#)
 - [What if I occasionally need to go into my attic -- how can I reduce my exposure?](#)
 - [Will the insulation contaminate the rest of my house?](#)
 - [Where can I get information on removal of the insulation?](#)
 - [What if I was exposed to asbestos-containing vermiculite as a contractor or through other activities that may have disturbed vermiculite?](#)
 - [Where can I get more information?](#)
- Additional frequent questions on vermiculite
 - Vermiculite in Garden Products (PDF) (205 pp, 12MB, [about PDF](#))
 - EPA Technical Studies

Why should I be concerned about asbestos-contaminated vermiculite insulation?

A mine near Libby, Montana, was the source of over 70 percent of all vermiculite sold in the U.S. from 1919 to 1990. There was also a deposit of asbestos at that mine, so the vermiculite from Libby was contaminated with asbestos. Vermiculite from Libby was used in the majority of vermiculite insulation in the U.S and was often sold under the brand name Zonolite. If you have vermiculite insulation in your home, you should assume this material may be contaminated with asbestos and be aware of steps you can take to protect yourself and your family from exposure to asbestos.

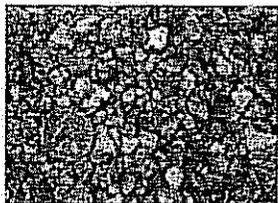
What is vermiculite?

Vermiculite is a naturally-occurring mineral composed of shiny flakes, resembling mica. When heated to a high temperature, flakes of vermiculite expand as much as 8-30 times their original size. The expanded vermiculite is a light-weight, fire-resistant, and odorless material and has been used in numerous products, including insulation for attics and walls. Sizes of vermiculite products range from very fine particles to large (coarse) pieces nearly an inch long.

How can I tell if my insulation is made from vermiculite?

Look at the photos on this website and then look at the insulation without disturbing it. Vermiculite insulation is a pebble-like, pour-in product and is usually gray-brown or silver-gold in color.

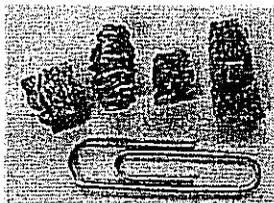
The following photographs show typical vermiculite insulation.



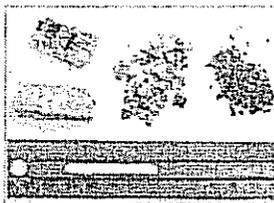
Typical vermiculite insulation; click to view larger version of image



Vermiculite insulation between attic joists; click to view larger version of image



Vermiculite insulation particle size relative to paper clip; click to view larger version of image



Different sizes of vermiculite particles; click to view larger version of image



Typical vermiculite insulation; click to view larger version of image