

### Office of Construction

**Code Compliance Department** 

Information on Vermiculite and Asbestos 3/17/2020

## History

The majority of the world's supply of vermiculite came from the mine located near Libby, Montana, that was closed in 1990 due to high levels of asbestos contamination. Since there is no mechanism to visually distinguish between vermiculite from the Libby mine versus other mines, as well as evidence of inaccuracies by analytical methods used to rule out asbestos contamination, EPA's continued guidance is to assume this material may be contaminated with asbestos. Accordingly, NYS Industrial Code Rule 56 lists vermiculite insulation as a suspect miscellaneous asbestos-containing material.

Typical uses of vermiculite included attic insulation and block fill insulation. Also, vermiculite was used as a component in a variety of other products (e.g. plasters, fireproofing, pipe insulations), and is still used today in some of these products.

#### **New Installations**

Regarding <u>new installations</u> of materials that contain vermiculite (e.g. fireproofing, plasters, various insulations), to document the material is non-ACM, a safety data sheet (SDS) indicating any asbestos content for the suspect material, along with a letter from the manufacturer is necessary, and the letter must document the asbestos content(<=1%) in the suspect material. As per the EPA, the manufacturer must also document that asbestos content was determined by bulk sampling and PLM analysis of the material consistent with the requirements of EPA 40 CFR 61 & 40 CFR 763. Please note that as per OSHA regulations, all hazardous constituents (including carcinogens) must be reported down to concentrations of 0.10% on the manufacturer's SDS for the product.

Provided the building owner retains the SDS and manufacturer letter for the installed products, the newly installed material that contains vermiculite will not have to be bulk sampled and analyzed for future renovations or demolitions, as NYS DOL accepts manufacturer documentation such as an SDS and manufacturer's letter in lieu of bulk sample analysis. For future renovation or demolition work, the SDS and manufacturer's letter must be provided to the firm performing the required asbestos survey, for inclusion with their asbestos survey report.

# **Existing Materials**

Note that for <u>existing</u> materials, even though ACM fireproofing and plasters were banned in the mid-1970s, these materials may have been installed after that date which contain asbestos contaminated vermiculite.

Surfacing Material is defined as a material that is sprayed-on, troweled-on, or otherwise applied to surfaces (such as acoustical or finish plaster on ceilings and walls, and fireproofing materials on structural members, or other materials of surfaces for acoustical, fireproofing, or other purposes.

For surfacing material bulk samples, if vermiculite is found to be present (regardless of the amount), one of the two ELAP approved methods must be used for the detection and quantitation of asbestos



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content. If vermiculite is not present, then Items 198.1 or 198.6 must be used, as appropriate, and based upon the presence of organically-bound or microscopically interfering materials.

Other material types that may contain vermiculite: Currently, the two approved methods have been validated and approved for use on Surfacing Material. Therefore, other building materials that are considered thermal systems insulation (TSI), other presumed ACM (PACM) or miscellaneous suspect ACM containing greater than 10% vermiculite must continue to be analyzed by Item 198.1 or 198.6.

Please be reminded that attic fill, block fill or other loose bulk vermiculite materials, must be designated and treated as ACM as described in July 9, 2013 interim guidance letter.

Here is pertinent text from the revised NYS DOH ELAP guidance on vermiculite materials:

"You are reminded that this interpretation of vermiculite-related guidance does not prohibit the use or application of vermiculite materials, but instead applies during renovation and/or demolishing of structures when the origin of the vermiculite material is unknown. Note that NYS Industrial Code Rule 56-5.1(c) allows for other documentation, such as manufacturer documentation that adequately documents that a material is non-ACM (e.g., MSDS compliant with all pertinent federal regulations through EPA and Occupational Safety and Health Administration (OSHA)), in lieu of bulk sample analysis. This documentation, along with any available documentation indicating the origin of the vermiculite material being used, should be shared with the building owner(s) for future reference and consideration during renovation and/or demolishing that may be required at their building in order to avoid future concerns."