Vermiculite Sampling

Asbestos was used mainly from 1950 to 1980. The health hazard is present when the asbestos fibers are stirred and are found in the air. Indeed, respiration of the fibers can cause asbestosis, mesothelioma and several types of cancers. Six minerals are classified as asbestos: chrysotile, amosite, crocidolite, anthophyllite, tremolite and actinolite. The last two types are the main ones found in the vermiculite insulation.

To Protect Yourself

As long as the absence of asbestos has not been confirmed, it is imperative to protect yourself and your environment from the spread of asbestos fibers. To do this, use a P100 class half-mask and disposable protective clothing (or painter's suit, all available at most hardware stores) before entering the area. Air exchanges with the living area must be minimized.

The Sampling

Vermiculite in the attic
For a surface of 1000 ft² or less, the sampling is done in 3 points. For a greater surface, the number of sampling must be increased, for up to 9 samples for a surface of over 5000 ft². It is important to thorougly scrape the bottom, as asbestos tends to settle there. The ideal amount to collect is 2/3 cup per point, or about 2 cups (500 ml) in total. The samples may be collected in the same bag if they come from the same place. Otherwise, they will be considered as separate samples.

Vermiculite in a wall
The sampling is done in 3 different depths. The number of required samples must be evaluated according to the surface as mentioned before. The samples can be inserted in the same bag as long as they are taken from the same spot.

Sampling Containers
To make your sample, you must have a hermetically sealed bag (Ziploc type bag). Once the sampling is complete and before leaving the sampling area, empty the excess air in the bag, double it and clean the outside to remove any dust that may be stuck to the bag. If necessary, do not hesitate to reinforce the bag with duct tape or other.

Please do not put your request for analysis in the sampling bag.

The Department of Asbestos and Industrial Hygiene thanks you for your trust and remains at your disposal to provide you with further information on the subject.

* In Quebec, "material, product, flocking or insulation contains asbestos when the asbestos concentration is at least 0.1% (v/v)." Occupational Health and Safety Regulations - Safety Code for Construction Work - Occupational Health and Safety Act (chapter S-2.1), June 6, 2013.

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Sampling of Construction Material

1. Put on your protective equipment (see "Protecting" section on previous page).
2. To minimize the release of fibers into the air, moisten/wet the surface with a spray bottle containing water and a little dish soap.
3. Use proper tools to minimize equipment disturbance and therefore release of potentially hazardous fibers into the air. (Favor the utility knife to the hammer!) Take only the minimum sample required (see description at the bottom of this page), while making sure that all the layers that make up the material have been taken.
4. If taking more than one sample, thoroughly clean the tools between each sample and at the very end using wet wipes.
5. Place each sample in a clean individual bag ("Ziploc" freezer type) and seal it well. Identify your sample on the bag (your name and/or place of sampling). As a precaution for transport or mailing, we recommend that you double the bag(s).
6. Use tape, caulk or other effective means to seal the sampling spots (holes). Use damp wipes to gently wipe any residual dust.
7. All potentially contaminated waste (for example, wet wipes) is placed in an airtight bag identified and shipped to the laboratory with the samples, where we will dispose of it in a safe manner.

Required Material Quantity for Analysis:

- For floor tiles, plaster/cement, roofing, insulating papers, etc., a piece of 5cm x 5cm or 2” x 2” **of each layer of material** is sufficient.
- For suspended ceiling tiles, insulators for boilers or pipes, gypsum insulation, etc., a volume of about 1 cubic inch (1 x 1 x 1 inch) is adequate. (2.2cm x 2.2cm x 2.2cm)
- Finally, for paints, sealants, plasters for joints, etc., a sample of 1.5cm x 1.5cm or 0.5 square inch is sufficient.

Please do not put your request for analysis in the sampling bag.

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