

Identification & Reporting on Vermiculite Insulation

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In a one week period early this month (Feb. 2002) I inspected two homes with very little attic insulation. Unfortunately the insulation was vermiculite. It has been a year or so since I encountered UNCOVERED vermiculite, and I paused during both these inspections to make a call to an insulation firm whose work I check semi-annually. I called to find out if they could add insulation over the vermiculite. The response from the insulator made my reporting tasks more complex.

Vermiculite was a very common attic and wall insulation for decades. Unfortunately much of the vermiculite is slightly contaminated with asbestos. Recent statements by public and occupational health officials indicate that there are likely health risks for persons working in or around vermiculite insulation. ASHI® Standards of Practice do NOT require us to report on the presence of asbestos, or the adequacy of the insulation, but the Standards DO require us to inspect and describe the attic insulation.

The response from the insulator confirmed what I feared. His crews can add insulation over the vermiculite, but ONLY if they do not have to disturb it in any way. Unfortunately in both cases this was NOT the situation. The first house had a floored attic with knob & tube wiring in the vermiculite below the floor. Rewiring, plumbing, etc. needed to be done, as well as sealing many air leaks around plumbing stacks, etc. (attic bypasses) The buyer was very interested in finishing the large attic into additional living space. The second house had an unfloored attic, but would need insulation baffles (air chutes) at the eaves as well as detail work around the plumbing stacks, and other attic bypasses. (Sadly, it also had a furnace with elevated CO, and a radon level of 4.5)

The insulation contractor indicated that it was most likely that the vermiculite would need to be REMOVED by an asbestos abatement firm and he referred me to a state certified local company.

The coincidence of two vermiculite cases in one week motivated me to review the literature on vermiculite and asbestos. Wow! This is a hot topic, both locally and nationally. Lots of vermiculite from the Libby, MT mine was processed in Northeast Minneapolis. Both W.R Grace and B.F. Nelson had plants that heated the raw material to create the insulation. (Heating vermiculite causes it to expand like popcorn to form the shiny low density particles used for insulation and gardening). The insulation from W.R. Grace was sold under the brand name "Zonolite attic fill".

Both the US EPA and Minnesota Dept. of Health (MDH) have lots of information about vermiculite and asbestos on their web sites. Perhaps the most useful webpage is on the Minn. Dept. of Health site entitled "Asbestos and Real Estate" www.health.state.mn.us/divs/eh/asbestos/house/realestate.html A few quotes from the site may be helpful. "There's no known safe level of asbestos exposure." "Removing asbestos insulation is expensive. In Minnesota, depending on the size of the job, you may have to hire a specially licensed contractor employing specially trained, certified workers. And MDH recommends using a licensed contractor even in situations where it isn't required by law."

MDH continues "You should be aware that, because of the physical characteristics of vermiculite insulation, it's unlikely that any asbestos is actually being released into the air. And if the vermiculite is sealed off from the living spaces in your home - behind walls or floor boards, or in an attic that's vented to the outside - your risk of exposure is low. The best advise would be to leave it alone."

The enclosed photos show some of the insulation I have seen in the past 2 years. I'll be happy to e-mail the color version of these photos to you. Contact me at rhankey@mn.rr.com.

Obviously, that health warning means that home inspectors shouldn't DISTURB the insulation. Unfortunately it also means just what I learned from the insulating contractor. Work in the attics of homes with vermiculite can get complicated and expensive. Given these recommendations, I have the following suggestions for report writing when UNCOVERED vermiculite insulation is found in houses with inadequate attic insulation or where it is likely that future work will disturb vermiculite insulation.

1. Report the vermiculite insulation as a suspected asbestos containing material (ACM)
2. Report that if additional insulation is needed, or another other work is needed in the attic (or walls with vermiculite), that asbestos abatement by a licensed asbestos contractor will likely be needed.
3. Under no circumstances should the vermiculite be disturbed or sampled by anyone other than a licensed asbestos contractor.
4. Refer clients and real estate agents to the Minnesota Dept. of Health website or call 651 215 5800

Additional resources:

EPA Fact Sheet "Asbestos in Vermiculite Insulation" www.epa.gov/opptintr/asbestos/insulation.htm

Seattle Post-Intelligencer Special Reports www.nwsourc.com/uncivilaction/asbe24.shtml