

## TECHNICAL BULLETIN

DATE: January 14, 2008

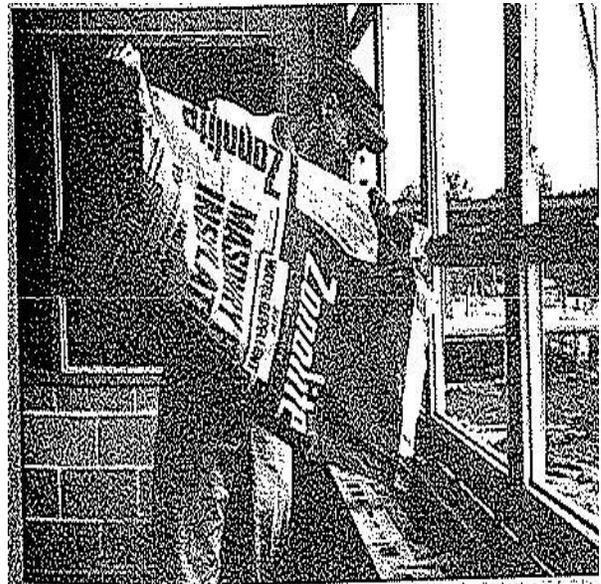
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SUBJECT: Vermiculite Sampling and Abatement Work

Vermiculite insulation has been used in various applications, including the following: attic insulation; wall insulation (behind/within hard plaster/gypsum board systems, within masonry block cores, and within cavity between layers of masonry); and beneath gymnasium floors. Note that when found within cavity, it is possible that vermiculite may also be in several layers of the brick facade or veneer due to installation methods for the insulation. The following protocols shall be used for sampling and removal of vermiculite insulation regardless of its application.



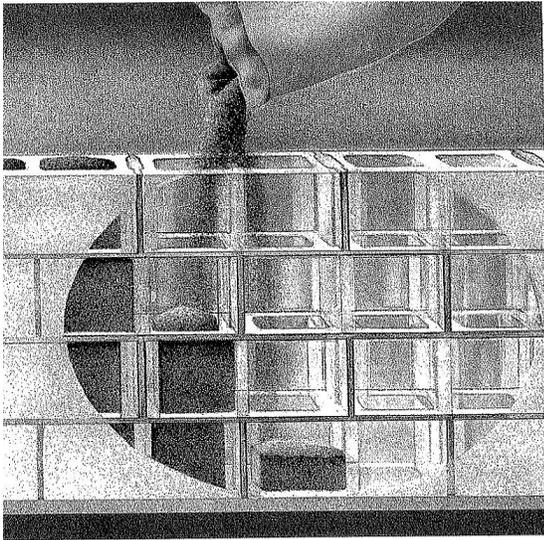
### **Sampling Protocol:**

During Pre-Demolition AMS, surveyors should be looking for vermiculite insulation in all construction units built in or after 1950. For Pre-Renovation AMS, surveyors should either verify its existence or assume that vermiculite insulation is present in suspect areas and assumed to contain asbestos. At a minimum, one (1) exterior wall system and one (1) interior auditorium/gymnasium wall system per construction unit should be checked for presence of vermiculite. The following samples (taken from base of area(s) in question) shall be procured from each construction unit:

1. Three (3) samples from 3 separate areas in bulk sample vials for screening purposes (analyses by PLM); and
2. One (1) gallon baggie full of vermiculite insulation (analysis by Carb 435 Method). Each baggie shall include aliquots from at least 3 randomly spaced locations.

If sampling material in wall, procure samples from base of wall systems. Drill hole (using a  $\frac{3}{4}$  x 12 inch bit) from interior side of masonry block to space within masonry block (within a foot of floor); after allowing material to pour into baggie, plug hole with caulking. If no vermiculite is found within masonry block core, drill a second hole approximately 6 inches above initial hole;

ensure that drill bit penetrates width of masonry block into cavity existing between masonry block and brick facade. After sampling has been completed, plug both holes with caulking. Since conduits are at times installed within masonry block cores and cavities, exercise caution during drilling activities to avoid portions of wall systems likely to have been used for this purpose. Due to amount of dust that is created during this sampling, use a HEPA equipped vacuum during sampling episode.



If sampling material in attics, use metal scoop and ensure that each aliquot includes full depth sampling of vermiculite. Asbestos fibers have been known to work their way to the bottom of vermiculite insulation.

Clients should be informed that laboratory results will be available within 2 weeks; note that while quicker analyses are possible, it may cost considerably more for shorter turn-around times.

### **Abatement Protocol:**

Removal of vermiculite insulation shall be conducted within negative pressure enclosures that include decontamination areas (per Section 02080/02 82 13). Vermiculite insulation shall be properly packaged, labeled, and disposed as regulated asbestos-containing material. Contaminated materials to be removed from these work areas (e.g., wood flooring and/or masonry materials) which cannot be properly decontaminated shall be disposed as contaminated waste.

If an abatement project does not include removal of all vermiculite insulation from a particular area (e.g., installation of a new door through an exterior wall system), abatement design shall include a method for enclosing vermiculite insulation which cannot be removed from adjacent spaces (e.g., spray foam). Owner/Architect should be informed that adjacent wall systems will not have the same insulation rating it had prior to start of work since it is impossible to prevent insulation (or portion thereof) from pouring out of adjacent areas.