



FREQUENTLY ASKED QUESTIONS ASBESTOS DECISION-MAKING - SURVEY NOB'S

What are non-friable organically bound (NOB) materials? And what is the significance of NOBs in an asbestos building survey?

NOBs include building materials such as floor tile, linoleum, mastics, caulks/sealants, adhesives, and roofing materials where the asbestos fibers are tightly bound in an asphalt or vinyl matrix. These building materials are non-friable, not usually significantly damaged, and do not represent an asbestos hazard to building occupants when not disturbed by renovation or demolition. Their significance is that NOB materials can still be prevalent in large quantities in buildings which have undergone active asbestos abatement and/or ACM management by an Asbestos Operations and Maintenance (O&M) Plan.

What is the problem associated with the laboratory analysis of NOB materials?

NOBs usually contain small asbestos fibers (both in length and size) and fibers may not be detected by Polarized Light Microscopy (PLM) (i.e. the OSHA reference method for asbestos bulk sample analysis). Studies continue to demonstrate, PLM analysis of NOBs do not provide consistently reliable results (*false negatives occur*). As a result, NOBs are listed as a restriction/limitation in every asbestos survey when only PLM analysis is performed.

What is quantitative Transmission Electron Microscopy (TEM)?

TEM re-analysis of NOBs is the standard of care which should be implemented to remove the restriction/limitation detailed in asbestos surveys. TEM uses 10,000x magnification (compared to 400x magnification for PLM) and can detect and identify even the smallest asbestos fibers. TEM re-analysis of NOBs demonstrating negative asbestos content by PLM is not mandated by the EPA, AHERA, OSHA and most state asbestos regulations. However, TEM analysis of NOBs is mandatory by regulation in the states of NY, NJ, ME and SC.

What should I do?

Know the restrictions and limitations of your asbestos building surveys. Have your asbestos consultant include, as an extra cost line item, TEM re-analysis of representative NOB samples. Verify by TEM the negative asbestos content of NOBs from past surveys prior to initiating renovation/demolition operations in your facilities.

When you need professional help or advice, email Alan Sutherland, CIH, CHMM at a.sutherland@aetinc.biz or call 610-891-0114. We provide nationwide services; phone consultations are free. Check out the full range of environmental contracting/consulting services we provide at our website www.aetinc.biz.