



Surveys and Inspections

QUESTION: **When are asbestos surveys required?**

ANSWER: **ALWAYS**

New York State, OSHA and the EPA all require that asbestos and asbestos containing materials are identified prior to commencing work.

This applies to work involving:

- Demolition
- Renovation
- Remodeling
- Repair

The survey requirement is regardless of construction date. New York State and OSHA both require building owners to exercise “due diligence” in identifying the location and quantity of asbestos containing materials, presumed asbestos containing materials or suspect materials.

Furthermore, the EPA simply states that asbestos must be identified prior to commencing renovation or demolition work.

This is not only a disposal and handling issue, but a hazard communication and health and safety issue. All parties involved are obligated to inform, train, and protect their employees from potential hazards, to include asbestos exposure. Additionally, to disturb asbestos without adhering to the EPA regulations is a criminal offense. Individuals and corporations can and have been charged with Federal felonies and steep monetary fines.

The following pages will provide some background information, an outline of the regulations, and some of the actual pertinent guidance. We hope that this information will help all concerned parties gain a better understanding of the regulatory survey and inspection requirements.

General Intent

The general intent of this document is to inform building owners, general contractors, contractors, trades and employers of the rules and regulations governing their responsibilities pertaining to hazard communication and survey requirements when asbestos, presumed asbestos or suspect materials are present within a building or structure prior to commencing any demolition, renovation, remodeling or repair work.

Introduction

Asbestos is a generic term for a group of regulated fibrous minerals which have been commercially mined throughout the world. Asbestos has been used in many applications for thousands of years and in the last century has been used extensively in building materials. Asbestos was used for many reasons in building materials. The three primary reasons for asbestos use were; it is light and strong, impervious to heat and chemicals (which made it virtually indestructible), and it was inexpensive. However, asbestos is a known carcinogen. Asbestos, when left undisturbed poses little risk. It is when asbestos is disturbed and becomes airborne that it has the potential to cause lung disease, such as asbestosis and lung cancer, or Mesothelioma.

Please note that asbestos-containing products are not banned in the US and are still available for purchase today. Additionally, asbestos may be a contaminant in other minerals like Talc and Vermiculite and as such are not typically identified as being present by manufacturers.

In New York State the inspection and survey, abatement and management of asbestos is controlled and governed by three agencies. The Environmental Protection Agency (EPA), The Occupational Safety and Health Administration (OSHA) and The New York State Department of Labor (NYSDOL). In order to understand the requirements and the role of each agency, it is important to understand what each government agency oversees. Although each agency may overlap or repeat what another agency states they each have a primary role, and within each regulation may often refer to each other. The task of sifting through multiple regulations promulgated by multiple agencies can be frustrating and confusing. However, it is important to realize that when multiple rules exist, some of which may be substantially similar, the most stringent, or most restrictive, rules must be followed. An illustration of this would be that the NYSDOL grants certain exemptions from the requirement to perform an asbestos survey on buildings or structures within New York State, those constructed after January 1, 1974 and agricultural buildings for example (although "due diligence" is always required to prevent the disturbance of asbestos and therefore these exemptions may not offer complete exemption). However, the EPA states that all buildings except residential buildings having 4 or fewer dwelling units are required to have surveys prior to demolition or renovation. Therefore, you would be required to follow the EPA requirements because they are more stringent.

Note, the use or practice of applying survey information from other structures or buildings of similar construction types and dates is not an acceptable survey practice by any regulation as each regulation clearly indicates the singular context in reference to work site, building, structure or facility. Therefore, the determination of homogeneous materials (that may be used to indicate that a material is negative) is limited to the singular work site, building, structure or facility.

Below is a brief description of each agency and its primary role.

The Environmental Protection Agency (EPA) is responsible for just that, protection of the environment. The two entities of the EPA are NESHAP and AHERA.

EPA NESHAP which stands for National Emission Standards for Hazardous Air Pollutants is concerned about visible emissions, fiber releases and disposal of asbestos during renovation and

demolition projects. EPA NESHAP does have regulations involving asbestos removal and engineering controls but these means and methods are not as stringent as NYSDOL.

EPA AHERA which stands for Asbestos Hazard Emergency Response Act is responsible for asbestos inspections and management within elementary and secondary public and private schools. It is also the standard for survey inspections, and analysis of asbestos containing materials (ACM).

Occupational Safety and Health Administration (OSHA) is responsible for worker protection. OSHA not only governs the rules and regulations around worker protection for abatement workers but also for employees working adjacent to asbestos abatement projects. Also included in OSHA are asbestos abatement means and methods that are more stringent than the EPA, but not as stringent as the NYSDOL.

The New York State Department of Labor (NYSDOL) governs asbestos abatement means and methods and protection of the public during asbestos abatement projects. NYSDOL has very specific rules and regulations in regards to asbestos abatement, removal practices, and engineering controls. NYSDOL is considered to have the most stringent rules in regards to asbestos abatement.

Below is a brief overview of the regulations, following the outline, definitions are provided as well as the actual regulations as written within each standard, regulation or code.

NYSDOL Industrial Code Rule 56 Survey Requirements

- **When is the survey required?**
 - Prior to demolition, renovation, remodeling or repair work of a building or structure or portions thereof that will be impacted by the demolition, renovation, remodeling or repair work.
 - If ACM, PACM or Suspect miscellaneous ACM is present that may be impacted by the work, no demolition, remodeling, repair or renovation work can commence prior to the completion of the asbestos abatement portion of the project.
- **Who is required to perform the survey?**
 - A NYSDOL Licensed Asbestos Contractor utilizing NYSDOL Certified Inspectors.
- **Who is exempt from NYSDOL survey requirements?**
 - Agricultural building
 - Buildings or structures constructed after January 1, 1974.
 - Structure certified in writing to be structurally unsound.
 - Owner of one and two-family dwellings who contracts for, but does not direct or control the work.
 - The owner's agent (contractor) is however still required to obtain a survey.
- **What is the required scope of the survey?**
 - A thorough inspection of all PACM, Suspect miscellaneous ACM, or asbestos material.
 - Identify and assess with "due diligence" the locations, quantities, friability and condition of all ACM, Suspect miscellaneous ACM, PACM, or asbestos material.
 - Suspect miscellaneous ACM and PACM assumed to be ACM until proved otherwise via bulk sample analysis.
 - Bulk sample analysis must meet Federal and NYS ELAP requirements
 - Survey report must be on-site during all work. See subpart 56-3.4.
 - Per NYS Code Rule Guidance Document v2.0
 - "Regardless of construction date, Building Owner 'due diligence' is always required for identification and assessment of ACM"
 - "ACM products can still be purchased and installed today... Thus, a survey of the affected area for suspect materials is always warranted."

OSHA Survey Requirements

- **When is the survey required?**
 - Prior to commencing work in areas containing ACM and PACM the building/facility owner shall identify the presence, location and quantity of ACM and/or PACM.
 - Building/facility owner shall notify the presence, location and quantity of ACM/PACM to the following:
 - Prospective employers; Employees of the owner; Employees of employers working within or adjacent to areas containing ACM/PACM; Tenants who will occupy areas containing such material.
- **Who is exempt from OSHA survey requirements?**
 - Entities to which the OSH Act does not apply
- **Who is required to perform the survey?**
 - Accredited inspector
- **What are the required criteria to rebut a PACM designation of a material?**
 - A completed AHERA inspection that demonstrates material not more than 1% asbestos
 - Bulk sample analysis that demonstrates material is not more than 1% asbestos
- **What is the required scope of the survey?**
 - Identify the presence, location and quantity of ACM and/or PACM.

EPA (NESHAP) Survey Requirements

- **When is the survey required?**
 - Prior to commencing demolition or renovation, in the affected facility or part of the facility must be thoroughly inspected for asbestos.
- **Who is exempt from EPA (NESHAP) survey requirements?**
 - Residential buildings having 4 or fewer dwelling units
- **Who is required to perform the survey?**
 - Accredited inspectors
- **What is the required scope of the survey?**
 - Required regardless of construction date
 - Identify the presence of asbestos

EPA (AHERA)&(ASHARA) Survey Requirements

- **When is the survey required?**
 - Public and private elementary and secondary schools.
 - Perform original inspection and re-inspection every 3 years.
- **Who is exempt from EPA (AHERA) survey requirements?**
 - EPA (AHERA) only applies to public and private elementary and secondary schools (K-12)
 - The standard sampling and testing protocol for all surveys
- **Who is required to perform the survey?**
 - Accredited inspectors
- **What is the required scope of the survey?**
 - Identify all locations of friable and non-friable asbestos containing building material.
 - Written assessment stating condition of asbestos and suspected asbestos.
 - Periodic visual inspection every 6 months of all known or suspected asbestos containing building material.
 - Required regardless of construction date

Regulatory References

Selected Definitions

Asbestos-containing building material (ACBM) means surfacing ACM, thermal system insulation ACM, or miscellaneous ACM that is found in or on interior structural members or other parts of a school building.

ACM: (Asbestos Containing Material). Any material containing greater than 1% of asbestos.

AHERA: Asbestos Hazard Emergency Response Act.

Asbestos: Any naturally occurring hydrated mineral silicate separable into commercially usable fibers, including chrysotile (serpentine), amosite (cumingtonite-grunerite), crocidolite (riebeckite), tremolite, anthophyllite and actinolite.

Asbestos Survey: A thorough inspection for and identification of all PACM, suspect ACM, or asbestos material throughout the building/structure or portion thereof to be demolished, renovated, remodeled, or repaired. (See Subpart 56-5)

ASHARA: Asbestos School Hazard Abatement Reauthorization Act.

Demolition: The wrecking or removal of any load-supporting structural member of a building or structure.

EPA: The United States Environmental Protection Agency.

Friable: Any material that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure, or is capable of being released into the air by hand pressure.

Inspection: means an activity undertaken in a school building, or a public and commercial building, to determine the presence or location, or to assess the condition of, friable or non-friable asbestos-containing building material (ACBM) or suspected ACBM, whether by visual or physical examination, or by collecting samples of such material. This term includes reinspections of friable and non-friable known or assumed ACBM which has been previously identified. The term does not include the following:

- a. Periodic surveillance of the type described in 40 CFR 763.92(b) solely for the purpose of recording or reporting a change in the condition of known or assumed ACBM;
- b. Inspections performed by employees or agents of Federal, State, or local government solely for the purpose of determining compliance with applicable statutes or regulations; or
- c. visual inspections of the type described in 40 CFR 763.90(i) solely for the purpose of determining completion of response actions.

Multi-employer Work Sites: Any demolition, renovation, remodeling or repair project work site, which includes work covered by this part, where more than one employer is reasonably expected to be on-site during the project.

NESHAP: National Emission Standards for Hazardous Air Pollutants (40 CFR Part 61).

Non-Friable: Any material that when dry, can not be crumbled, pulverized, or reduced to powder by hand pressure, and is not capable of being released into the air by hand pressure.

Non-Friable Organically Bound (NOB) Asbestos Material. Non-friable asbestos materials embedded in flexible-to-rigid asphalt or vinyl matrices, including but not limited to flooring materials, adhesives, mastics, asphalt shingles, roofing materials and caulks.

OSHA: The Occupational Safety and Health Administration.

Presumed Asbestos Containing Material (PACM): All Thermal System Insulations and Surfacing Materials found in buildings constructed no later than 1980. PACM is considered to be ACM unless proven otherwise by appropriate bulk sampling and laboratory analyses. Per 1926.1101(g)(8)(i), although not included in this definition the removal of vinyl and asphalt flooring materials, when the absence of ACM has not been verified, in buildings constructed no later than 1980, the work shall be performed in accordance with 1926.1101.

Regulated Asbestos-Containing Material (RACM): Friable ACM or PACM, Category I Non-friable ACM that has become friable or has been or will be subjected to sanding, grinding, cutting or abrading, or Category II Non-friable ACM that has a high probability of becoming or has become

crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

Remodel: For purposes of this code, remodel shall mean the same as renovation.

Renovation: The altering of an existing building/structure, or a portion of building/structure components or systems, including the stripping, removal or abatement of ACM from a building or structure. Operations in which load supporting structural members are wrecked or taken out are demolitions.

Suspect Miscellaneous ACM. Any suspect asbestos-containing material that is not PACM, such as floor tiles, ceiling tiles, mastics/adhesives, sealants, roofing materials, cementitious materials, etc. A listing of typical suspect miscellaneous ACM can be found in Subpart 56-5. All suspect miscellaneous ACM must be assumed to be ACM, unless proven otherwise by appropriate bulk sampling and laboratory analyses, regardless of installation date.

Surfacing Material: 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 on surfaces for acoustical, fireproofing, or other purposes).

Thermal System Insulation,(TSI): Insulation material applied to pipes, fittings, boilers, breeching, tanks, ducts or other structural components to prevent heat gain or loss.

All definitions were taken directly out of The Environmental Protection Agency (EPA) regulations 40 CFR part 61 subpart M or 40 CFR part 763 subpart E, The Occupational Safety and Health Administration (OSHA) standard, 29 CFR Subpart Z 1926.1101 or The New York State Department of Labor (NYS DOL) industrial code rule 56, subpart 56-2.

Asbestos Survey Requirements

The following rules and regulations are only portions of the applicable standards that the authors thought were relevant to the information that is being conveyed in this document and is specific to the identification of asbestos hazards. On January 24 of 2009 NYSDOL issued a revised guidance document. Portions of this document are included below.

NYSDOL Industrial Code Rule 56

56-1.4(c) All non-asbestos contractors on a demolition, renovation, remodeling, or repair project, which includes work covered by this Part, are responsible to notify the building owner or their representative, upon discovery of PACM or suspect miscellaneous ACM that has not been identified by the asbestos survey per this Part, or has not been identified by other inspections as per current OSHA or EPA requirements. The presence, location, and quantity of newly discovered material, shall be conveyed within twenty-four (24) hours of discovery to the building owner or their representative, as well as to all other employers at the work site. All activities shall cease in the area where the PACM or suspect miscellaneous ACM is found, until a licensed asbestos contractor appropriately assesses and handles the discovered materials. Disturbance of PACM, ACM and asbestos material (known and assumed) at the work site, is prohibited by any non-asbestos contractor.

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 11 (56-1.4)

Only entities that engage in any portion of an asbestos project, or employ persons engaged in any portion of an asbestos project must be licensed as per Code Rule 56. A property owner or prime contractor that hires an asbestos contractor, but does not directly control the work, is not required to be a licensed asbestos contractor.

In addition, if employees of the general contractor or construction manager perform the duties of any of the nine asbestos handler categories as listed in ICR 56-3.2, the individual should be appropriately trained and NYS DOL asbestos handler certified, as well as the firm being currently NYS DOL licensed as an asbestos contractor.

Section 1.4 also includes contractor responsibilities (asbestos and non-asbestos contractors) at multi-employer work sites.

Similar to US OSHA, any contractor performing a general supervisory role on any renovation, remodeling, demolition, or repair project is responsible for informing all contractors under their direct general supervision and control that any disturbance to ACM, PACM and asbestos material (known or assumed) at the site is prohibited by any contractor other than the asbestos contractor.

Also, the contractor performing the general supervisory role shall require all asbestos contractors under their direct general supervision and control to be in compliance with Code Rule 56. (This requirement does not include entering asbestos project work areas to check on the asbestos contractor.)

56-1.4(d) Prior to commencement of any demolition, renovation, remodeling or repair project, which includes work covered by this part, the building owner or their designated representative shall inform all employers reasonably expected to be at the work site during the project, about the presence, location and quantity of PACM, ACM and asbestos material (known and assumed) within the portion of their building or structure impacted by the project.

56-1.4(e) All contractors performing a supervisory role on a demolition, renovation, remodeling or repair project, that includes work covered by this Part, shall prohibit disturbance of PACM, ACM or asbestos material (known or assumed) by non-asbestos contractors at the work site under their direct supervision and control, and shall require all asbestos contractors at the work site under their direct supervision and control to be in compliance with this Part.

56-5.1(a) Asbestos Survey Required. An owner or an owner's agent, except the owner of one and two-family dwellings who contracts for, but does not direct or control the work, shall cause to be conducted, an asbestos survey completed by a licensed asbestos contractor using inspectors certified in compliance with Section 56-3.2(d), to determine whether or not the building or structure, or portion(s) thereof to be demolished, renovated, remodeled, or have repair work, contains ACM, PACM or asbestos material. This asbestos survey shall be completed and submitted as indicated in Subdivision (g) of this Section, prior to commencing work. All such asbestos surveys shall be conducted in conformance with the requirements of Subdivision (e) of this Section.

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 115 (56-5.1)

The OSHA construction standard (29 CFR 1926.1101) indicates that "before work subject to this standard is begun, building and facility owners are to determine the presence, location, and quantity of ACM and/or PACM at the work site." In addition, as per OSHA, the building/facility owner is responsible for notification of the presence, location and quantity of ACM and/or PACM, at the work sites in their buildings. This notification shall be made to bidders, employees, other employers and tenants at the work site within the areas or adjacent to areas containing such materials. This identification and notification requirement is not limited by the date of construction of the building or facility. The Code Rule 56 survey requirements have been upgraded for buildings constructed prior to January 1, 1974, to be in compliance with OSHA requirements. Regardless of construction date, Building Owner "due diligence" is always required for identification and assessment of ACM, as per OSHA requirements.

Only a certified asbestos inspector, that works for a currently licensed asbestos contractor firm may perform the required ICR 56 survey/inspection. This certified inspector may utilize information within existing building surveys/inspections provided by the property owner as a starting point for his/her inspection. If any additional materials, or materials not analyzed using current approved laboratory analysis methodology, are observed within the impacted area, the inspector shall take measures necessary to properly assess and identify the material.

Regarding the extent of the asbestos survey, the entire area impacted by the demolition, renovation, remodeling or repair project must be surveyed. If only a portion of the room/area/space is impacted by the project, then only that portion of the room/area/space needs to be surveyed.

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 120 (56-5.1(a))

There is no survey time limit defined within ICR 56.

The required survey must be completed as part of the planning/design phase of the asbestos project. Only a

certified asbestos inspector, that works for a currently licensed asbestos contractor firm may perform the required ICR 56 survey/inspection. This certified inspector may utilize information within existing building surveys/inspections provided by the property owner as a starting point for his/her inspection. If any additional materials, or materials not analyzed using current approved laboratory analysis methodology, are observed within the impacted area, the inspector shall take measures necessary to properly assess and identify the material."

So, if the survey was completed, and then the project postponed or canceled and then another project commences, another survey in compliance with ICR 56-5.1(a) is required, but the previous survey could be used as a starting point for the next survey. It certainly makes sense for the building owner to have a comprehensive asbestos survey for his entire building/structure, to be used as a starting point for the asbestos survey required for any demolition, renovation, remodeling or repair project.

Please note that the OSHA construction standard (29 CFR 1926.1101) indicates that "before work subject to this standard is begun, building and facility owners are to determine the presence, location, and quantity of ACM and-or PACM at the work site." In addition, as per OSHA, the building/facility owner is responsible for notification of the presence, location and quantity of ACM and/or PACM, at the work sites in their buildings. This notification shall be made to bidders, employees, other employers and tenants at the work site within the areas or adjacent to areas containing such materials. This identification and notification requirement is not limited by the date of construction of the building or facility.

The Code Rule 56 survey requirements have been upgraded for buildings constructed prior to January 1, 1974, to be in compliance with OSHA requirements. Regardless of construction date, Building Owner "due diligence" is always required for identification and assessment of ACM, as per OSHA requirements.

Thus as per OSHA, during the bidding of the project the presence of all ACM at the work site must be identified, and notification must be given to all affected parties.

56-5.1(b) Exemptions to Asbestos Survey Requirements: The asbestos survey required by this Subdivision (a) of this Section shall not be required for the following classes of buildings or structures:

- 1) An agricultural building;
- 2) Buildings or structures for which original construction commenced on or after January 1, 1974;
- 3) A structure certified in writing to be structurally unsound by a licensed Professional Engineer, Registered Architect, Building Inspector, Fire Inspector or other official of competent jurisdiction. (See Section 56-11.5)

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 122 (56-5.1(b))

Regardless of Code Rule 56 requirements regarding surveys/inspections, as per Section 56-5.1(d) "No exemption to this requirement to conduct an asbestos survey shall exempt any person, asbestos contractor, property owner or business entity from the inspection or asbestos survey requirements of EPA, OSHA...". Thus, if federal regulations mandate various materials installed on January 1, 1974 or after to be treated as ACM, Code Rule 56 does not grant relief from that requirement. Regardless of construction date, Building Owner "due diligence" is always required for identification and assessment of ACM, as per OSHA requirements.

Also, ACM products can still be purchased and installed today...so after an asbestos removal project is completed, it is likely that ACM may be re-installed (e.g. - roofing products, caulking, mastics, adhesives, refractory products, etc...). Thus, a survey/inspection of the affected area for suspect materials is always warranted.

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 125 (56-5.1(b)(2))

Regarding the extent of the asbestos survey, the entire area impacted by the demolition, renovation, remodeling or repair project must be surveyed. If only a portion of the room/area/space is impacted by the project, then only that portion of the room/area/space needs to be surveyed. The survey/inspection firm should check with the building owner and/or project designer to confirm the extent of building/structure impact to define the extent of the necessary inspection. Please note that if a site-specific variance is necessary for the asbestos project, it must be prepared and submitted by a certified project designer that works for a licensed asbestos (abatement or non-abatement) contractor.

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 127 (56-5.1(b & c))

A certification from a registered architect or professional engineer responsible for the building/structure construction, indicating that only non-ACM products were specified for the building/structure construction and to the best of his/her knowledge, no ACM was used in the construction of the building/structure, would be acceptable documentation, similar to what is allowed under EPA AHERA.

However, the only way to know for sure that a material is non-ACM is through appropriate bulk sampling and analyses. For example, you are completing a renovation in an area that was previously renovated, and you have documentation that the installed materials do not contain asbestos...there is a complaint and the asbestos control bureau investigates...the inspector collects bulk samples of sheetrock and joint compound that is currently being disturbed...they find from the bulk sample results that the joint compound is an ACM, even though you have documentation that the sheetrock and joint compound were specified to be non-ACM only. Obviously, now you have an asbestos project cleanup as well as abatement for any remaining materials impacted by the renovation project. The positive bulk sample analysis results take precedence over any other documentation that you might have.

Also, don't forget that you can still purchase and install ACM products today! In addition, you should be aware that contractors may not actually install the materials that were approved if he/she has found an alternative.

56-5.1(d) Responsibility to Comply: No exemption to the requirement to conduct an asbestos survey shall exempt any person, asbestos contractor, property owner or business entity from the inspection or asbestos survey requirements of EPA, OSHA, and any other applicable section of this Part.

56-5.1(e) Building/Structure Asbestos Survey Requirements: The asbestos survey shall include a thorough inspection for and identification of all PACM, suspect miscellaneous ACM, or asbestos material throughout the building/structure or portion thereof to be demolished, renovated, remodeled, or to have repair work. The required inspection shall be performed by a certified asbestos inspector, and, at a minimum, shall include identification of PACM, suspect miscellaneous ACM or asbestos material by all of the following methods:

56-5.1(e)(2) A visual inspection for PACM and suspect miscellaneous ACM throughout the building/structure or portion thereof to be demolished, renovated, remodeled, or repaired. For the purpose of this Part, all PACM and suspect miscellaneous ACM visually assessed shall be treated and handled as ACM and shall be assumed to be ACM, unless bulk sampling is conducted as per this Section, standard EPA and OSHA accepted methods, including multi-layered systems sampling protocols; the subsequent analyses are performed by a laboratory that meets the requirements of Section 56-4.2 of this Part; and the analyses satisfies both ELAP and federal requirements, including multi-layered sample analyses, to document non-asbestos containing material.

56-5.1(f)(1) Building/Structure Asbestos Survey Information: The asbestos survey shall, at a minimum, identify and assess with due diligence, the locations, quantities, friability and conditions of all types of installations at the affected portion of the building/structure relative to the ACM, suspect miscellaneous ACM, PACM or asbestos material contained therein. The following list is not inclusive of all types of ACMs, it only summarizes typical ACMs. The certified asbestos inspector is responsible for identification and assessment of all types ACM, PACM, suspect miscellaneous ACM and asbestos material within the affected portion of the building/structure:

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 129 (56-5.1(3))

The most stringent bulk sampling requirements of EPA and OSHA are to be followed. For example, if one layer of a non-separable system is found to be ACM, then the entire system is considered to be ACM (e.g. ACM joint compound on a non-ACM sheetrock wall or ceiling, or ACM felts in a non-separable roofing system). Note: joint compound, drywall/sheetrock and tape materials are to be analyzed separately as per OSHA.

56-5.1(h) Removal Required. If the building/structure asbestos survey finds that the portion of the building/structure to be demolished, renovated, remodeled, or have repair work contains ACM, PACM, suspect miscellaneous ACM assumed to be ACM, or asbestos material, which is impacted by the work, the owner or the owner's agent shall conduct, or cause to have conducted, asbestos removal performed by a licensed asbestos abatement contractor in conformance with all standards set forth in this Part. All ACM, PACM, suspect miscellaneous ACM assumed to be ACM, or asbestos material impacted by the demolition, renovation, remodeling or repair project shall be removed as per this Part, prior to access or disturbance by other uncertified trades or personnel. No demolition, renovation, remodeling or repair work shall be commenced by any owner or the owner's agent prior to the completion of the asbestos abatement in accordance with the notification requirements of this Part. For multi-phased work, the access restriction for uncertified trades or personnel applies to each intermediate portion of the entire project. Upon completion of the intermediate portion of the asbestos project, other trades or personnel may access that portion of the work site. For demolition projects that are exempt from asbestos survey requirements due to being structurally unsound, the demolition is considered an asbestos project and shall proceed as per Section 56-11.5.

(1) All building/structure owners and asbestos abatement contractors on a demolition, renovation, remodeling, or repair project, which includes work covered by this Part, shall inform all trades on the work site about PACM, ACM, asbestos material and suspect miscellaneous ACM assumed to be ACM at the work site.

GUIDANCE DOCUMENT (version 2.0, released 1/24/09) Question 148 (56-5.1(h)(1))

Similar to US OSHA, any contractor performing a general supervisory role on any renovation, remodeling, demolition, or repair project is responsible for informing all contractors under their direct supervision and control that any disturbance to ACM, PACM and asbestos material (known or assumed) at the site is prohibited by any contractor other than the asbestos contractor.

Also, the contractor performing the general supervisory role shall require all asbestos contractors under their direct supervision and control to be in compliance with ICR 56. (This requirement does not include entering asbestos project work areas to check on the asbestos contractor.)

56-5.1(j) Unidentified and Unassessed Asbestos: When any construction activity, such as demolition, remodeling, renovation or repair work, reveals PACM or suspect miscellaneous ACM that has not been identified by the asbestos survey per this Part, or has not been identified by other inspections as per current OSHA or EPA requirements, all activities shall cease in the area where the PACM or suspect miscellaneous ACM is found and the Asbestos Control Bureau shall be notified by telephone by the building/structure owner or their representative, followed with a written notice in accordance with the notification requirements of this Part. Unassessed PACM or suspect miscellaneous ACM shall be treated and handled as ACM and assumed to be ACM, unless proven otherwise by standard EPA and OSHA accepted methods, including multi-layered systems sampling protocols; subsequent analyses performed by a laboratory that meets the requirements of Section 56-4.2 of this Part; and the analyses satisfies both NYS ELAP and federal requirements, including multi-layered sample analyses, to document non-asbestos containing material.

Recent Analysis Determinations

In the last several years the New York State Department of Health through the Environmental Laboratory Approval Program (ELAP) has updated protocols for the analysis of **ceiling tile** that contains cellulose and for **vermiculite** or **vermiculite containing materials**.

As of April 2011 ceiling tile with cellulose must be tested per the new methodology. Therefore previous negative samples are no longer valid.

There is not a currently approved method to determine asbestos content within loose fill vermiculite. Therefore, it must be considered to be ACM.

Sprayed-on fireproofing that contains vermiculite (SOF-V), as of October 31, 2014, now has two approved methods for analysis to determine asbestos content. See DOH letter dated July 22, 2014: http://www.wadsworth.org/labcert/elapcert/forms/NewTestingRequirements_SOF_072214.pdf

Materials with vermiculite as a component must first determine the percentage of vermiculite which will determine the appropriate methodology. However at this time because of the inexactness of this methodology the lab may use the following disclaimer: *"This method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing greater than 10% vermiculite."* Therefore it leaves the owner or contractor without actually knowing if ACM is present. See interim guidance letter here: <http://www.labor.ny.gov/workerprotection/safetyhealth/PDFs/Asbestos/Vermiculite%20Interim%20Guidance%207.9.13.pdf>

USDOL Occupational Safety and Health Administration (OSHA)

Construction Standard Part 1926.1101

1926.1101(k)(1)

This section applies to the communication of information concerning asbestos hazards in construction activities to facilitate compliance with this standard. Most asbestos-related construction activities involve previously installed building materials. Building owners often are the only and/or best sources of information concerning them. Therefore, they, along with employers of potentially exposed employees, are assigned specific information conveying and retention duties under this section. Installed Asbestos Containing Building Material. Employers and building owners shall identify TSI and sprayed or troweled on surfacing materials in buildings as asbestos-containing, unless they determine in compliance with paragraph (k)(5) of this section that the material is not asbestos-containing. Asphalt and vinyl flooring material installed no later than 1980 must also be considered as asbestos containing unless the employer, pursuant to paragraph (g)(8)(i)(I) of this section determines that it is not asbestos-containing. If the employer/building owner has actual knowledge, or should have known through the exercise of due diligence, that other materials are asbestos-containing, they too must be treated as such. When communicating information to employees pursuant to this standard, owners and employers shall identify "PACM" as ACM. Additional requirements relating to communication of asbestos work on multi-employer worksites are set out in paragraph (d) of this section.

1926.1101(d) *Multi-employer worksites*

1926.1101(d)(1)

On multi-employer worksites, an employer performing work requiring the establishment of a regulated area shall inform other employers on the site of the nature of the employer's work with asbestos and/or PACM, of the existence of and requirements pertaining to regulated areas, and the measures taken to ensure that employees of such other employers are not exposed to asbestos.

1926.1101(d)(5)

All general contractors on a construction project which includes work covered by this standard shall be deemed to exercise general supervisory authority over the work covered by this standard, even though the general contractor is not qualified to serve as the asbestos "competent person" as defined by paragraph (b) of this section. As supervisor of the entire project, the general contractor shall ascertain whether the asbestos contractor is in compliance with this standard, and shall require such contractor to come into compliance with this standard when necessary.

1926.1101(k)(2) Duties of building and facility owners.

1926.1101(k)(2)(i)

Before work subject to this standard is begun, building and facility owners shall determine the presence, location, and quantity of ACM and/or PACM at the work site pursuant to paragraph (k)(1) of this section.

1926.1101(k)(3)(i)

Before work in areas containing ACM and PACM is begun; employers shall identify the presence, location, and quantity of ACM, and/or PACM therein pursuant to paragraph (k)(1) of this section.

1926.1101(k)(5)(ii)(B)

Performing tests of the material containing PACM which demonstrate that no ACM is present in the material. Such tests shall include analysis of bulk samples collected in the manner described in 40 CFR 763.86. The tests, evaluation and sample collection shall be conducted by an accredited inspector or by a CIH. Analysis of samples shall be performed by persons or laboratories with proficiency demonstrated by current successful participation in a nationally recognized testing program such as the National Voluntary Laboratory Accreditation Program (NVLAP) or the National Institute for Standards and Technology (NIST) or the Round Robin for bulk samples administered by the American Industrial Hygiene Association (AIHA) or an equivalent nationally-recognized round robin testing program.

Environmental Protection Agency (EPA)

CFR Part 61 Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP)

§ 61.145 Standard for demolition and renovation.

(a) Applicability. To determine which requirements of paragraphs (a), (b), and (c) of this section apply to the owner or operator of a demolition or renovation activity and prior to the commencement of the demolition or renovation, thoroughly inspect the affected facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos, including Category I and Category II nonfriable ACM. The requirements of paragraphs (b) and (c) of this section apply to each owner or operator of a demolition or renovation activity, including the removal of RACM as follows:

(c)(1) Remove all RACM from a facility being demolished or renovated before any activity begins that would break up, dislodge, or similarly disturb the material or preclude access to the material for subsequent removal. RACM need not be removed before demolition if:

Environmental Protection Agency (EPA) CFR Part 763 Subpart E, Asbestos Hazard Emergency Response Act (AHERA)

§ 763.80 Scope and purpose.

(a) This rule requires local education agencies to identify friable and nonfriable asbestos-containing material (ACM) in public and private elementary and secondary schools by visually inspecting school buildings for such materials, sampling such materials if they are not assumed to be ACM, and having samples analyzed by appropriate techniques referred to in this rule. The rule requires local education agencies to submit management plans to the Governor of their State by October 12, 1988, begin to implement the plans by July 9, 1989, and complete implementation of the plans in a timely fashion. In addition, local education agencies are required to use persons who have been accredited to conduct inspections, re-inspections, develop management plans, or perform response actions. The rule also includes recordkeeping requirements. Local education agencies may

contractually delegate their duties under this rule, but they remain responsible for the proper performance of those duties. Local education agencies are encouraged to consult with EPA Regional Asbestos Coordinators, or if applicable, a State's lead agency designated by the State Governor, for assistance in complying with this rule.

§ 763.85 Inspection and reinspections.

(a) *Inspection.* (1) Except as provided in paragraph (a)(2) of this section, before October 12, 1988, local education agencies shall inspect each school building that they lease, own, or otherwise use as a school building to identify all locations of friable and nonfriable ACBM. (2) Any building leased or acquired on or after October 12, 1988, that is to be used as a school building shall be inspected as described under paragraphs(a) (3) and (4) of this section prior to use as a school building. In the event that emergency use of an un-inspected building as a school building is necessitated, such buildings shall be inspected within 30 days after commencement of such use.(3) Each inspection shall be made by an accredited inspector. (4) For each area of a school building, except as excluded under § 763.99, each person performing an inspection shall: (i) Visually inspect the area to identify the locations of all suspected ACBM.(ii) Touch all suspected ACBM to determine whether they are friable.(iii) Identify all homogeneous areas of friable suspected ACBM and all homogeneous areas of nonfriable suspected ACBM.(iv) Assume that some or all of the homogeneous areas are ACM, and, for each homogeneous area that is not assumed to be ACM, collect and submit for analysis bulk samples under §§ 763.86 and 763.87.(v) Assess, under § 763.88, friable material in areas where samples are collected, friable material in areas that are assumed to be ACBM, and friable ACBM identified during a previous inspection.(vi) Record the following and submit to the person designated under § 763.84 a copy of such record for inclusion in the management plan within 30 days of the inspection:(A) An inspection report with the date of the inspection signed by each accredited person making the inspection, State of accreditation, and if applicable, his or her accreditation number. (B) An inventory of the locations of the homogeneous areas where samples are collected, exact location where each bulk sample is collected, dates that samples are collected, homogeneous areas where friable suspected ACBM is assumed to be ACM, and homogeneous areas where nonfriable suspected ACBM is assumed to be ACM. (C) A description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number. (D) A list of whether the homogeneous areas identified under paragraph(a)(4)(vi)(B) of this section, are surfacing material, thermal system insulation, or miscellaneous material. (E) Assessments made of friable material, the name and signature of each accredited inspector making the assessment, State of accreditation, and if applicable, his or her accreditation number.

(b) *Reinspection.* (1) At least once every 3 years after a management plan is in effect, each local education agency shall conduct a reinspection of all friable and nonfriable known or assumed ACBM in each school building that they lease, own, or otherwise use as a school building. (2) Each inspection shall be made by an accredited inspector. (3) For each area of a school building, each person performing a reinspection shall: (i) visually reinspect, and reassess, under § 763.88, the condition of all friable known or assumed ACBM. (ii) Visually inspect material that was previously considered nonfriable ACBM and touch the material to determine whether it has become friable since the last inspection or reinspection. (iii) Identify any homogeneous areas with material that has become friable since the last inspection or reinspection. (iv) For each homogeneous area of newly friable material that is already assumed to be ACBM, bulk samples may be collected and submitted for analysis in accordance with §§ 763.86 and 763.87. (v) Assess, under § 763.88, the condition of the newly friable material in areas where samples are collected, and newly friable materials in areas that are assumed to be ACBM. (vi) Reassess, under § 763.88, the condition of friable known or assumed ACBM previously identified. (vii) Record the following and submit to the person designated under § 763.84 a copy of such record for inclusion in the management plan within 30 days of the reinspection: (A) The date of the reinspection, the name and signature of the person making the reinspection, State of accreditation, and if applicable, his or her accreditation number, and any changes in the condition of known or assumed ACBM. (B) The exact locations where samples are

collected during the reinspection, a description of the manner used to determine sampling locations, the name and signature of each accredited inspector who collected the samples, State of accreditation, and, if applicable, his or her accreditation number. (C) Any assessments or reassessments made of friable material, the name and signature of the accredited inspector making the assessments, State of accreditation, and if applicable, his or her accreditation number.

(c) *General*. Thermal system insulation that has retained its structural integrity and that has an undamaged protective jacket or wrap that prevents fiber release shall be treated as nonfriable and therefore is subject only to periodic surveillance and preventive measures as necessary.

§ 763.86 Sampling.

(a) *Surfacing material*. An accredited inspector shall collect, in a statistically random manner that is representative of the homogeneous area, bulk samples from each homogeneous area of friable surfacing material that is not assumed to be ACM, and shall collect the samples as follows: (1) At least three bulk samples shall be collected from each homogeneous area that is 1,000 ft² or less, except as provided in § 763.87(c)(2). (2) At least five bulk samples shall be collected from each homogeneous area that is greater than 1,000 ft² but less than or equal to 5,000 ft², except as provided in § 763.87(c)(2). (3) At least seven bulk samples shall be collected from each homogeneous area that is greater than 5,000 ft², except as provided in § 763.87(c)(2).

(b) *Thermal system insulation*. (1) Except as provided in paragraphs (b) (2) through (4) of this section and § 763.87(c), an accredited inspector shall collect, in a randomly distributed manner, at least three bulk samples from each homogeneous area of thermal system insulation that is not assumed to be ACM. (2) Collect at least one bulk sample from each homogeneous area of patched thermal system insulation that is not assumed to be ACM if the patched section is less than 6 linear or square feet. (3) In a manner sufficient to determine whether the material is ACM or not ACM, collect bulk samples from each insulated mechanical system that is not assumed to be ACM where cement or plaster is used on fittings such as tees, elbows, or valves, except as provided under § 763.87(c)(2). (4) Bulk samples are not required to be collected from any homogeneous area where the accredited inspector has determined that the thermal system insulation is fiberglass, foam glass, rubber, or other non-ACBM.

(c) *Miscellaneous material*. In a manner sufficient to determine whether material is ACM or not ACM, an accredited inspector shall collect bulk samples from each homogeneous area of friable miscellaneous material that is not assumed to be ACM.

(d) *Nonfriable suspected ACBM*. If any homogeneous area of nonfriable suspected ACBM is not assumed to be ACM, then an accredited inspector shall collect, in a manner sufficient to determine whether the material is ACM or not ACM, bulk samples from the homogeneous area of nonfriable suspected ACBM that is not assumed to be ACM.

§ 763.88 Assessment.

(a)(1) For each inspection and reinspection conducted under § 763.85 (a) and (c) and previous inspections specified under § 763.99, the local education agency shall have an accredited inspector provide a written assessment of all friable known or assumed ACBM in the school building. (2) Each accredited inspector providing a written assessment shall sign and date the assessment, provide his or her State of accreditation, and if applicable, accreditation number, and submit a copy of the assessment to the person designated under § 763.84 for inclusion in the management plan within 30 days of the assessment.

(b) The inspector shall classify and give reasons in the written assessment for classifying the ACBM and suspected ACBM assumed to be ACM in the school building into one of the following categories:

- (1) Damaged or significantly damaged thermal system insulation ACM.
- (2) Damaged friable surfacing ACM.
- (3) Significantly damaged friable surfacing ACM.
- (4) Damaged or significantly damaged friable miscellaneous ACM.

(5) ACBM with potential for damage.

(6) ACBM with potential for significant damage.

(7) Any remaining friable ACBM or friable suspected ACBM.

(c) Assessment may include the following considerations: (1) Location and the amount of the material, both in total quantity and as a percentage of the functional space. (2) Condition of the material, specifying: (i) Type of damage or significant damage (e.g., flaking, blistering, water damage, or other signs of physical damage). (ii) Severity of damage (e.g., major flaking, severely torn jackets, as opposed to occasional flaking, minor tears to jackets). (iii) Extent or spread of damage over large areas or large percentages of the homogeneous area. (3) Whether the material is accessible. (4) The material's potential for disturbance. (5) Known or suspected causes of damage or significant damage (e.g., air erosion, vandalism, vibration, water). (6) Preventive measures which might eliminate the reasonable likelihood of undamaged ACM from becoming significantly damaged. (d) The local education agency shall select a person accredited to develop management plans to review the results of each inspection, reinspection, and assessment for the school building and to conduct any other necessary activities in order to recommend in writing to the local education agency appropriate response actions. The accredited person shall sign and date the recommendation, provide his or her State of accreditation, and, if applicable, provide his or her accreditation number, and submit a copy of the recommendation to the person designated under § 763.84 for inclusion in the management plan.

Recommendations and Conclusions

1. Maintain all records of past and upcoming asbestos abatement projects within your building or facility. Project records are required to be maintained consistent with subpart 56-3.4(a)(1) & (2) of NYSDOL industrial code rule 56.
2. Asbestos containing products are still produced, imported and sold in many stores today. Make sure new building material installations are non-asbestos, and do not contain any wording like; may contain chrysotile, amosite, crocidolite, tremolite, anthophyllite and actinolite, which are the mineral names for asbestos. However, this may still not offer protection against installing asbestos containing materials as there are several methods of testing for asbestos and several definitions of what is an asbestos fiber.
3. For full compliance:
 - a. Building materials must be sampled for the presence of asbestos prior to demolition, renovation, remodeling or repair regardless of the building construction date or the date of installation of the materials.
 - b. Sample all new building material installations, even if you purchased the materials today or installed the materials yesterday, and maintain those records to prove that asbestos is not present.

Additional Resources

1. *Managing Asbestos in Buildings: A Guide for owners and Managers.*
 - a. <http://eia-usa.org/index.php>
2. ASTM E2356-14, *Standard Practice for Comprehensive Building Asbestos Surveys*
 - a. <http://www.astm.org/Standards/E2356.htm>

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