EGLE MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Thorough Asbestos Inspection Guidance

Purpose

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), the United States Environmental Protection Agency (USEPA) and the National Emission Standards for Hazardous Air Pollutants (NESHAP) require a thorough asbestos survey to be completed by an owner/operator prior to all subject renovation or demolition activities (***40 CFR, Part 61.145 (a)***). This guidance document will help answer questions about compliant asbestos surveys so owners/operators can ensure compliance with the Asbestos NESHAP.

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Definitions

Asbestos Inspection (survey)	A room by room, surface by surface accounting of locations in the building to be affected by renovation or demolition that documents the presence, type, location, quantity and condition of all friable and non-friable ACM.
ACM (Asbestos-Containing Material)	Any material containing greater than 1% asbestos by weight, as determined by laboratory (PLM) analysis.
RACM (Regulated Asbestos-Containing Material)	Friable ACM, Category I non-friable ACM that has become friable, or Category II non-friable ACM that will be or has been crumbled, pulverized, or reduced to powder during demolition or renovation.
Friable ACM	Material that, when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.
Non-Friable ACM	Material that cannot be crumbled, pulverized, or reduced to powder by hand pressure when dry. Classified as: • **Category I:** Non-friable ACM in resilient floor coverings, gaskets, packings, and asphalt roofing products. • **Category II:** All other non-friable ACM not in Category I.
PLM (Polarized Light Microscopy)	A laboratory method used to identify asbestos fibers in bulk material samples.
Point Count Analysis	A more precise analytical method **(EPA/600/R-93/116)** used to verify asbestos content when PLM results indicate ≤1% asbestos.

Common Questions

Is new construction exempt?

The asbestos NESHAP does not exempt renovation/demolition activities based on the date of construction. Therefore, even newly constructed buildings undergoing renovations/demolition will require a thorough asbestos inspection prior to renovation/demolition activities, and/or notification/abatement if applicable.

Who can conduct NESHAP-Compliant Asbestos Inspections?

Individuals accredited under the Michigan Asbestos Workers Accreditation Act (Act 440, P.A. 1988, as amended) as asbestos inspectors can conduct NESHAP-compliant asbestos inspections. The MIOSHA Asbestos Program oversees licensing of asbestos inspectors, reviews inspection reports, and has the authority to address deficiencies in the work of accredited asbestos inspectors.

What constitutes a thorough asbestos Inspection?

The asbestos NESHAP does not specifically define a thorough asbestos inspection; however, the USEPA believes that the methods described in Sections 1 through 5 and Section 8 of **ASTM E2356-14 Standard Practice for Comprehensive Building Asbestos Surveys** (specifically the Pre-Construction Survey as described) is one way to satisfy the thorough inspection requirement.

For purposes of compliance, all building materials except wood, metal, glass, fiberglass and rubber are suspect materials and should be assumed or sampled accordingly – this includes materials such as concrete, cinderblock and brick, along with their associated mortars. At a minimum, at least two samples are required to be collected of all suspect miscellaneous ACM to confirm a non-ACM determination. Additional sampling may be required for surfacing materials and/or thermal system insulation (TSI) based on established sampling protocols. All suspect building materials are to be sampled via polarized light microscopy (PLM) or assumed to contain >1% asbestos.

What is a destructive inspection?

Inspections conducted at known renovation/demolition sites should undergo destructive investigation to identify potentially hidden ACM. If only an initial, non-destructive inspection was conducted, additional destructive investigation needs to be conducted immediately prior to demolition activities. Elements of a destructive inspection (holes in walls, and etc.) will be clearly identifiable by EGLE, AQD staff during compliance inspections.

Do all areas need to be inspected?

All parts of the building affected by the scope of work need to be inspected for ACM. Areas of the building not inspected during the initial inspection for any reason (locked or blocked doors, occupied areas, etc.) must be thoroughly inspected immediately prior to demolition. Buildings with excessive debris and/or hoarding situations will still require thorough inspection prior to renovation/demolition activities.

How should materials be classified?

The NESHAP requires all non-friable suspect ACM to be classified as Category I and II ACM. Furthermore, Category I and II materials are required to be assessed to determine if the material is or will become a regulated asbestos containing material (RACM) during demolition, renovation or abatement according to methods described in ***Asbestos/NESHAP Regulated Asbestos Containing Materials Guidance, USEPA, 1990.***

Laboratory documentation of the condition of any material is insufficient. Friability determinations are the responsibility of the owner/operator and require knowledge of the scope of work and present site conditions to be valid.

What materials must be removed before demolition or renovation activities?

All RACM requires removal prior to renovation/demolition activities. Additionally, all materials listed as **Assumed** or **Assumed ACM** (i.e., roofing) are to be treated as **friable ACM** and removed prior to renovation/demolition unless additional testing and/or assessment indicates that the material is either (1) non-ACM or (2) is non-friable ACM that will not become friable during the renovation/demolition process. Additional testing and/or assessment need to be properly documented.

Are there additional analytical requirements?

Friable materials identified within an inspection report as containing ≤1% asbestos, or trace asbestos under PLM analysis **require** verification by additional point count analysis (***PLM EPA/600/R-93/116 (400 Point Count)***) or removal as ACM prior to renovation/demolition. Point count analysis is a more accurate analytical method and will supersede PLM results but must be conducted on the already submitted sample to be valid.

Who is responsible for ensuring a thorough asbestos inspection is done?

EGLE, AQD reminds stakeholders that the asbestos NESHAP holds owners and operators of subject activities responsible for inaccurate, deficient or incomplete asbestos surveys. Third-party survey/inspection companies are often not liable under the asbestos NESHAP and it is therefore imperative that building owners and/or operators review all surveys for accuracy and completeness prior to commencement of renovation, demolition or abatement activities, and have any discrepancies addressed at that time. If a material is encountered that is not specifically identified and sampled within the survey, it must be assumed ACM or tested prior to disturbance.

Contact and Information

EGLE Asbestos NESHAP Web Page

EGLE, Air Quality Division Asbestos Contacts