

Michigan Department of Labor & Economic Growth Michigan Occupational Safety & Health Administration Construction Safety and Health Division Asbestos Program 7150 Harris Drive P. O. Box 30671
Lansing, Michigan 48909-8171
517.322.1320 office • 517.322.1713 fax
www.michigan.gov/asbestos
E-mail: asbestos@michigan.gov

For additional information, please contact us

at:

- Reviews AHERA management plans.
- Investigates asbestos-related complia
- Maintains databases of approved trainers, licer accredited individuals, and asbestos projects
- Accredits professionals in the asbestos abate

The MDLEG - Asbestos Program performs the following service Approves asbestos-related training courses.

limited to pipe insulation, floor coverings, ceiling tile, spray-on insulation, boiler wrap insulation, wall coverings, fire doors, and old electrical wire insulation. Employees, tenants, and custodial Asbestos has been used in more than 3,000 different products over the last 100 years primarily because of its thermal insulating, fire retardant, and chemical resistant properties. Some common products in buildings that contain asbestos include but are not maintenance workers may be exposed to ACM during maintenance, renovation, or disturbance activities.

Asbestos-Containing Materials

years and sometimes as long as 40 to 50 years from first exposure before symptoms appeal

> If inhaled, these needle-like fibers can cause three fibrous scarring of the lungs), *Lung Cancer*, and *Mesothelioma* (a cancer of the lining of the chest or abdominal cavity). These diseases do not develop abdominal cavity). These diseases do not develop immediately after inhalation of asbestos fibers and typically have a latency period ranging from 15 to 30 specific asbestos-related diseases:

The Department of Labor & Economic Growth will individual or group because of race, religion, age, status, political beliefs or disability. If you need ass hearing, etc., under the Americans with Disabiliti meds known to this agency.

Asbestos is the name of a group of naturally occurring minerals that can separate into microscopic needle-The most common of these minerals are Chrysotile, Amosite, and Crocidolite. Once released into the atmosphere, the size and shape of these fibers permit them to remain airborne for long periods of time and thus contaminate the building environment. like fibers.

Background of Asbestos

- (b) Ensure that there is a written report of the engineering survey at the field office until the completion engineering survey at the field office until the completion of the job. The report shall include information such as the name of the person conducting the survey, date of the survey, and hazardous substances and dangerous conditions found and their location. safety of an employee.
- (iv) Any other conditions and equipment affecting the
- (iii) The utility service entering the building.
- by the demolition.
- adjacent structure will be affected (ii) Whether any
- survey of the structure and cted by a competent person and (i) The condition of the foundation, roof, walls, knowledgeable in demolition to determine: (a) An engineering survey equipment is conducted by
- demolition operation, an employer shall ensure that all of the α start of the 2031. (1) Before following are done: Rule

MIOSHA's Demolition Standard, Part 20, also regulates demolition activities. Specific information regarding this standard is listed below:

ASBESTOS AWARENESS TRAINING

Asbestos

MUST BE PROVIDED ANNUALLY

Whether the facility contains Class I or Class II ACM, demolition involving ACM requires a 40-hour trained competent person. Accreditation is also required specified in Part 602 for these materials. requirement involving flooring and roofing that are removed intact utilizing the compliant work practices for Class I and friable Class II projects. <u>Training</u> exceptions to this competent person training There are

This brochure is provided as a general summary of the responsibilities of demolition contractors in regard to the Michigan Occupational Safety and Health Administration (MIOSHA) rules and regulations, building surveys, and employee training. This brochure does not address the specific National Emission Standards for Hazardous Air Pollutants (NESHAP) requirements

workers, while demolition of buildings containing non-friable Class II materials require workers be trained 8 or more hours depending on number of Class II materials involved. 32-hour worker training and accreditation is Demolition involving a facility containing Class I materials requires 32-hour trained and accredited required for friable Class II projects.

Part 602, the OSHA Asbestos Standards for Construction [29 CFR 1926.1101(k)(2(i)] requires that a thorough asbestos inspection must be conducted of all pre-1981 building facilities. This

demolition.

and/or presumed asbestos-containing materials quantity of asbestos-containing materials (ACM) survey must identify the presence, location, and

(PACM) within the building.

Work Practices and Engineering Controls

and procedures are of ACM being removed reactive exposure a All projects involving the demolition of a building with ACM must address establishment of a regulated area. Contractors must also address the need for engineering surveillance. Many of these specific work practices and procedures are dependent upon whether the personal protective equipment, decontamination area, worker/supervisor training, and potentially medical controls, air monitoring, respiratory protection, exposure assessment (NEA) has been remains intact and/or whether

contact the Asbestos Program of the Michigan Department of Environmental Quality (DEQ)

building during the demolition activities. Please contain ACM that will remain within the

A building that is slated for demolition may

asbestos materials that may remain in a building if you have questions in regard to the types of

be demolished and for any

additional

NESHAP requirements.

group as specified in Michigan Public Act 135 of 1986, as amended, the Asbestos Abatement Contractor Licensing Act, must be utilized to perform the demolition activities. The licensed exempt trades (plumbers, electrician, mechanical contractors, residential building, and maintenance If the ACM is or will become friable during any part of the demolition, a licensed asbestos abatement contractor or licensed exempt trade Licensure/Project Notification

> projects that are incidental to their primary licensed trade that do not exceed 260 linear feet or 160 square feet of friable ACM. Regarding project notifications alteration contractors) are limited to

before beginning these projects projects exceeding 10 linear feet or 15 square feet of friable materials at least 10 days before beginning and Economic Growth's Asbestos Program of contractors must notify the Department licensed the project. Exempt licensed trades must notify asbestos abatement <u>a</u>

conducting What should a compliance officer see when an inspection at a demolition

- area). Restricted access to the site (i.e., regulated
- the building debris) Wet methods (i.e., a water hose spraying water on
- Labeled, lined dumpsters for ACM wastes
- or drop cloth and HEPA vacuum whatever applies) for employees unless only Class II ACM is involved and an NEA is obtained. A means of personal decontamination (i.e., shower
- personal II work and an NEA has been obtained Demolition workers wearing respirators and ersonal protective clothing unless it is intact Class and

What should a compliance officer when conducting an inspection at a demolition

- persons on the site. An unregulated demolition site with unauthorized
- on the concrete slab. A concrete crusher if there is floor tile remaining
- Persons without respirators within the regulated area where non-intact Class II work is being performed or where an NEA has not been obtained on intact Class II work.



with Part 602 regardless of the amount of ACM

being removed or disturbed.

In addition, in place

following requirements muto the disturbance of ACM:

must be

prior

then the demolition activities are regulated by

Please note, a contractor must comply

removal of all ACM is encouraged. However, when the ACM is to remain within the building

To minimize obligations under MIOSHA removal of all ACM is encouraged. However

MIOSHA require?

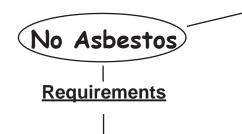
building containing ACM, what does

demolition contractor demolishes





DEMOLITION OF A BUILDING/STRUCTURE



No MIOSHA Asbestos Requirements

- MIOSHA Part 20 Demolition, Construction Safety Standard Requirements
- NESHAP Requirements (Notification)

*Respirators

Mandatory if

- · Non-intact removal, or
- No NEA, or
- > PEL, or
- Dry removal (except for intact roofing where NEA obtained), or
- In emergencies, or
- Class I

**Medical Surveillance

Mandatory if

- · Wearing negative-pressure respirator, or
- Exposed >= PEL >= 30 days of work/year, or
- Class I, II, or III work >= 30 days/yr.

***PPE

Mandatory if

- Class I if > 25' or 10 ft2, or
- •< 25' or 10ft² and No NEA, or
- •> PEL

Key:

- ACM: Asbestos-Containing Material
- PACM: Presumed Asbestos-Containing Material
- **HEPA:** High Efficiency Particulate Air
- **NEA**: Negative Exposure Assessment
- >PEL: Greater than Permissible Exposure Limits
- >=PEL: Greater than or equal to Permissible Exposure Limits
- PPE: Personal Protective Equipment (i.e., protective clothing)
- TSI: Thermal System Insulation

Requirements for Class I

TSI & Surfacing Materials

- Licensed asbestos abatement contractor or exempt licensed trade group (i.e., residential builder or residential maintenance and alteration contractor)
- Project notification if project > 10' or 15 ft²
- 40-hour initially trained/accredited competent person and 8-hour annual refresher training/accreditation
 accreditation excludes residential <10 units and exterior ACM
- 32-hour initially trained/accredited worker(s) and 8-hour annual refresher training/accreditation - accreditation excludes residential <10 units and exterior ACM
- Regulated area (restrict access to work site)
- Personal air monitoring or NEA
- Wet methods
- Decontamination unit (shower > 25' or 10 ft², drop cloth, & HEPA vacuum < 25' or 10ft²)
- Respirators*
- Medical surveillance**
- PPE***
- Waste disposal (sealed impermeable bags/containers)
- Waste transport requirements, if friable (USDOT Hazardous Materials for Asbestos, 49 CFR Parts 100-180)
- Engineering controls for partial interior demolition and pre-building demolition interior removals [isolation/ containment, see Part 602, 29 CFR 1926.1101 (g)(4) and (5)]
- Engineering controls for demolition of building where ACM remains [see Part 602, 29 CFR 1926.1101 (g)(6)]
- **NESHAP** Requirements

1 Non-Intact Class II ACM

(i.e., roofing materials, flooring materials, siding materials, ceiling tiles, or transite materials)

Asbestos

- Licensed asbestos abatement contractor or exempt licensed trade group (i.e., residential builder or residential maintenance and alteration contractor), if friable
- Project notification of friable project > 10' or 15 ft²
- 40-hour initially trained competent person and 8-hour annual refresher training
- 8 or more hours initial worker training and annual refresher training
- Regulated area (restrict access to work area)
- Personal air monitoring or NEA
- Wet Methods
- Decontamination unit (drop cloth + HEPA vacuum) if no NEA
- Respirators*
- Medical surveillance**
- PPE***
- Waste disposal (sealed impermeable bags/containers)
- Waste transport requirements, if friable (USDOT Hazardous Materials for Asbestos, 49 CFR Parts 100-180)
- Engineering controls for partial interior demolition and pre-building demolition interior removals [isolation/ containment, see Part 602, 29 CFR 1926.1101 (g)(7) and (8)(i)-(v) for specific controls]
- Engineering controls for demolition of building where ACM remains [see Part 602, 29 CFR 1926.1101 (g)(8)(vi)]
- NESHAP Requirements

More than 1 Non-Intact Class II ACM

(i.e., roofing materials, flooring materials, siding materials, ceiling tiles, or transite materials)

- Licensed asbestos abatement contractor or exempt licensed trade group (i.e., residential builder or residential maintenance and alteration contractor), if friable
- Project notification of friable project > 10' or 15 ft²
- 40-hour initially trained/accredited (if friable) competent person and 8-hour annual refresher training/ accreditation - accreditation excludes residential < 10 units and exterior ACM
- 32-hour initially trained/accredited worker(s) and 8-hour annual refresher training/accreditation on friable projects - accreditation excludes residential < 10 units and exterior ACM
- > 8 hours worker initial training and annual refresher training (non-friable)
- Regulated area (restrict access to work area)
- Personal air monitoring or NEA
- Wet methods
- Decontamination unit (drop cloth + HEPA vacuum) if no NEA
- Respirators*
- Medical surveillance**
- PPE***

Requirements for Class II

- Waste Disposal (sealed impermeable bags/containers)
- Waste transport requirements, if friable (USDOT Hazardous Materials for Asbestos, 49 CFR Parts 100-180)
- Engineering controls for partial interior demolition and pre-building demolition interior removals [isolation/ containment, see Part 602, 29 CFR 1926.1101 (g)(7) and (8)(i)-(v) for specific controls]
- Engineering controls for demolition of building where ACM remains [see Part 602, 29 CFR 1926.1101 (g)(8)(vi)]
- **NESHAP** Requirements

Definitions:

Intact: means that the ACM has not crumbled, been pulverized, or otherwise deteriorated so that asbestos is no longer likely to be bound to its matrix (Part 602).

Friable: means ACM that can be crumbled, pulverized, or reduced to powder when dry, by hand pressure (Act 135 and Act 440).

Asbestos-Containing Material: means any material containing more than one percent asbestos.

Accredited: means individuals accredited under the Asbestos Workers Accreditation Act (Act 440, P.A. 1988, as amended).

Demolition: means wrecking or taking out of any load-supporting structural member and any related removing or stripping of friable asbestos material (Act 135)/asbestos products (Part 602). **Class I Asbestos Work:** means activities involving the removal of TSI and surfacing ACM or PACM (Part 602).

Class II Asbestos Work: means activities involving the removal of ACM which is not TSI or surfacing material (Part 602).