



U.P. Solid Waste Landfill Operator Training
Gladstone, Michigan
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Introduction to Asbestos NESHAP Regulations & Requirements for Landfill Operators

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Air Quality Division
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Who regulates **asbestos**?



- **FEDERAL:**

- Asbestos **NESHAP** (National Emission Standards for Hazardous Air Pollutants)
 - Regulates landfilling practices & record keeping



- **STATE of MICHIGAN:**

- U.S. EPA has delegated NESHAP enforcement authority to state agencies
 - Asbestos **NESHAP** was adopted by reference to the State of Michigan Air Rules in 2000
 - **DEQ Air Quality Division Asbestos NESHAP Program (U.P. District)**

U.S. EPA can & does conduct compliance inspections independent of the DEQ

Who regulates **asbestos**? (cont'd)



- **STATE of MICHIGAN:**



- DLARA/MIOSHA focuses primarily on worker protection
- MIOSHA Part 305 General Industry covers landfill employees
 - For more information on landfill employee safety please contact:

**MIOSHA Consultation Education & Training Division
(517) 322-1809**

DLARA does not regulate landfilling asbestos

What is **Asbestos**?

- **Naturally occurring fibrous mineral**
- Name derived from Greek adjective meaning '**inextinguishable**'
- Unique mineral in that its **crystals form long fibers**, typically 0.1 to 10 microns
- Excellent **insulation** and **flame** resistance
- **Corrosion** resistant
- **High tensile** strength
- **Low electrical** conductivity



Why the concern?

- Asbestos fibers are **very light** and can stay suspended in the air for days
- Embedded in lung tissue, asbestos can cause **cancerous and noncancerous respiratory diseases**
- May contribute to **colorectal cancers** as well



There's a reason for the PPE & HEPA filters



What activities are subject?

RENOVATION

Altering one or more facility component in any way, including abatement of RACM, **without removing any load-supporting structural members**

DEMOLITION

Wrecking or taking out **load-supporting structural member** of a facility together with any related handling operations

RENOVATION



DEMOLITION



DEMOLITION



What facilities are subject?

**ALL COMMERCIAL &
INDUSTRIAL facilities**

AND

**RESIDENTIAL DWELLINGS
owned by a governmental or
commercial entity**

Multi-story Housing Complex





Boiler and steam lines in a historic, docked naval destroyer

Sub-grade steam lines & utility crib at a private university



Michigan Blight Elimination Grant Program



Friable vs. Nonfriable

FRIABLE:

- 'hand pressure test'
 - If it can be crumbled, pulverized, or reduced to powder by hand pressure
- Pipe wrap is great example

NONFRIABLE:

- Fails the 'hand pressure test'
- Not RACM, unless physically altered to be so
- Floor tile is great example

ASBESTOS

CALL DEQ BEFORE RENOVATING OR DEMOLISHING.

Don't put yourself or others at risk of exposure.

EXTERIOR SURFACES

Cement Asbestos Siding

Cement Asbestos
Roofing & Felt

Window Putty

MISCELLANEOUS

Woodstoves

Flooring:

Vinyl Asbestos Sheets,
Tiles, and Undersheeting

Old Built-In Items:

Dishwashers and Ranges

INTERIOR SURFACES

Sprayed-on Popcorn Ceilings

Acoustical Tiles

Sheetrock Tape Mud

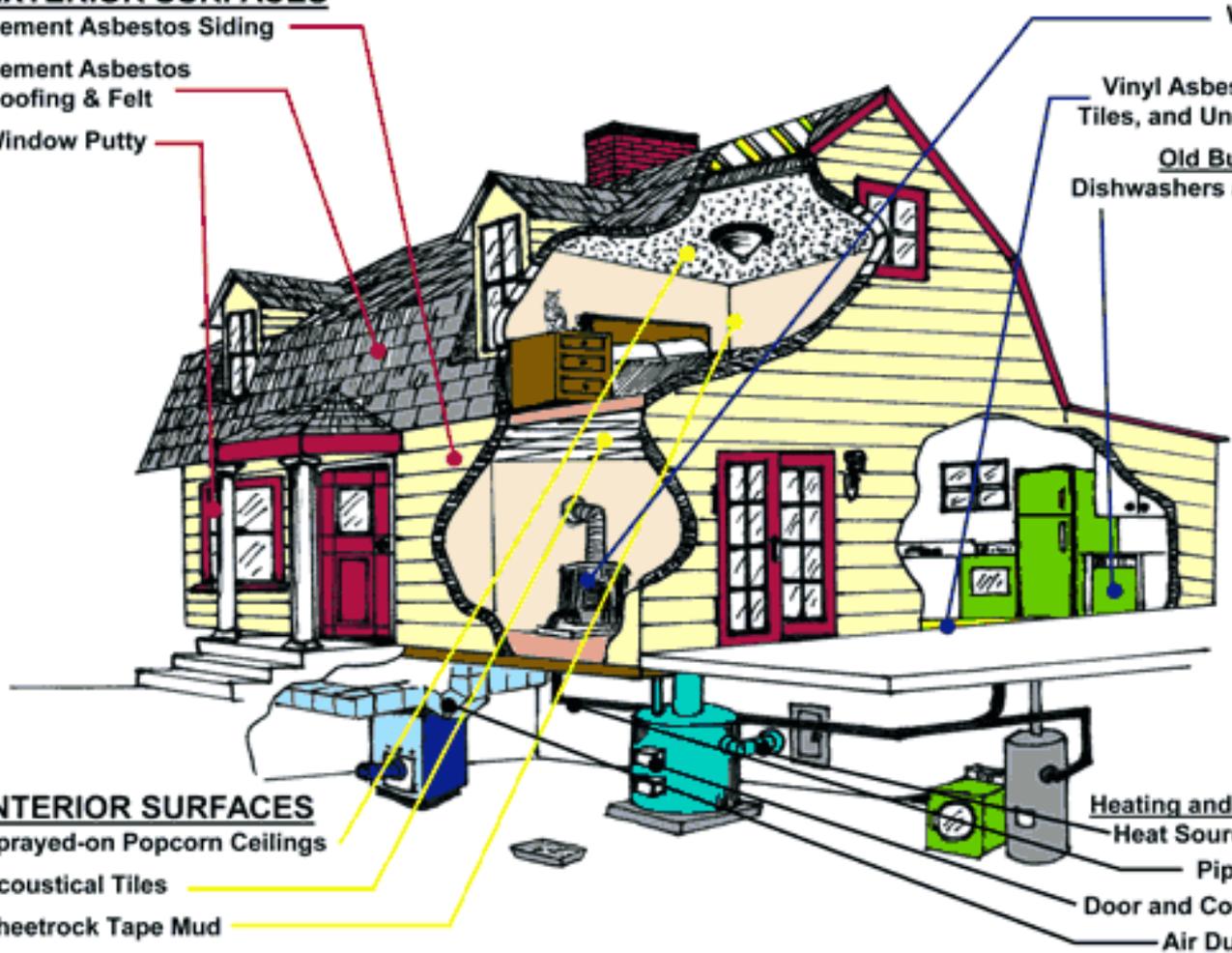
Heating and Ventilation:

Heat Source Covering

Pipe Insulation

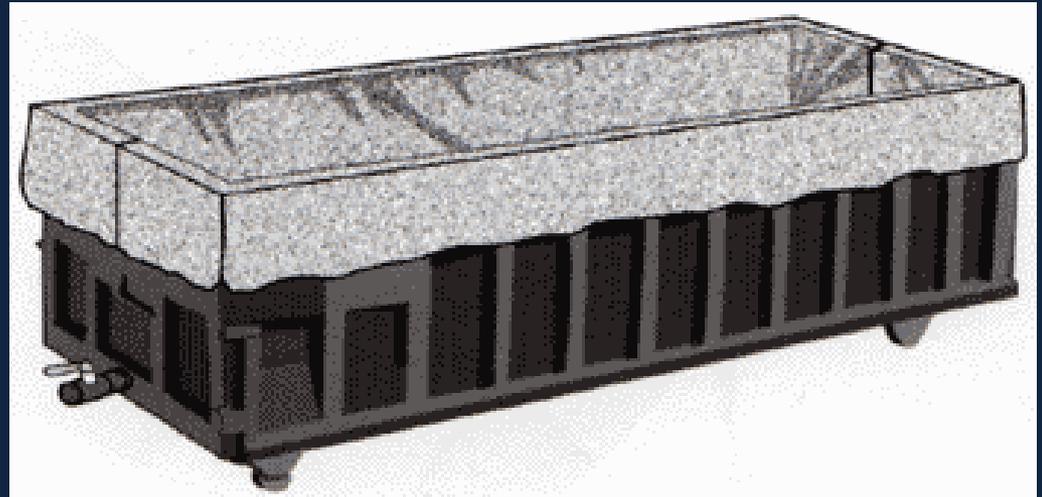
Door and Cover Gaskets

Air Duct Covering



Asbestos Waste Disposal & Transport

- Asbestos-containing waste material must be sealed in a leak-tight container while wet
- Must have generator label affixed
- Transportation vehicles that move waste from the point of generation to the asbestos landfill must have proper placarding and waste shipment recordkeeping



Landfilling Basics for ACM

- Friable ACM must be deposited in Type II
- Nonfriable ACM can go to Type III
- Landfills must be licensed to accept asbestos waste
- Landfills can choose to accept or not to accept asbestos waste

Receiving Asbestos Waste

Landfill operator should inspect load to verify waste is in leak-tight containers & labeled

If waste is **not properly containerized**:

Operator may choose to reject waste

OR

1. Operator must **thoroughly soak waste** with water **prior to unloading**
2. **Rinse** out truck/container with water
3. Immediately **cover**
4. **Contact district DEQ Asbestos NESHAP program**

Waste Deposition & Covering

**Designate a specific area for
asbestos waste disposal**

Control Public Access

Unless adequate natural barrier,
warning signs placed at all
entrances and at **330' intervals**
along property line

Waste Deposition & Covering

DAILY COVER

MUST cover with minimum of 6" of nonasbestos-containing material

- Ø Once every 24 hrs if continuous operation; **or**
- Ø At the end of each operating day

ALTERNATIVE

May instead use a **petroleum-based dust suppression agent** following manufacturer's recommended application procedures

Recordkeeping

Owner or Operator of waste disposal site
MUST

1. Maintain asbestos waste shipment records
 - § Record the name, address, & telephone number of waste generator AND waste transporter
2. Record the quantity of RACM waste (cubic meters or cubic yards)
3. Record the date of receipt

Recordkeeping (cont'd)

MUST maintain records of location, depth and area, and quantity of ACM on map or diagram

Reporting Requirements

For asbestos waste that is improperly enclosed or uncovered, or asbestos waste not sealed in leak-tight containers:

§ Send a written report, including a copy of the waste shipment record, to the District DEQ Asbestos NESHAP inspector

§ Report must be sent by the following work day

Reporting Requirements (cont'd)

For discrepancy issues regarding quantity of waste designated on shipment records & quantity actually received:

- § If unresolved within 15 days of shipment, immediately report in writing to the District DEQ Asbestos NESHAP inspector
- § Describe discrepancy & attempts to reconcile with waste generator & include copy of waste shipment record

Reporting Requirements (cont'd)

45 days PRIOR to disturbing or excavating buried ACM, operator MUST notify in writing to DEQ Asbestos NESHAP Program

∅ Notification must include:

§ Scheduled **start & end dates**

§ The **reason for disturbing the waste**

§ The **emissions control procedures** to be used during the excavation, transport and ultimate disposal of excavated ACM

§ Location of any **temporary storage site and the final disposal site**

∅ If excavation date changes within 45 day notification window, new start date MUST be provided to DEQ Asbestos NESHAP Program 10 working days prior to start of excavation

Reporting Requirements (cont'd)

Upon CLOSURE of waste disposal facility, owner/operator MUST submit a copy of records of asbestos waste disposal locations and quantities.

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Questions?
Comments?

Thank You