

MODULE 2 – ASBESTOS

Welcome to Module 2 – Tips for a Safe Inspection



THE FOCUS

- In this module the focus is on the following topics:
- Preparation
- Recordkeeping
- A Visual Inspection
- Sampling
- Management Plan
- Instructions for the inspection narrative
- Reinspection or Final Inspection Phase



Testing for
asbestos

PREPARING FOR INSPECTION – PART 1

This phase requires several key steps which will be outlined in the next few slides.

Be familiar with the applicable asbestos rules.

- Conduct your own self-inspection of the jobsite and correct any identified problems.
- Ensure that you will be ready before you call for a prep inspection.
- Ensure the electric is off in the work area or ensure written procedures, approved and signed by a licensed electrician, is available onsite



PREPARING FOR INSPECTION – PART 2

Ensure that all required paperwork is available on site at the time of the inspection.

- Copy of project design
- Air monitoring results
- Worker licenses and fit tests
- Certificate of air quality



PREPARING FOR INSPECTION – PART 3

1. An Asbestos investigator is trained and certified by the Department of Environmental Protection to assess whether the suspect material contains asbestos.
2. If you suspect that work you are doing may disturb material that could contain asbestos then you are required by law to have an inspection. This is done in a safe way with minimal risk.
3. Be prepared to correct problems while the inspector is still on site. (e.g., frayed or ungrounded extension cords, properly working manometer, paper for recording manometer readings, botsball in containment)



**Only use a certified
and licensed
investigator.**

RECORDKEEPING - PART 1

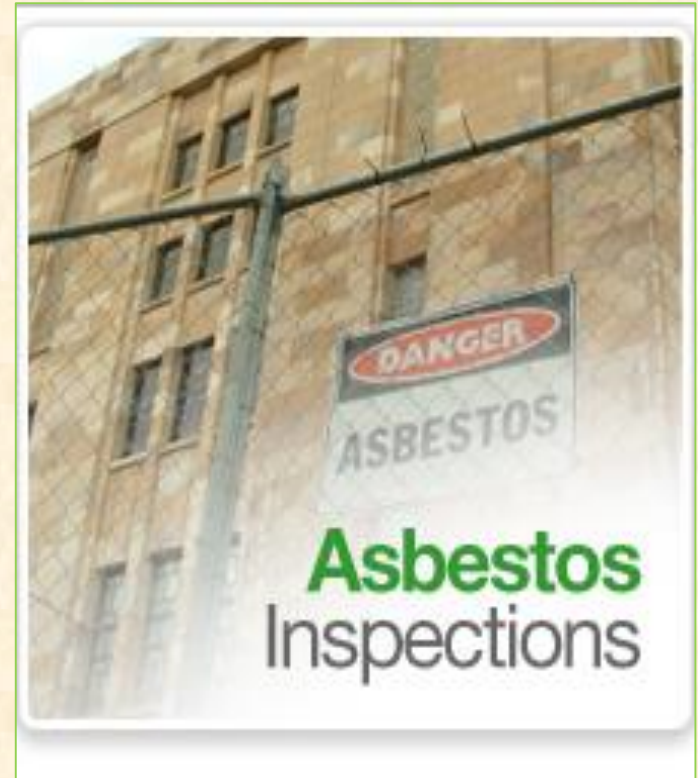
- Investigators **must maintain adequate backup documentation.**
- A detailed survey report is required for each and every asbestos survey. Asbestos investigators must maintain a permanent record (survey report) for every building survey/hazard assessment for asbestos.
- A survey report that reflects the condition of the work area at the time of the investigator's inspection.

The report should include: the building or structure's address and the name and address of the building owner, as well as the locations, quantities, and condition of all building materials in the affected portion(s) of the building or structure relative to the asbestos containing material (ACM) contained therein.

RECORDKEEPING – PART 2

Additional Requirements

- A blueprint, diagram, drawing, or written description of each building, structure or portion thereof inspected by the investigator that identifies clearly each location and approximate linear or square footage of any area where material was sampled for ACM.
- The exact locations where bulk samples were collected, the date of collection, and location of any areas assumed to have ACM.



RECORDKEEPING – PART 3

Additional Requirements

- The printed name and signature of any and all persons who collect bulk samples for the purpose of determining the presence of ACM, a copy of the current DEP asbestos handler certificate
- The name of the firm performing the survey and a copy of its current asbestos handling license

**STATE OF DELAWARE
ASBESTOS INSPECTION FORM**

FACILITY NAME: _____

ADDRESS: _____ **TAX PARCEL:** _____

CITY: _____ **COUNTY:** _____ **STATE:** _____ **ZIP:** _____

SITE CONTACT NAME: _____ **CONTACT PHONE:** _____

OWNER NAME: _____

OWNER ADDRESS: _____

CITY: _____ **COUNTY:** _____ **STATE:** _____ **ZIP:** _____

OWNER CONTACT: _____ **OWNER PHONE:** _____

FACILITY DESCRIPTION: Agricultural Commercial Industrial Institutional Public Residential

BUILDING DESCRIPTION (describe structure and size): _____

NOTE: This Survey Form was designed to be used for ONE Building/Structure only. Use additional forms for additional structures.

PROFESSIONAL SERVICE FIRM: _____

ADDRESS: _____

CITY: _____ **COUNTY:** _____ **STATE:** _____ **ZIP:** _____

INSPECTOR'S NAME: _____ **PHONE NUMBER:** _____

INSPECTION'S CERTIFICATION: _____ **PROFESSIONAL SERVICE FIRM CERTIFICATION:** _____

PM# - _____ **PS# -** _____

TYPE OF INSPECTION: RENOVATION DEMOLITION **DATE OF INSPECTION:** _____

IS ASBESTOS CONTAINING MATERIAL PRESENT? YES NO See summary results on page 2.

I hereby certify, that I am a Delaware Licensed inspector employed by a Delaware Licensed Professional Service Firm and that the building and/or contents therein located at the property identified above have been inspected for asbestos containing materials in accordance with the State of Delaware Regulations Governing the Control of Air Pollution, Regulation #21 Section 10

Name: _____ **Title:** _____

Signature: _____ **Date:** _____

If ACM is present and will be disturbed, removed or abated:
Name of Abatement Company (Print Company Name): _____
Phone # _____ **Asbestos Abatement Contractor License #** _____
The State of Delaware requires a licensed asbestos abatement contractor for all abatement projects except for work performed in an owner-occupied single family dwelling.

Asbestos Abatement & Demolition/Renovation Notification Form submitted to DNREC/USEPA
 Region 3 on _____ (insert date) _____ (insert DOANS #)

The Notification must be submitted a minimum of 10-days prior to beginning the abatement project (see 40 CFR 61 Subpart M).
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Sample report form

RECORDKEEPING – PART 4

Additional Requirements

- The name and address of the laboratory analyzing the samples, the date of analysis, the results of the analysis, the method of analysis and the name and signature of the person performing the analysis
- A detailed written description of any proposed demolition, renovation, alteration or modification work to be performed, including the techniques to be used and a description of affected facility components; and
- A chain of custody for all bulk samples collected as part of the survey

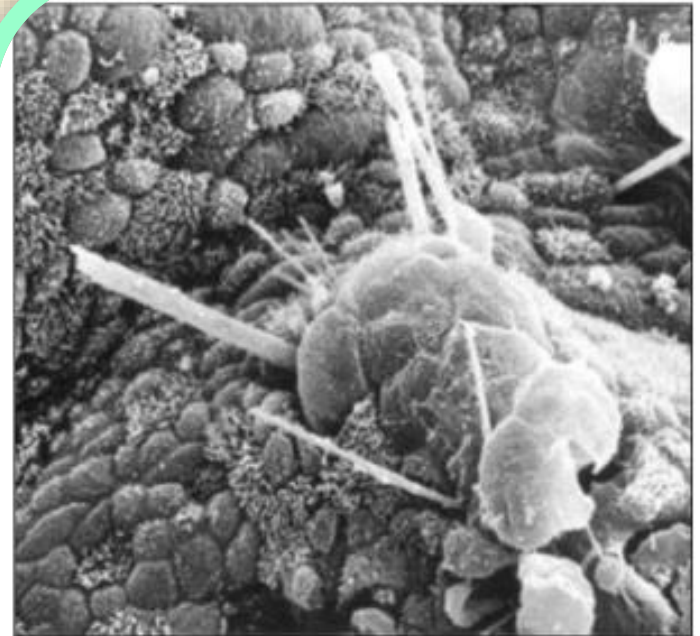
THE VISUAL INSPECTION – PART 1

- Inspect all areas including areas above suspended ceiling, pipe chases, attics, steam tunnels, crawl spaces, elevator shafts, HVAC systems, fireproof curtains, porticos, covered exterior hallways, walkways, roofs, and cooling towers.
- Notify the person in charge, immediately of anything requiring immediate action, such as a major fiber release episode. Include verification of notification in the inspection report.



VISUAL INSPECTION – PART 2

- The person in charge decides on actions to be taken or make arrangements for a licensed contractor, or agency personnel to properly eliminate the hazard.
- If a quantity of ACM is found "stockpiled", each different material shall be classified as a separate homogeneous area.
- A Stockpiled ACM Information Report (These report forms may vary according to state procedures.)
- Contact the EPA for more information) shall be completed for each different material.



Asbestos fibers present in lung tissue

SAMPLING PROCEDURES – PART 1

General Information

- Sample and photograph all homogeneous areas as recommended during the review meeting as approved by the person in charge.
- Have an accredited laboratory analyze bulk samples.
- If additional manufacturer's labels or identifying stamps are found, record the manufacturer and the exact location of the label or stamp by photos and on the drawings.
- If any situation which requires immediate action is found, notify the person in charge.



Asbestos
in the
home

SAMPLING PROCEDURES – PART 2

- *Only collect samples when the area is not in use*
- *Each person in the sampling area shall wear NIOSH (National Institute for Occupational Health and Safety) approved respirators in accord with 29 C.F.R. 1910.1001 and 1910.134 and disposable protective clothing*.*

CFR refers to Code of Federal Regulations

** Title 29 - Labor*

Part 1910 - OCCUPATIONAL SAFETY AND HEALTH STANDARDS

> Subpart Z - Toxic and Hazardous Substances

> Section 1910.1001 - Asbestos.

> Subtitle B - Regulations Relating to Labor

> Chapter XVII - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, DEPARTMENT OF LABOR



SAMPLING PROCEDURES – PART 3

- Place each sample in a write-on Whirl-Pak bag labeled with the sample number, A/E's or inspector's name, and the date.
- Place all the Whirl-Pak bags containing samples from the same building in a large Ziploc bag(s).
- Complete Chain of Custody for each building bag(s).
- Repair the sample site with methods and materials that are structurally sound, aesthetically compatible with existing conditions, and prevent fiber release. Collect samples from inconspicuous locations to minimize visual damage.



SAMPLING PROCEDURES – PART 4

Unless otherwise instructed, the following criteria shall be used to determine the number of samples required.

- Surfacing Material: Follow state department of health rules.
- Thermal System Insulation (TSI): Follow state department of health rules with the following exceptions:
 - (1) For each homogeneous area of patched insulation less than 20 linear or square feet: collect one bulk sample.
 - (2) Sample cementitious fitting insulation as a separate homogeneous area on all piping insulated with non-ACM material.
 - (3) Aircell: Collect one bulk sample.

SAMPLINE – MISCELLANEOUS PROCEDURES

- (1) Ceiling Panels or Tiles
- (2) Floor Tiles/Resilient Sheet Flooring: No samples are required.
- (3) Transite (interior & exterior): No samples are required.
- (4) Fire Door Insulation: One sample from each damaged fire door.
- (5) Stockpiled Material: One sample, unless the container is sealed or container states material is ACM.
- (6) Built Up Roofing: No samples are required.
- (7) Mastics: No samples are required.
- (8) Joint Compound: Three samples.

SAMPLING – HOMOGENOUS AREA & PHOTO DESIGNATIONS

- Sample all materials in accord with USEPA document "Asbestos in Buildings: Simplified Sampling Scheme for Friable Surfacing Materials" dated October 1985.
- Divide the homogeneous area into nine sectors and sample according to the random sample chart.
- Include a copy of the sampling area chart in accord with state department of health rules.



WHAT IS A HOMOGENOUS AREA?

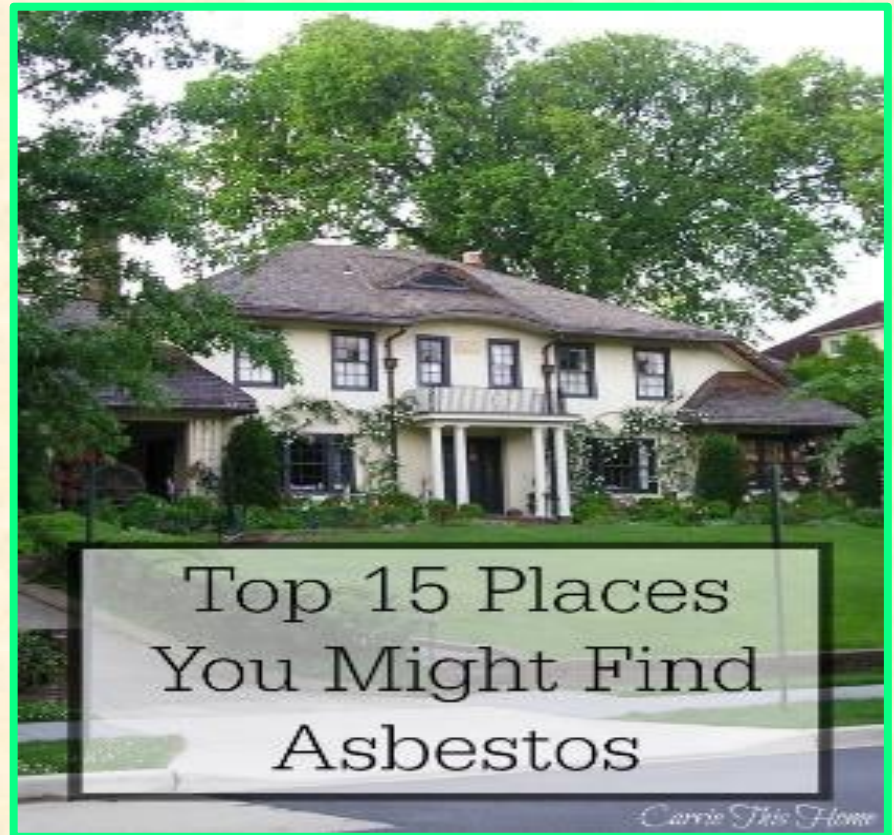
- All built-up roofs, linoleum and mastic, 9" x 9" floor tile and mastic, 12" x 12" floor tile and mastic, and carpet mastic shall be assumed as one homogeneous area.
- Include each date of installation in description if portions were installed on different dates.



A home undergoing the process of asbestos removal.

SAMPLES THAT ARE NOT SUSPECT

- (1) Gypsum Wallboard
- (2) Pyrobar
- (3) Tectum
- (4) Vinyl or Rubber



FLOOR PLANS & PHOTOGRAPHS

Floor Plans

1. Use the floor plans from the inspection phase. Indicate photo, sample, and salient areas on the floor plans.
2. Add any pipes, mechanical equipment, etc. which are included in the homogeneous area that were omitted from the floor plans.

Photographs

1. Take one photograph, using color film or digital camera, of each sample location.
2. Include in the photograph a placard with the following information: facility name, building name and number, sample number and date.
3. Also photograph salient conditions, stockpiled materials, manufacturers' identifying marks and assumed materials.

CHAIN OF CUSTODY

- All signatures on the original Chain of Custody Record shall be made using nonerasable ink; the original Chain of Custody shall remain with the samples.
- Beginning with the individual collecting the sample, each person having custody of any bulk sample shall provide the information required on the Chain of Custody Record and sign it. Any person transporting samples shall maintain the Chain of Custody.



Collect, label and maintain chain of custody for all samples.

MANAGEMENT PLAN

1. *Prepare a Management Plan for each building in which ACM is assumed or verified.*
2. *Include hazard assessment, recommended response actions, cost estimates for recommended response actions, specific O&M Procedures, and removal cost estimates if it is not the recommended response action.*



INSTRUCTIONS FOR THE INSPECTION NARRATIVE

Summary of Findings

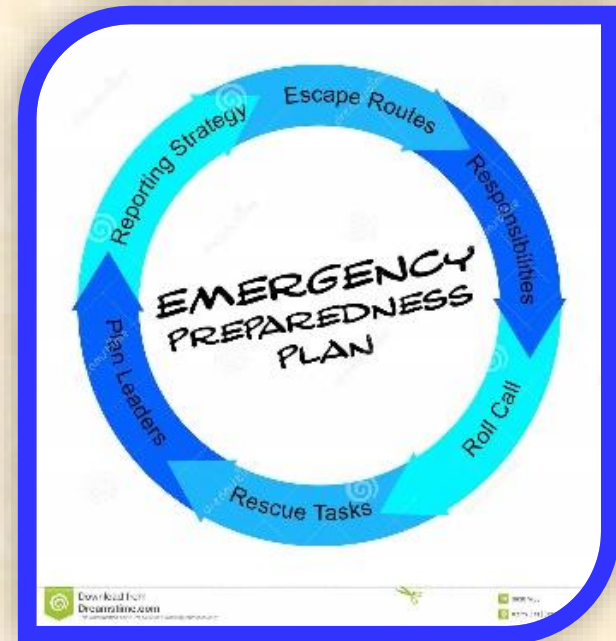
1. Enter percentage of asbestos by whole number.
2. If ACM is assumed, indicate with an "X" in the appropriate space.
3. Indicate Damage Assessment from analyzing Inspection Report (Form 9) for each homogeneous area.
4. Indicate the response action number and response action for each homogeneous area.



HAZARD ASSESSMENT

Prior to writing a response action, evaluate the Inspection Report the drawings, bulk sample analysis, and photos for each homogeneous area identified in the Sampling Report.

1. Select the appropriate response action number and response action utilizing the Decision Tree
2. Prepare the response action section
3. Complete the Cost Summary



REINSPECTION OR FINAL INSPECTION

- This procedure is to be utilized for facilities which currently have a Management Plan in conformance with the A/E Manual of Procedures for
- Asbestos Inspections and Management Plans (protocol). This Reinspection
- Report will be a supplement to the existing Management Plan.
- If previously unreported homogeneous areas are discovered, comply with all sections of the A/E Manual of Procedures for Asbestos Inspections and Management Plans (protocol) including the preparation of response actions.

THE REPORT

1. Review the existing management plan and inspect all areas of the building.
2. Complete a report for all homogeneous areas which have changed since the previous inspection.
3. Prepare a narrative which describes any changes in the building or in the homogeneous areas since the previous inspection. Include a summary of any abatement activity.
4. Revise the Management Plan for each homogeneous area if the condition of the ACM has changed since the last inspection.



CONCLUSION

This concludes the two-part series on Asbestos. Please proceed to the 10-question quiz before moving on to the two-part series on lead paint.

A blue-tinted photograph of a construction site with workers and equipment. Overlaid on the image is the text "Asbestos Awareness" in large, bold, yellow letters with a black outline.

**Asbestos
Awareness**