Asbestos Removal, Renovation, and Demolition
Overview

- Asbestos Background
- Applicability
- Exemptions
- Facility Surveys
- Notifications
- Procedures for Asbestos Emission Control
- Waste Handling and Disposal
- Test Methods
- Next Steps
Why is Asbestos Harmful?
20 U.S. Code § 3601 - Congressional statement of findings and purposes

§ 3601.

Congressional statement of findings and purposes

(a) The Congress finds that—

(1) exposure to asbestos fibers has been identified over a long period of time and by reputable medical and scientific evidence as significantly increasing the incidence of cancer and other severe or fatal diseases, such as asbestosis;

(2) medical evidence has suggested that children may be particularly vulnerable to environmentally induced cancers;

(3) medical science has not established any minimum level of exposure to asbestos fibers which is considered to be safe to individuals exposed to the fibers;

(4) substantial amounts of asbestos, particularly in sprayed form, have been used in school buildings, especially during the period 1946 through 1972;
Where Asbestos is Found?

- Common until 1980’s
- Still found in many buildings
Current Asbestos Use

Examples of Asbestos–Containing Products Not Banned

- Pipeline Wrap
- Roofing Felt
- Vinyl Floor
- Cement Pipes
- Roof Coatings
EPA Determination

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, Ca. 94105-3901

April 20, 1994

Chris Ralph
Washoe County District Health Department
Air Quality Management Division
1001 East 9th Street
Reno, Nevada 89512

Dear Mr. Ralph:

Thank you for your inquiry regarding the applicability of the Asbestos National Emission Standard for Hazardous Air Pollutants (NESHAP). Your specific question deals with whether the NESHAP demolition and renovation standards apply to structures built recently, during a period when many asbestos containing building materials were banned.

There is no waiver of the Asbestos NESHAP based on the date a structure is built. All notification, inspection, and work practice standards mandated by the regulation must be followed regardless of the date the structure was built.
What is a Facility?

- Institutional, commercial, public, industrial or residential structure, installation, or building...any ship; and any ACWM disposal site

**Non-residential**

**Examples**

- Hospital
- Military installation
- Office building
- Chemical/Processing/Power plant
- Shopping mall
- School building(s)
- Post office
- Billboard
What is a Facility?

- Non-residential
- More Examples
  - Bridges
  - Tunnels
  - Docked ships.
  - A church
  - A amusement park or State fairgrounds.
  - A jail or prison.
  - A nursing home for disabled persons.
  - A parking garage.
  - A farm.
  - Water Tower
What is a Facility?

- **Residential**
  - A single residential building having more than 4 units
(a) Applicability

RULE 1206. ASBESTOS REMOVAL, RENOVATION, AND DEMOLITION
(Adopted & Effective (date of adoption))

(a) APPLICABILITY

Except as otherwise provided in Section (b), this rule is applicable to owners and operators of any renovation or demolition operation.
(b)(1)(i) Exemption to Rule 1206

- Rule 1206 does not apply to renovations of facilities involving the disturbance of any combination of building materials in any consecutive 365-day period totaling:
  - <100 ft$^2$ of facility components or
  - <20 ft$^3$ of materials removed from facility components where the area could not be measured prior to removal, stripping or disturbance.

- If the amount of building materials disturbed exceeds the above thresholds, or a demolition of a facility will occur- a facility survey is required beforehand.
Exemptions

Other Exemptions to the Rule are:

- Residential structure(s) that contains four or fewer dwelling units.

- At a single mobile, manufactured, or modular home.
(b) Exemptions

One residential structure with four or fewer units, unless:

- More than one residential structure (mobile home or house)
- Detached
- Common owner/operator
- Same property
- Non-contiguous property when part of same commercial Project
Residential Mobile or modular structures are not exempt of Rule 1206 when used for the following purposes:

- Institutional
- Commercial
- Public
- Industrial Purpose
### (b) Exemptions

**RACM Removal Exemption Thresholds**

<table>
<thead>
<tr>
<th>Old</th>
<th>Existing</th>
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<tbody>
<tr>
<td>• &lt;160 ft$^2$ on Facility Components</td>
<td>• &lt;100 ft$^2$ on facility components and pipes</td>
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<tr>
<td>• &lt;260 linear feet on pipes</td>
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<tr>
<td>• &lt;35 ft$^3$ of materials removed prior to removal from facility components where the area could not be measured prior to, stripping, or disturbance.</td>
<td>• &lt;20 ft$^3$ of materials removed prior to removal from facility components where the area could not be measured prior to, stripping, or disturbance.</td>
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(d) Facility Survey Requirements

- Facility survey is required to determine presence of asbestos (old & new buildings)

- Must be conducted by personnel with the following certifications:
  ✓ Completion of EPA–Approved Building Inspector Course

- Certified Asbestos Consultant and Site Surveillance Technician meet the EPA Building Inspector Course requirements
(d) Facility Survey Requirements

- Suspect Material are required to be analyzed for asbestos prior to Renovation/Demolition.

- Suspect Materials that are required to be analyzed are listed in the definition as any material with a propensity to contain: RACM, Category I and II Non-Friable ACM, or building material that have a history of manufacture involving asbestos but not limited to:
Suspect Materials

- Friable if Asbestos Containing
  - Acoustic ceiling material and tiles
  - Paper backing on vinyl sheet flooring/vinyl tiles
  - Insulating Materials
  - Pipe insulation
  - Furnace and Boiler Components, Furnace and Stove Vents, Walls, floors and ceiling around boilers, air ducts and air duct connections
  - Duct Wrap
  - Ceiling tiles
  - Fireproofing materials
  - Thermal paper products
  - Wallboard Materials Including tape, joint compounds, and texturing compounds,
Category I non-friable if Asbestos containing:

- floor tiles
- Sheet Vinyl Flooring
- Linoleum
- Roofing asphalt Products
- Packings
- Gaskets

**Reminder:** Category I Non-friable ACM is not regulated unless in poor condition or made friable by mechanical methods (subjected to sanding, grinding, cutting or abrading).
Suspect Materials

- **Category II Non-friable if Asbestos containing:**
  - Cementitious/Concrete like products
    - Transite materials
      - Roof tiles
      - Shingles
      - Sidings
      - Pipes
    - Stucco/plaster
  - Mastics and adhesives/putty

**Reminder:** Category II Non-Friable ACM is not regulated unless in poor condition or crumbled, pulverized or reduced to powder by hand pressure.

Cementitious materials are required to be removed prior to a demolition.
Non-Friable Asbestos Containing Material

- Category II non-friable material not listed in definition of suspect materials but may also contain asbestos
  - Paint
Laboratory analysis not required for suspect materials presumed to be RACM when: Notify, Handle and dispose of as RACM.

Additional Facility Survey Requirements:

- Survey required only in area to be disturbed.
- Facility survey has no expiration date providing no changes are made to the facility since the survey was conducted.
- Must be maintained onsite and available to the inspector via hard copy or electronic version.
Survey Sampling General Guidelines:

- AHERA Sampling Guidelines: 3/1000, 5/1000-5000, 7/>5,000ft² and 3 samples of Thermal System Insulation.

- Representative Sampling of homogeneous suspect materials.

- At a minimum all suspect materials per Rule 1206 must be sampled and analyzed for asbestos.
(d) Facility Survey Requirements

- **Examples of Un-Acceptable Substitutes for Sampling and Analyzing Suspect Materials for Asbestos:**
  - Letter from building architect stating the building is asbestos free
  - MSDS for a suspect material (Note: per EPA since asbestos is not a primary ingredient in most materials, it is not required to be specified in a MSDS).
  - The general contractor shows you documentation that the building was constructed five years ago, is new and can’t possible contain asbestos.
(d) Facility Survey Requirements

- Documentation of Asbestos Removal Work Completion
  - Receipt
  - Work Order/Work Completion Form
  - Previous Notification of Renovation
(e) Notification Requirements

- Must be submitted ten working days prior to start date. (holidays are included as working days & Day 1 is the day received by the District)
- Must be complete and accurate
- Payment required within One working day
- EPA Building Inspector Course Certification Number
- All ACM removed must be identified and labeled as CAT I and II
- Description of facility components containing ACM
- Notification valid for one year (expires after 365 day)
How can Non-friable material be made Friable?

- Subjected to sanding, grinding, cutting or abrading
- Use of mechanical equipment
  - Bead blasters
  - Jackhammers
  - Mechanical sanders
  - Tile stripper
  - Cutting with rotating saw blades if more than 3,488 ft² is removed
  - Cranes
  - Terminator
  - Zamboni
  - Floor buffers
  - Bulldozer
  - Backhoes/Skid loaders/Top loaders
(e) Notification Requirements

Types of Notifications:

- **Planned Renovation**
  - Must be submitted by 12/17 of previous year
  - Covers RACM removal for small jobs (e.g. small repairs, maintenance, etc.) during the calendar year.
  - Does not cover individual RACM renovations of >100 square feet.

- **Emergency Renovation & Demolition Notification**
  - Must be submitted and approved by District prior to COB 1 working day after starting
  - A copy of the Emergency Demolition Order must be submitted with notification
  - Emergency renovation notification must be accompanied by proof of emergency (photos/description).
  - The definition of an emergency renovation clarified in Rule 1206.
  - Emergency renovation only applies to emergency affected areas of RACM
(e) Notification Requirements

When a Revised Notification is Required:

- **RACM Quantity Increases by 20% or More**
  - A revised notification is required before RACM removal exceeds 20%.

- **Change in Start Date (Postponed or earlier start date)**
  - If postponed, notification must be received prior to start date
  - If earlier, notification must be received prior to original start date and no later than 10 working days prior to the start date.

- A notification is invalid if all required fees have not been paid within 1 working day
(f) Procedures for Asbestos Emission Control

- **Poor condition**: Defined as Binding of a material is losing its integrity. Includes but not limited to: peeling, cracking, exfoliating, fragmenting, weathering, being broken into smaller pieces, or crumbling of the material.

- Requires More 100 or > \( \text{ft}^2 \) of poor condition ACM to be regulated.
How can Non-friable material be made Friable?

- Subjected to sanding, grinding, cutting or abrading
  - Use of mechanical equipment
    - Bead blasters
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(f) Procedures for Asbestos Emission Control

- Certified personnel - EPA-approved Asbestos Contractor Supervisor Course pursuant to the Asbestos Hazard Emergency Response Act (AHERA)
- The above AHERA training is required annually instead of biennially.
- Certification with govt issued ID onsite (electronic copy of certificate is acceptable)
(f) Procedures for Asbestos Emission Control

- All open wall sides of Containment must have transparent Inspector viewing ports.
(g) Waste Handling & Disposal

- ACWM must be kept in **secured** and **locked** containers to prevent access to public. Note: Area only marked with warning signs are not secured areas.

- Must remain adequately wet

- Collected in **clear** leak-tight wrapping or containers.

- Translucent (semi-transparent) bags are allowed as long as the it can be verified that the contents are adequately wet.
ACWM is defined as any waste containing RACM or that is contaminated with RACM.

Section (g) requires ACWM to be:

- Deposited at a certified waste disposal site. **Note:** There are no certified waste disposal sites to handle RACM in San Diego County. RACM is mostly disposed of at landfills in Azusa and La Paz, Yuma.
(h) Test Methods

Asbestos content must be analyzed in a National Voluntary Laboratory Accreditation Program (NVLAP) Certified Lab.

Test Methods (PLM, Point Counting, any EPA approved method is acceptable)

- Appendix E, Subpart E, 40 CFR, Part 763
  - EPA-600/M4-82-020
  - EPA 600/R-93/116
An online notification system is being developed that incorporates controls to assist customers in completing their notifications and reduces notification errors.

Asbestos Updates will be submitted via the Asbestos Email List Server: https://service.govdelivery.com/accounts/CASAND/subscribe/new.

District Contact

Matthew Allison
Asbestos Coordinator
(858) 586-2678
Matthew.Allison@sdcounty.ca.gov

Eric Luther
Business Assistant
(858) 586-2656
Eric.Luther@sdcounty.ca.gov