

# LANE REGIONAL AIR PROTECTION AGENCY

## TITLE 43

### ASBESTOS REQUIREMENTS

#### Section 43-001 Policy

The board finds and declares that certain air contaminants for which there is no ambient air standard may cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness, and are therefore considered to be hazardous air contaminants. Under Section 112 of the Federal Clean Air Act, the federal EPA has declared asbestos to be hazardous. Title 43 contains requirements for handling of asbestos. (Section 43-001 Amended 06/11/02)

#### Section 43-002 Applicability

Sections 43-010 through 43-015-19 apply to asbestos milling, manufacturing, fabricating, abatement, disposal, or any situation where a potential for exposure to asbestos fibers exists. (Section 43-002 Amended 06/11/02)

#### Section 43-005 Definitions

The following definitions are relevant to this title. Additional general definitions can be found in Title 12.

- “Abate” means to eliminate the nuisance or suspected nuisance by reducing or managing the emissions using reasonably available practices. The degree of abatement will depend on an evaluation of all of the circumstances of each case and does not necessarily mean completely eliminating the emissions.
- “Accidental Release” means an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source.
- “Accredited Inspector” means a person that has completed training and received accreditation under **40 CFR part 763 subpart E, appendix C (Model Accreditation Plan), Section B (Initial Training), Subsection 3 (Inspector), 1994.**
- “Accredited Trainer” means a provider of asbestos abatement training courses authorized by the Department to offer training courses that satisfy requirements for worker training.
- “Act” and “FCAA” mean the Federal Clean Air Act, Public Law 88-206 as last amended by Public Law 101.549.
- "Adequately wet" means to sufficiently mix or penetrate asbestos-containing material with liquid to prevent the release of particulate asbestos materials. An asbestos-containing material is not adequately wetted if visible emissions originate from that material; however, the absence of visible emissions is not sufficient evidence of being adequately wet.

- Precipitation is not an appropriate method for wetting asbestos-containing material.
- "Agency" means the Lane Regional Air Protection Agency.
  - "Agent," as used in Title 43, means an individual who works on an asbestos abatement project for a contractor but is not an employee of the contractor.
  - "Asbestos" means the asbestiform varieties of serpentine (chrysotile), riebeckite (crocidolite), cumingtonite-grunerite (amosite), anthophyllite, actinolite and tremolite.
  - "Asbestos Abatement Project" means any demolition, renovation, repair, construction or maintenance activity of any public or private facility that involves the repair, enclosure, encapsulation, removal, salvage, handling, disturbance or disposal of any material with the potential of releasing asbestos fibers from asbestos-containing material into the air.
  - "Asbestos-Containing Material" means asbestos or any material, including particulate material, that contains more than 1% asbestos as determined using the method specified in **40 CFR Part 763 Appendix E, Subpart E, Section 1, Polarized Light Microscopy**.
  - "Asbestos-containing waste material" means any waste that contains asbestos tailings or any commercial asbestos and is generated by a source subject to 43-010 and 43-015-1 through 43-015-19, including but not limited to asbestos mill tailings, control device asbestos waste, friable asbestos waste material, asbestos abatement project waste and bags or containers that previously contained commercial asbestos.
  - "Asbestos manufacturing operation" means the combining of commercial asbestos, or in the case of woven friction products, the combining of textiles containing commercial asbestos with any other material(s) including commercial asbestos, and the processing of this combination into a product as specified in Section 43-015-3.
  - "Asbestos mill" means any facility engaged in the conversion or any intermediate step in the conversion of asbestos ore into commercial asbestos.
  - "Asbestos tailings" means any solid waste product of asbestos mining or milling operations that contains asbestos.
  - "Asbestos Waste generator" means any person performing an asbestos abatement project or any owner or operator of a source subject to 43-010 and 43-015-1 through 43-015-19 whose act or process generates asbestos-containing waste material.
  - "Asbestos waste shipment record" means the shipment document, required to be originated and signed by the asbestos waste generator, used to track and substantiate the disposition of asbestos-containing waste material.
  - "Board" means the Board of Directors of the Lane Regional Air Protection Agency.
  - "Certified supervisor," as used in Title 43, means a person who has a current Oregon supervisor certification card.

- “Certified worker,” as used in Title 43, means a person who has a current Oregon worker certification card.
- "Chair" means the chairperson of the Board of Directors of the Lane Regional Air Protection Agency.
- "Commercial asbestos" means any variety of asbestos that is produced by extracting asbestos from asbestos ore.
- "Commission" means the Oregon Environmental Quality Commission.
- “Contractor,” as used in Title 43, means a person who undertakes for compensation an asbestos abatement project for another person. Also as used in Title 43, “compensation” means wages, salaries, commissions and any other form of remuneration paid to a person for personal services.
- "Demolish" or "Demolition" means the wrecking or removal of any load-supporting structural member of a facility together with any related handling operations or the intentional burning of any facility.
- "Department" means the Oregon Department of Environmental Quality.
- "Director" means the Director of the Lane Regional Air Protection Agency or the Director of the Oregon Department of Environmental Quality and authorized deputies or officers.
- "Emission" means a release into the ambient air of air contaminants.
- "EPA" means the United States Environmental Protection Agency.
- "Fabricating" means any processing (e.g., cutting, sawing, drilling) of a manufactured product that contains commercial asbestos, with the exception of processing at temporary sites (field fabricating) for the construction or restoration of facilities. In the case of friction products, fabricating includes bonding, debonding, grinding, sawing, drilling, or other similar operations performed as part of fabricating.
- "Facility" means all or part of any public or private building, structure, installation, equipment, or vehicle or vessel including but not limited to ships.
- "Filing" or "filed" means receipt in the office of the Director. Such receipt is adequate where filing is required for a document on a matter before the Agency, except a claim of personal liability.
- "Friable asbestos-containing material" means any asbestos-containing material that can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friable asbestos material includes any asbestos-containing material that is shattered or subjected to sanding, grinding, sawing, abrading or has the potential to release asbestos fibers.
- "Fugitive emissions" means any emissions which escape from a point or area that is not

identifiable as a stack, vent, duct or equivalent opening.

- "Hazardous air contaminant" means any air contaminant considered by the Agency, Department or Commission to cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating irreversible illness and for which no ambient air standard exists.
- "Hazardous air contaminant" means any air contaminant considered by the Agency or Department to cause or contribute to an identifiable and significant increase in mortality or to an increase in serious irreversible or incapacitating reversible illness and for which no ambient air standard exists.
- "Hazardous Air Pollutant (HAP)" means an air pollutant listed by the EPA pursuant to **Section 112(b) of the FCAA** or determined by the Commission and/or Board to cause, or reasonably be anticipated to cause, adverse effects to human health or the environment.
- "Hazardous Waste" means a hazardous waste as defined in 40 CRF 261.3.
- "HEPA filter" means a high-efficiency particulate air filter capable of filtering 0.3 micrometer particles with 99.97 percent efficiency.
- "Inactive asbestos waste disposal site" means any disposal site for asbestos-containing waste where the operator has allowed the Department's solid waste permit to lapse, has gone out of business, or no longer receives asbestos-containing waste.
- "Interim storage of asbestos-containing material" means the storage of asbestos-containing waste material that has been placed in a container outside a regulated area until transported to an authorized landfill.
- "LRAPA" means the Lane Regional Air Protection Agency, a regional air quality control authority.
- "Major Source," as used in this Title, is the same as the definition of major source in **OAR 340-200-0020**.
- "Negative pressure enclosure" means any enclosure of an asbestos abatement project area where the ambient air pressure is greater than the air pressure within the enclosure, and the air inside the enclosure is changed at least four times an hour by exhausting it through a HEPA filter.
- "Nonfriable asbestos-containing material" means any asbestos-containing material that cannot be crumbled, pulverized, or reduced to powder by hand pressure. Nonfriable asbestos-containing material does not include material that has been subjected to shattering, sanding, grinding, sawing, or abrading or that has the potential to release asbestos fibers.
- "Open Accumulation" means any accumulation, including interim storage, of friable asbestos-containing materials or asbestos-containing waste material other than material securely enclosed and stored as required by 43-015-18 and 43-015-19.

- “Owner or operator,” as used in Title 43, means any person who owns, leases, operates, controls or supervises a facility being demolished or renovated or any person who owns, leases, operates, controls, or supervises the demolition or renovation operation, or both
- "Particulate asbestos material" means any finely divided particles of asbestos material.
- "Person" means any individual, public or private corporation, association, firm, partnership, joint stock company, public and municipal corporation, political subdivision, agency, board, department, or bureau of the state and any agency thereof, and the federal government and any agency thereof, municipality, partnership, association, firm, trust, estate, or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.
- "Person in Charge of Property" means an agent, occupant, lessee, tenant, contract purchaser, or other person having possession or control of property.
- "Renovate" or "renovation" means altering in any way one or more facility components. Operations in which load-supporting structural members are wrecked or removed are considered demolition and are not included in the definition of renovation.
- "Responsible person" means each person who is in ownership, control, or custody of the property on which the open burning occurs, including any tenant thereof; or who is in ownership, control, or custody of the materials which are burned; or any person who causes or allows open burning to be initiated or maintained.
- "Roadways" mean surfaces on which vehicles travel. This term includes public and private highways, roads, streets, parking areas, and driveways.
- “Section 112(b)” means that subsection of the FCAA that includes the list of hazardous air pollutants to be regulated.
- “Shattered,” as used in Title 43, means the condition of an asbestos-containing material that has been broken into four (4) or more pieces from its original whole condition.
- "Small-scale, short-duration activity" means a task for which the removal of asbestos is not the primary objective of the job, including, but not limited to:
  - A. Removal of asbestos-containing insulation on pipes, not to exceed amounts greater than those which can be contained in a single glove bag;
  - B. Removal of small quantities of asbestos-containing insulation on beams or above ceilings;
  - C. Replacement of an asbestos-containing gasket on a valve;
  - D. Installation or removal of a small section of drywall;
  - E. Installation of electrical conduits through or proximate to asbestos-containing materials;

- F. Minor repairs to damaged thermal system insulation that does not require removal;
  - G. Repairs to asbestos-containing wallboard; or
  - H. Repairs involving encapsulation, enclosure, or removal of small amounts of friable asbestos-containing material in the performance of emergency or routine maintenance activity and not intended solely as asbestos abatement. Such work may not exceed amounts greater than those that can be contained in a single prefabricated mini-enclosure. Such an enclosure must conform spatially and geometrically to the localized work area, in order to perform its intended containment function.
  - I. No such activity described above shall result in airborne asbestos concentrations above 0.1 fibers per cubic centimeter of air (calculated on an 8-hour weighted average).
- "Startup" means commencement of operation of a new or modified source resulting in release of contaminants to the ambient air.
  - "Structural member" means any load-supporting member, such as beams and load-supporting walls, or any non-supporting member, such as ceilings and non-load-supporting walls.
  - "Survey," as used in Title 43, means to conduct a detailed inspection of a building, structure, or facility for the presence of asbestos-containing material. The survey must be conducted by an accredited inspector and include sampling of materials suspected to contain asbestos, analysis of those samples to determine asbestos content, and evaluation of the materials in order to assess their condition.
  - "Waste generator" means any person performing an asbestos abatement project or any owner or operator of a source covered by this section whose act or process generates asbestos-containing waste material.
  - "Waste shipment record" means the shipment document, required to be originated and signed by the waste generator; used to track and substantiate the disposition of asbestos-containing waste material.

(Section 43-005 amended 06/11/02)

### Section 43-010 General Provisions

1. No person may openly accumulate friable asbestos-containing material or asbestos-containing waste material.
2. Contractors working on asbestos abatement projects at a secure facility must insure that all security clearance requirements are completed before asbestos abatement projects at a secure facilities start so Agency inspectors may gain immediate access to perform required asbestos abatement project inspections.

(Section 43-010 Amended 06/11/02)

*Amended 07/01/08*

Section 43-015 Emission Standards and Procedural Requirements for Asbestos

1. EMISSIONS STANDARDS FOR ASBESTOS MILLS. No person may cause or allow to be discharged into the atmosphere any visible emissions, including fugitive emissions, from any asbestos milling operation, except as provided under 43-015-15, Air Cleaning. For purposes of these rules, the presence of uncombined water in the emission plume is not a violation of the visible emission requirement. Outside storage of asbestos materials is not part of an asbestos mill. The owner or operator of an asbestos mill must meet the following requirements:
  - A. Monitor each potential source of asbestos emissions from any part of the mill facility, including air cleaning devices, process equipment, and buildings that house equipment for material processing and handling, at least once each day, during daylight operations, for visible emissions to the outside air during periods of operations. The monitoring must be by visual observation of at least fifteen (15) seconds duration per source of emissions.
  - B. Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunction including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis, submit to the Agency, revise as necessary, and implement a written maintenance plan to include, at a minimum, the following:
    - (1) Maintenance schedule; and
    - (2) Record keeping plan.
  - C. Maintain records of the results of visible emissions monitoring and air cleaning device inspections using a format approved by the Agency and including the following information:
    - (1) Date and time of each inspection;
    - (2) Presence of visible emissions;
    - (3) Condition of fabric filters, including presence of any tears, holes, and abrasions;
    - (4) Presence of dust deposits on clean side of fabric filters;
    - (5) Brief description of corrective actions taken, including date and time; and
    - (6) Daily hours of operation for each air cleaning device.
  - D. Furnish upon request, and make available at the affected facility during normal business hours for inspection by the Agency, all records required under this section.

- E. Retain a copy of all monitoring and inspection records for at least two (2) years.
  - F. Submit a copy of visible emission monitoring records to the Agency quarterly. The quarterly reports must be postmarked by the thirtieth (30th) day following the end of the calendar quarter.
  - G. Asbestos-containing waste material produced by any asbestos milling operation must be disposed of according to Section 43-015-18 and 43-015-19.
2. ROADWAYS AND PARKING LOTS. No person may construct or maintain, or allow to be constructed or maintained a roadway with asbestos tailings or asbestos-containing waste material on that roadway, unless (for asbestos tailings):
- A. It is a temporary roadway on an area of asbestos ore deposits (asbestos mine); or
  - B. It is a temporary roadway at an active asbestos mill site and is encapsulated with a resinous or bituminous binder, and the encapsulated road surface is maintained at least once per calendar year or within 12 months of road construction to prevent dust emissions; or
  - C. It is encapsulated in asphalt concrete meeting the specifications contained in section 401 of Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-85, 1985, or their equivalent.
3. MANUFACTURING. No person may cause or allow to be discharged into the atmosphere any visible emissions, except as provided in 43-015-16, from any building or structure in which manufacturing operations utilizing asbestos are conducted, or directly from any such manufacturing operations if they are conducted outside buildings or structures, or from any other fugitive emissions. All asbestos-containing waste material produced by any manufacturing operation must be disposed of according to 43-015-18 and 43-015-19. Visible emissions from boilers or other points not producing emissions directly from the manufacturing operation, and having no possible asbestos material in the exhaust gases, are not a violation of this rule. The presence of uncombined water in the exhaust plume is not a violation of the visible emission requirements.
- A. Applicability. Manufacturing operations subject to these rules are as follows:
    - (1) The manufacture of cloth, cord, wicks, tubing, tape, twine, rope, thread, yarn, roving, lap, or other textile materials;
    - (2) The manufacture of fire proofing and insulating materials;
    - (3) The manufacture of cement products;
    - (4) The manufacture of friction products;

- (5) The manufacture of paper, millboard, and felt;
  - (6) The manufacture of floor tile;
  - (7) The manufacture of paints, coatings, caulks, adhesives, or sealants;
  - (8) The manufacture of plastics and rubber materials;
  - (9) The manufacture of chlorine, using asbestos diaphragm technology;
  - (10) The manufacture of shotgun shell wads;
  - (11) The manufacture of asphaltic concrete; or
  - (12) Any other manufacturing operation that results or may result in the release of asbestos material to the ambient air.
- B. The owner or operator of the manufacturing operation must monitor each potential source of asbestos emissions from any part of the manufacturing facility, including air cleaning devices, process equipment, and buildings housing material processing and handling equipment. Monitoring must be done at least once each day during daylight hours for visible emissions to the outside air during periods of operation and be by visual observation for at least fifteen (15) seconds duration.
- C. The owner or operator of the manufacturing operation must inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags, and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis, submit to the Agency, revise as necessary, and implement a written maintenance plan to include, at a minimum, the following:
- (1) Maintenance schedule; and
  - (2) Record keeping plan.
- D. The owner or operator of a manufacturing operation must maintain records of the results of visible emission monitoring and air cleaning device inspections using a format approved by the Agency and includes the following information:
- (1) Date and time of each inspection;
  - (2) Presence of visible emissions;
  - (3) Condition of fabric filters, including presence of any tears, holes, and abrasions;
  - (4) Presence of dust deposits on clean side of fabric filters;
  - (5) Brief description of corrective actions taken, including date and time; and

(6) Daily hours of operation for each air cleaning device.

- E. The owner or operator of a manufacturing operation must furnish upon request, and make available at the affected facility during normal business hours for inspection by the Agency, all records required under this section.
- F. The owner or operator of a manufacturing operation must retain a copy of all monitoring and inspection records for at least two (2) years.
- G. The owner or operator of a manufacturing operation must submit quarterly a copy of the visible emission monitoring records to the Agency if visible emissions occurred during the report period. Quarterly reports must be postmarked by the thirtieth (30th) day following the end of the calendar quarter.
- H. Asbestos-containing waste material produced by any asbestos manufacturing operation shall be disposed of according to 43-015-18 and 43-015-43-015-19.

#### 4. SOURCES USING AIR CLEANING DEVICES.

- A. New sources covered by this rule must submit the requested information 90 days before initial startup. Existing sources covered by this rule must comply by March 1, 1996. Changes in the information provided to the Agency must be submitted within thirty (30) days after the change.
- B. Sources covered by 43-015-1 Mills, 43-015-3 Manufacturing, 43-015-16 Fabricating, and 43-015-5 Asbestos to Nonasbestos Conversion Operations, must provide the following information to the Agency:
  - (1) A description of the emission control equipment used for each process; and
  - (2) If a fabric filter device is used to control emissions,
    - (a) the airflow permeability in  $m^3_{air}/min/m^2_{fabric}$  ( $ft^3_{air}/min/ft^2_{fabric}$ ) if the fabric filter device uses a woven fabric, and, if the fabric is synthetic, whether the fill yarn is spun or not spun;
    - (b) if the fabric filter device uses a felted fabric, the density in  $g/m^2$  ( $oz/yd^2$ ), the minimum thickness in millimeters (inches), and the airflow permeability in  $m^3_{air}/min/m^2_{fabric}$  ( $ft^3_{air}/min/ft^2_{fabric}$ ); and
  - (3) If a HEPA filter is used to control emissions, the certified efficiency.
- C. For sources covered by this rule and subject to 43-015-18, Friable Asbestos Disposal Requirements, and 43-015-19, Nonfriable Asbestos Disposal Requirements:
  - (1) A brief description of each process that generates asbestos containing waste material;

- (2) The average volume of asbestos containing waste material disposed of, measured in m<sup>3</sup>/day (yd<sup>3</sup>/day);
  - (3) The emission control methods used in all stages of waste disposal; and
  - (4) The type of disposal site or incineration site used for ultimate disposal, the name of the site operator and the name and location of the disposal site.
- D. For sources covered by this rule and subject to 43-015-18.J Active Disposal Sites, 43-015-18.M Inactive Disposal Sites, and 43-015-19, Nonfriable Asbestos Disposal Requirements:
- (1) A brief description of the site; and
  - (2) The method or methods used to comply with the standard, or alternative procedures to be used.
5. **ASBESTOS TO NON-ASBESTOS CONVERSION OPERATIONS.** (See **OAR 340-248-0230**)
6. **MAJOR SOURCES.** This section applies only to renovation and demolition activities at major sources subject to the federal operating permit program as defined in **OAR 340-200-0020**.
- A. To determine applicability of the Agency's asbestos regulations, the owner or operator of a renovation or demolition project must thoroughly survey, using an accredited inspector, the affected area for the presence of asbestos, including nonfriable asbestos. A copy of that survey report must remain on site during any demolition or renovation activity.
  - B. For demolition projects where no asbestos-containing material is present, written notification must be submitted to the Agency on an approved form. The notification must be submitted by the owner or operator or by the demolition contractor as follows:
    - (1) Submit the notification, as specified in Part C of this Subsection to the Agency at least ten (10) days before beginning any demolition project.
    - (2) Failure to notify the Agency before any changes in the scheduled starting or completion dates or other substantial changes, renders the notification of demolition void.
  - C. The following information must be provided for each notification of demolition:
    - (1) Name, address and telephone number of the person conducting the demolition;
    - (2) Contractor's Oregon demolition license number, if applicable;

- (3) Certification that no asbestos was found during the pre-demolition asbestos survey and that, if asbestos-containing material is uncovered during demolition, the procedures found in Sections 43-015-7 through 43-015-18 will be followed;
  - (4) Description of the building, structure, facility, installation, vehicle, or vessel to be demolished, including:
    - (a) the age and present and prior use(s) of the facility;
    - (b) address or location of the scheduled demolition project.
  - (5) Major source owner's or operator's name, address and phone number;
  - (6) Scheduled starting and completion dates of demolition work; and
  - (7) Any other information requested on the Agency form.
7. ASBESTOS ABATEMENT PROJECTS. Any person who conducts or provides for the conduct of an asbestos abatement project must comply with the provisions set forth in Title 43 except as provided in this rule.
- A. The asbestos abatement projects described in (1) through (7) below are exempt from certain provisions of Title 43 as listed in this section and OAR Chapter 340, Division 248.
- (1) Asbestos abatement conducted inside a single private residence by the owner is exempt from 43-015-10.A, if the residence:
    - (a) is not used as a rental property;
    - (b) is not used as a commercial business;
    - (c) is not intended to be demolished.
  - (2) Asbestos abatement conducted inside a single private residence by the owner-occupant is exempt from 43-015-8 through 43-015-11.
  - (3) Asbestos abatement conducted outside of a single private residence by the owner is exempt from 43-015-9 and 43-015-10.A, if the residence:
    - (a) is not used as a rental property;
    - (b) is not used as a commercial property; and
    - (c) is not intended to be demolished.
  - (4) Residential buildings with four or fewer dwelling units that were constructed after 1987 are exempt from the provisions of 43-015-10.A.

(5) Projects involving the removal of mastics and roofing products that are fully encapsulated with a petroleum-based binder and are not hard, dry, or brittle, and the conditions in (a) and (b) below are met are exempt from 43-010 through 43-015-18 and 43-015-19.A, B, H, and I, provided these materials are not made friable.

(a) The generation of particulate asbestos material is minimized.

(b) Asbestos-containing materials are wetted prior to removal and during subsequent handling, to the extent practicable.

(6) Projects involving the removal of less than three square feet or three linear feet of asbestos-containing material are exempt from 43-015-10.T through 43-015-10.W provided that the removal of asbestos is not the primary objective, is part of a needed repair operation, the methods of removal are in compliance with **OAR 437 Division 3, "Construction" Subsection Z and 29 CFR 1926.1101(g)(i) through (iii) (1998)**, and the following conditions are met:

(a) the generation of particulate asbestos material is minimized;

(b) no vacuuming or local exhaust ventilation and collection is conducted with equipment having a collection efficiency lower than that of a HEPA filter;

(c) all asbestos-containing waste materials shall be cleaned up using HEPA filters or wet methods; and

(d) asbestos-containing materials are wetted prior to removal and during subsequent handling, to the extent practicable.

An asbestos abatement project may not be subdivided into smaller-sized units in order to qualify for this exemption.

(7) Projects involving the removal of asbestos-containing materials that are sealed from the atmosphere by a rigid casing are exempt from 43-015-8 through 43-015-10, 43-015-19B through 43-015-19-D, and 43-015-19G through 43-015-19.I, provided the casing is not broken or otherwise altered such that asbestos fibers could be released during removal, handling and transport to an authorized disposal site.

B. Open storage or open accumulation of asbestos-containing material or asbestos-containing waste material is prohibited.

*(Note: The requirements and jurisdiction of the State of Oregon Department of Insurance and Finance, Accident Prevention Division (Oregon OSHA) and any other state agency are not affected by these rules.)*

8. NON-FRIABLE ASBESTOS ABATEMENT PROJECTS. Any person who removes

non-friable asbestos-containing material not exempted under 43-015-7.A must comply with the following:

- A. Submit asbestos removal notification and the appropriate fee to the Agency, on an Agency form in accordance with 43-015-9.
  - B. Remove non-friable asbestos-containing materials in a manner that ensures the material remains nonfriable.
  - C. A nonfriable asbestos abatement project is exempt from the asbestos licensing and certification requirements under 43-015-10.T through 43-015-10.W. This exemption ends whenever the asbestos-containing material becomes friable or has the potential to release asbestos fibers into the environment.
9. ASBESTOS ABATEMENT NOTIFICATION REQUIREMENTS. Except as provided for in 43-015-7, written notification of any asbestos abatement project must be provided to the Agency on a form prepared by and available from the Agency, accompanied by the appropriate fee. The notification must be submitted by the facility owner or operator or by the contractor, in accordance with one of the procedures specified in subsections A, B or C below, except as provided in subsections F and G below.
- A. Submit the notifications as specified in subsection D below, and the project notification fee to the Agency at least ten (10) days before beginning any friable asbestos abatement project and at least five (5) days before beginning any non-friable asbestos abatement project.
    - (1) The project notification fees in effect for 07/01/2007 are:
      - (a) forty-four dollars (\$44) for each asbestos abatement project less than 40 linear feet or 80 square feet of asbestos-containing material, a residential building used as a residence before **AND** after abatement, or a non-friable asbestos abatement project;
      - (b) ninety-four dollars (\$94) for each asbestos abatement project greater than or equal to 40 linear feet or 80 square feet of asbestos-containing material and less than 260 linear feet or 160 square feet;
      - (c) three-hundred and seventy-nine dollars (\$379) for each project greater than or equal to 260 linear feet or 160 square feet, and less than 1,300 linear feet or 800 square feet;
      - (d) four hundred and seventy-five (\$475) for each project greater than or equal to 1,300 linear feet or 800 square feet, but less than 2,600 feet or 1,600 square feet;
      - (e) eight hundred and twenty-two dollars (\$822) for each project greater than or equal to 2,600 linear feet or 1,600 square feet, and less than 5,000 linear feet

or 3,500 square feet;

- (f) nine hundred and forty-eight dollars (\$948) for each project greater than or equal to 5,000 linear feet or 3,500 square feet, and less than 10,000 linear feet or 6,000 square feet;
  - (g) one thousand, five hundred and eighteen dollars (\$1,518) for each project greater than or equal to 10,000 linear feet or 6,000 square feet, and less than 26,000 linear feet or 16,000 square feet;
  - (h) two thousand, five hundred and thirty-one dollars (\$2,531) for each project greater than or equal to 26,000 linear feet or 16,000 square feet, and less than 260,000 linear feet or 160,000 square feet.
  - (i) three thousand, one hundred and sixty-three dollars (\$3,163) for each project greater than 260,000 linear feet or 160,000 square feet.
- (2) The annual notifications fees are:
- (a) three hundred and twenty-nine dollars (\$329) for annual notifications for friable asbestos abatement projects involving removal of less than 40 linear feet or 80 square feet of asbestos-containing material; and
  - (b) four hundred and forty-three dollars (\$443) for annual notifications for non-friable asbestos abatement projects performed at schools, colleges, and facilities.
- (3) The fees in 43-015-9.A(1) and (2) will increase by four (4) percent on July 1 of each year, beginning July 1, 2003.
- (4) Project notification fees must accompany the completed project notification form. Notification has not occurred until the completed notification form and appropriate notification fee are received by the Agency.
- (5) The Agency may waive the ten-day notification requirement in subsection A above in emergencies that directly affect human life, health, and property. This includes:
- (a) emergencies where there is an imminent threat of loss of life or severe injury; or
  - (b) emergencies where the public is exposed to air-borne asbestos fibers; or
  - (c) emergencies where significant property damage will occur if repairs are not made immediately.
- (6) The Agency may waive the ten-day notification requirement in subsection A

above for asbestos abatement projects that were not planned, resulted from unexpected events, and will cause damage to equipment or impose unreasonable financial burden if not performed immediately. This includes the non-routine failure of equipment.

- (7) In either (5) or (6) above persons responsible for such asbestos abatement projects must notify the Agency by telephone before commencing work, or by 9:00 a.m. of the next working day if the work was performed on a weekend or holiday. In any case, notification as specified in sub-section D below and the appropriate fee must be submitted to the Agency within three (3) days of commencing emergency or unexpected event asbestos abatement projects.
  - (8) If an asbestos project, equal to or greater than 2600 linear feet or 1600 square feet continues for more than one year from the original start date of the project, a new notification and fee must be submitted annually thereafter until the project is complete.
  - (9) Failure to notify the Agency before any changes in the scheduled starting or completion dates or other substantial changes, will render the notification void.
  - (10) Residential buildings include: site built homes, modular homes constructed off site, mobile homes, condominiums, and duplexes or other multi unit residential building consisting of four units or less, and will be used as residential dwellings after any asbestos abatement project is completed.
- B. Annual notification for small-scale friable asbestos abatement projects may be used only for projects where less than forty (40) linear or eighty (80) square feet of asbestos-containing material is removed. The small-scale friable asbestos projects may be conducted at multiple facilities by a single licensed asbestos contractor or at a facility that has a centrally controlled asbestos operation and maintenance program where the facility owner uses appropriately trained and certified personnel to remove asbestos. The annual notification may be submitted as follows:
- (1) Establish eligibility for use of this notification procedure with the Agency prior to use.
  - (2) Maintain on file with the Agency a general asbestos abatement plan. The plan must contain the information specified in part D of this subsection to the extent possible.
  - (3) Provide to the Agency a summary report of all asbestos abatement projects conducted in the previous three months, by the 15th day of the month following the end of each calendar quarter. The summary report must include the information specified in part D of this subsection for each project, a description of any significant variations from the general asbestos abatement plan, and a description of asbestos abatement projects anticipated for the next quarter when possible.

- (4) Provide to the Agency, upon request, a list of asbestos abatement projects that are scheduled or are being conducted at the time of the request.
  - (5) Submit a project notification fee prior to use of this notification procedure.
  - (6) Failure to provide payment for use of this notification procedure will void the general asbestos abatement plan, and each subsequent abatement project will be individually assessed a project notification fee.
- C. Annual nonfriable asbestos abatement projects may only be performed at schools, colleges, and facilities where the removal work is done by certified asbestos abatement workers. Submit the notification as follows:
- (1) Establish eligibility for use of this notification procedure with the Agency prior to use.
  - (2) Maintain on file with the Agency a general nonfriable asbestos abatement plan. The plan must contain the information specified in part D of this subsection to the extent possible.
  - (3) Provide to the Agency a summary report of all non-friable asbestos abatement projects conducted in the previous three months by the 15<sup>th</sup> day of the month following the end of the calendar quarter. The summary must include the information specified in part D of this subsection for each project, a description of any significant variations from the general asbestos abatement plan, and a list describing the non-friable asbestos abatement projects anticipated for the next quarter, when possible.
  - (4) Submit project notification and fee prior to use of this notification procedure.
  - (5) Failure to provide payment for use of this notification procedure will void the general nonfriable asbestos abatement plan, and each subsequent nonfriable abatement project will be individually assessed a project notification fee.
- D. The following information must be provided for each notification:
- (1) Name and address of person intending to engage in asbestos abatement;
  - (2) The Oregon asbestos abatement contractor's license number and certification number of the supervisor for the asbestos abatement project or, for nonfriable asbestos abatement projects, the name of the supervising person that meets Oregon OSHA's competent person qualifications as required in OAR 437, Division 3 "Construction", Subdivision Z, 1926.1101(b) "Competent person", (2/10/1994);
  - (3) Method of asbestos abatement to be employed;

- (4) Procedures to be employed to insure compliance with 43-015;
- (5) Names, addresses and phone numbers of waste transporters;
- (6) Name and address or location of the waste disposal site where the asbestos-containing waste material will be deposited;
- (7) Description of asbestos disposal procedure;
- (8) Description of building, structure, facility, installation, vehicle or vessel to be demolished or renovated, including:
  - (a) the age, present and prior use of the facility; and
  - (b) address or location where the asbestos abatement project is to be accomplished, including building, floor, and room numbers.
- (9) Facility owner's or operator's name, address and phone number;
- (10) Scheduled starting and completion dates of asbestos abatement work;
- (11) Description of the asbestos type, approximate asbestos content (percent) and location of the asbestos-containing material;
- (12) Amount of asbestos to be abated (linear feet, square feet, thickness);
- (13) For facilities described in 43-015-10(I), provide the name, title and authority of the state or local government official who ordered the demolition, date the order was issued, and the date the demolition is to begin; and
- (14) Any other information requested on the Agency form.

E. In addition to any other legal remedy available, the project notification fees specified in this section will be increased by fifty (50) percent when an asbestos abatement project is commenced without filing of a project notification or submittal of a notification fee or when notification of less than ten days is provided under 43-015-9.A(5) and (6).

F. The Director may waive part or all of a project notification fee. Requests for waiver of fees must be made in writing to the Director, on a case-by-case basis, and be based upon financial hardship. Applicants for waivers must describe the reason for the request and certify financial hardship.

10. **ASBESTOS ABATEMENT WORK PRACTICES AND PROCEDURES.** Except as provided for in 43-015-7, the following procedures must be employed by any person who conducts or provides for the conduct of an asbestos abatement project:

A. Prior to performing a demolition or renovation activity on a facility the owner or operator of a facility must have an accredited inspector thoroughly survey the affected

facility or part of the facility where the demolition or renovation operation will occur for the presence of asbestos-containing material, including nonfriable asbestos-containing material.

- B. The owner or operator of a facility that requires a survey pursuant to 43-015-10.A must keep a copy of the survey report onsite at the facility during any demolition or renovation activity.
- C. Remove all asbestos-containing materials before beginning any activity that would break up, dislodge, or disturb the materials or preclude access to the materials for subsequent removal. Asbestos-containing materials need not be removed before demolition if:
  - (1) They are on a facility component that is encased in concrete or other similar material and are adequately wetted whenever exposed during demolition; or
  - (2) They were not discovered before demolition and cannot be removed because of unsafe conditions as a result of the demolition.
- D. Upon discovery of asbestos materials found during demolition, the owner or operator performing the demolition must:
  - (1) Stop demolition work immediately;
  - (2) Notify the Agency immediately of the occurrence;
  - (3) Keep the exposed asbestos-containing materials and any asbestos-contaminated waste material adequately wet at all times until a licensed asbestos abatement contractor begins removal activities; and
  - (4) Have the licensed asbestos abatement contractor remove and dispose of the asbestos-containing waste material.
- E. Enclose the area of the asbestos-containing materials to be abated, in a negative pressure enclosure prior to abatement unless prior approval has been granted by the Agency.
- F. Asbestos-containing materials must be adequately wetted when they are being removed. In renovation, maintenance, repair and construction operations, where wetting would unavoidably damage equipment or is incompatible with specialized work practices, or presents a safety hazard, adequate wetting is not required, if the owner or operator:
  - (1) Obtains prior written approval from the Agency for dry removal of asbestos-containing material;
  - (2) Keeps a copy of the Agency's written approval available for inspection at the work site;

- (3) Adequately wraps or encloses any asbestos-containing material during handling to avoid releasing fibers; and
  - (4) Uses a local exhaust ventilation and collection system designed and operated to capture the particulate asbestos material produced by the asbestos abatement project which is no less efficient than a HEPA filter.
- G. When a facility component covered or coated with asbestos-containing materials is being taken out of the facility as units or in sections:
- (1) Adequately wet any asbestos-containing materials exposed during cutting or disjointing operation; and
  - (2) Carefully lower the units or sections to ground level, not dropping them or throwing them.
  - (3) Asbestos-containing materials do not need to be removed from large facility components such as reactor vessels, large tanks, steam generators, but excluding beams if the following requirements are met:
    - (a) the component is removed, transported, stored, disposed of, or reused without disturbing or damaging the regulated asbestos-containing material;
    - (b) the component is encased in leak-tight wrapping; and
    - (c) the leak-tight wrapping is labeled according to 43-015-18.B(1)(b)(ii) during all loading and unloading operations and during storage.
- H. For friable asbestos-containing materials being removed or stripped:
- (1) Adequately wet the materials to ensure that they remain wet until they are disposed of in accordance with 43-015-18.
  - (2) Carefully lower the materials to the floor, not dropping or throwing them.
  - (3) With prior written approval from the Agency, transport the materials to the ground via dust-tight chutes or containers if they have been removed or stripped above ground level and were not removed as units or in sections.
  - (4) Enclose the area where friable asbestos-containing materials are to be removed with a negative pressure enclosure prior to abatement unless written approval for an alternative is granted by the Agency.
  - (5) A minimum of one viewing window will be installed in all enclosures, including negative pressure enclosures, in accordance with the following:
    - (a) Each viewing window must be a minimum of two feet by two feet and be made of a material that will allow a clear view inside the enclosure.

- (a) For large enclosures, including negative pressure enclosures, install one viewing window for every 5,000 square feet of area when spatially feasible.
- I. The asbestos abatement project area shall be adequately cleaned at the conclusion of the project to assure removal of all asbestos debris.
- J. While at the project site, all asbestos-containing waste shall be secured in a posted area or receptacle.
- K. Ambient air sampling may be required in proximity to any asbestos removal project where work practices prescribed in this section are not being followed, whether or not prior approval to use alternate method has been obtained from the Agency.
- L. Before a facility is demolished by intentional burning, all asbestos containing material must be removed and disposed of in accordance with sections 43-015-10 Work Practices through 43-015-19.
- M. Any person that demolishes a facility under an order of the State of Oregon or a local governmental agency, issued because the facility is structurally unsound and in danger of imminent collapse must comply with the following:
  - (1) Obtain written approval from the Agency for an ordered demolition procedure before that demolition takes place;
  - (2) Send a copy of the order and an asbestos abatement project notification (as described in 43-015-9) to the Agency before commencing demolition work;
  - (3) Keep a copy of the order, Agency's approval, and the notification form at the demolition site during all phases of demolition until final disposal of the project waste at an authorized landfill; and
  - (4) Keep asbestos-containing materials and asbestos contaminated debris adequately wet during demolition and comply with the disposal requirements set forth in 43-015-18 and 43-015-19.
- N. Persons performing asbestos abatement outside full negative pressure containment must obtain written approval from the Agency before using mechanical equipment to remove asbestos-containing material.
- O. None of the operations in subsections A through H of this section may cause any visible emissions. Any local exhaust ventilation and collection system or other vacuuming equipment used during an asbestos abatement project must be equipped with a HEPA filter or other filter of equal or greater collection efficiency.
- P. Open storage or open accumulation of friable asbestos-containing material or asbestos-containing waste material is prohibited.
- Q. Any materials within a container which displays an asbestos hazard warning will be

subject to all applicable rules and regulations pertaining to the storage and disposal of asbestos-containing waste materials.

- R. No person shall conduct an asbestos abatement project unless they possess a current asbestos abatement Contractors license or workers certification, issued by the Department under OAR 340-248-040 or OAR 340-248-0120 and OAR 340-248-0130, respectively, unless exempted by 43-015-7 and/or 43-015-8.
  - S. Any person acting as the supervisor for any asbestos abatement project must be certified by the Department as a supervisor under the provisions of OAR 340-248-0130.
  - T. Any person engaged in or working on any asbestos abatement project must be certified by the Department as a worker or a supervisor under the provisions of OAR 340-248-0130.
  - U. A certified supervisor is required to be present on each asbestos abatement project other than a small-scale short-duration activity.
  - V. An owner or operator of a facility shall not allow any persons other than those employees of the facility owner or operator who are appropriately certified or a licensed asbestos abatement contractor to perform an asbestos abatement project in or on that facility unless exempted by 43-015-7 or 43-015-8.
  - W. The Director may approve, on a case-by-case basis, requests to use an alternative to the requirements contained in this rule. The contractor or facility owner or operator must submit a written description of the proposed alternative and demonstrates, to the Director's satisfaction, that the proposed alternative provides public health protection equivalent to the protection that would be provided by the specific requirement, or that such level of protection cannot be obtained for the asbestos abatement project.
11. FINAL AIR CLEARANCE SAMPLING REQUIREMENTS apply to projects involving more than 160 square feet or 260 linear feet of asbestos-containing material. Before containment around such an area is removed, the person performing the abatement must have at least one air sample collected that documents that the air inside the containment has no more than 0.01 fibers per cubic centimeter of air. The air sample(s) collected may not exceed 0.01 fibers per cubic centimeter of air. The Agency may grant a waiver to this section or exceptions to the following requirements upon receiving an advanced written request.
- A. The air clearance samples must be performed and analyzed by a party who is National Institute of Occupational Safety and Health (NIOSH) 582, or equivalent, certified and financially independent from the person(s) conducting the asbestos abatement project.
  - B. Before final air clearance sampling is performed the following must be completed:
    - (1) All visible asbestos-containing material and asbestos-containing waste material must be removed according to the requirements of this section;

- (2) The air and surfaces within the containment must be sprayed with an encapsulant;
  - (3) Air sampling may commence when the encapsulant has settled sufficiently so that the filter of the sample is not clogged by airborne encapsulant; and
  - (4) Air filtration units must remain on during the air monitoring period.
- C. Air clearance sampling inside containment areas must be aggressive and comply with the following procedures:
- (1) Immediately before starting the sampling pumps, direct exhaust from a minimum one horse power forced air blower against all walls, ceilings, floors, ledges, and other surfaces in the containment.
  - (2) Then place stationary fans in locations that will not interfere with air monitoring equipment, and direct the fans toward the ceiling. Use one fan per 10,000 cubic feet of room space.
  - (3) Start sampling pumps and sample an adequate volume of air to detect concentrations of 0.01 fibers per cubic centimeter according to the U.S. National Institute of Occupational Safety and Health, (NIOSH) 7400 method.
  - (4) When sampling is completed turn off the pump and then the fan(s).
  - (5) As an alternative to meeting the requirements of (1) through (4) of this sub-section, air clearance sample analysis may be performed according to Transmission Electron Microscopy Analytical Methods prescribed by 40 CFR 763, Appendix A to Subpart E (Interim Transmission Electron Microscopy Analytical Methods).
- D. The persons(s) performing asbestos abatement projects requiring air clearance sampling must submit to the Agency clearance results within thirty (30) days after the monitoring procedures were performed.

12. RELATED WORK PRACTICES AND ENGINEERING CONTROLS employed for asbestos abatement projects by contractors and/or workers who are not otherwise subject to the requirements of the Oregon Department of Insurance and Finance, Oregon Occupational Safety and Health Division, shall comply with the subsections of OAR Chapter 437, Division 3, "Construction" (29 CFR 1926.1101(g)) which limit the release of asbestos-containing materials or exposure of other persons. As used in this subsection the term "employer" shall mean the operator of the asbestos abatement project, and the term "employee" shall mean any other person.

13. SPRAYING OPERATIONS. The following apply to spraying operations:

- A. No person may cause or allow to be discharged into the atmosphere any visible emissions from any spray-on application of materials containing more than one percent (1%) asbestos on a dry weight basis used to insulate or fireproof equipment or

machinery, except as provided in subsection 15 of this section. Spray-on materials used to insulate or fireproof buildings, structures, pipes, and conduits must contain less than one percent (1%) asbestos on a dry weight basis. If any city or area of local jurisdiction has ordinances or regulations for spray application materials more stringent than those in this section, the provisions of such ordinances or regulations apply.

B. Any person intending to spray asbestos materials to insulate, fireproof, cover or coat buildings, structures, pipes, conduits, equipment, or machinery must notify the Agency in writing twenty (20) days before the spraying operation begins. The notification must contain the following information:

- (1) Name and address of person intending to conduct the spraying operation;
- (2) Address or location of the spraying operation; and
- (3) Name and address of the owner of the facility being sprayed.

C. The spray-on application of materials in which the asbestos fibers are encapsulated with a bituminous or resinous binder during spraying and which are not friable after drying is exempted from the requirements of parts A and B of this subsection.

14. **OPTIONS FOR AIR CLEANING.** Rather than meet the no visible emissions requirements of 43-015-1 and 3, owners and operators may elect to use methods specified in section 15, below.

15. **AIR CLEANING.** All persons electing to use air cleaning methods rather than comply with the no visible emission requirements must meet all provisions of this section:

A. Fabric filter collection devices must be used, except as provided in subsections B and C of this section. Such devices must be operated at a pressure drop of no more than four (4) inches (10.16 cm) water gauge as measured across the filter fabric. The air flow permeability, as determined by ASTM Method D737-75, must not exceed  $30 \text{ ft.}^3_{\text{air}}/\text{min.}/\text{ft.}^2_{\text{fabric}}$  ( $9 \text{ m}^3_{\text{air}}/\text{min.}/\text{m}^2_{\text{fabric}}$ ) for woven fabrics or  $35 \text{ ft.}^3_{\text{air}}/\text{min.}/\text{ft.}^2_{\text{fabric}}$  ( $11 \text{ m}^3_{\text{air}}/\text{min.}/\text{m}^2_{\text{fabric}}$ ) for felted fabrics with the exception that airflow permeability of  $40 \text{ ft.}^3_{\text{air}}/\text{min.}/\text{ft.}^2_{\text{fabric}}$  ( $12 \text{ m}^3_{\text{air}}/\text{min.}/\text{m}^2_{\text{fabric}}$ ) for woven and  $45 \text{ ft.}^3_{\text{air}}/\text{min.}/\text{ft.}^2_{\text{fabric}}$  ( $14 \text{ m}^3_{\text{air}}/\text{min.}/\text{m}^2_{\text{fabric}}$ ) for felted fabrics must be allowed for filtering air emissions from asbestos ore dryers. Each square yard of felted fabric must weigh at least 14 ounces (475 grams/square meter) and be at least one-sixteenth 1/16 inch (1.6 mm) thick throughout. Any synthetic fabrics used must not contain fill yarn other than that which is spun.

B. The Agency may authorize the use of wet collectors designed to operate with a unit contacting energy of at least forty (40) inches (10.16 cm) of water gauge pressure when the use of fabric filters creates a fire or explosion hazard, as determined by the local fire department.

C. The Agency may authorize the use of filtering equipment other than that described in

parts A and B of this sub-section if such filtering equipment is satisfactorily demonstrated and certified to provide filtering efficiency of at least 99.97 percent for particles 0.3 microns or greater.

- D. All air cleaning devices authorized by this section must be properly installed, operated, and maintained. Devices to bypass the air cleaning equipment may be used only during upset and emergency conditions, and then only for such time as is necessary to shut down the operation generating the particulate asbestos-containing material.
  - E. All persons operating any existing source using air cleaning devices shall, within ninety (90) days of the effective date of these rules, provide the following information to the Agency:
    - (1) A description of the emission control equipment used for each process.
    - (2) If a fabric is utilized, the following information shall be reported:
      - (a) the pressure drop across the fabric filter in inches water gauge and the airflow permeability in  $\text{ft.}^3_{\text{air}}/\text{min.}/\text{ft.}^2_{\text{fabric}}$  ( $\text{m}^3_{\text{air}}/\text{min.}/\text{m}^2_{\text{fabric}}$ );
      - (b) for woven fabrics, indicate whether the fill yarn is spun or not spun; and
      - (c) for felted fabrics, the density in ounces/yard<sup>3</sup> (gms/m<sup>3</sup>) and the minimum thickness in inches (centimeters).
    - (3) If a wet collector is used the unit contact energy shall be reported in terms of inches of pressure, water gauge.
  - F. Fabric filter collection systems installed after January 10, 1989, must be easily inspected for faulty bags.
16. FABRICATION. No person using commercial asbestos may cause to be discharged into the atmosphere any visible emissions including fugitive emissions except as provided in 43-015-15, from any fabricating operations including, but not limited to, the following:
- A. The fabrication of cement building products;
  - B. The fabrication of friction products, except those operations that primarily install asbestos friction materials on motor vehicles; and
  - C. The fabrication of cement or silicate board for ventilation hoods, ovens, electrical panels, laboratory furniture; bulkheads, partitions and ceilings for marine construction; and flow control devices for the molten metal industry.
  - D. Unless receiving prior approval from the Agency, the owner or operator subject to this section must:
    - (1) Monitor each potential source of asbestos emissions from any part of the fabricating facility, including air cleaning devices and process equipment for

material processing and handling, at least once each day, during daylight hours, for visible emissions to the outside air during periods of operations. The monitoring must be by visual observation of at least fifteen (15) seconds duration per source of emissions.

- (2) Inspect each air cleaning device at least once each week for proper operation and for changes that signal the potential for malfunctions including, to the maximum extent possible without dismantling other than opening the device, the presence of tears, holes, and abrasions in filter bags and for dust deposits on the clean side of bags. For air cleaning devices that cannot be inspected on a weekly basis according to this subsection, submit to the Agency, revise as necessary, and implement a written maintenance plan to include, at a minimum, the following:
    - (a) maintenance schedule; and
    - (b) record keeping plan.
  - (3) Maintain records of the results of visible emission monitoring and air cleaning device inspections using a format approved by the Agency that includes the following information:
    - (a) date and time of each inspection;
    - (b) presence or absence of visible emissions;
    - (c) condition of fabric filters, including presence of any tears, holes, and abrasions;
    - (d) presence of dust deposits on clean side of fabric filters;
    - (e) brief description of corrective actions taken, including date and time; and
    - (f) daily hours of operation for each air cleaning device.
  - (4) Furnish upon request and make available at the affected facility during normal working hours for inspection by the Agency, all records required under this subsection.
  - (5) Retain a copy of all monitoring and inspection records for at least two (2) years.
  - (6) Submit a copy of the visible emission monitoring records to the Agency quarterly. The quarterly report must be postmarked by the thirtieth (30th) day following the end of the calendar quarter.
17. **INSULATION.** No owner or operator of a facility may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of this subsection do not apply to insulating materials regulated under section 13 of this rule which

are spray applied.

18. **FRIABLE ASBESTOS DISPOSAL REQUIREMENTS** Work practices and procedures for packaging, storing, transporting, and disposing of friable asbestos containing waste material: The owner or operator of a facility or an activity covered under the provisions of 43-015-1 through 18, or any other source of friable asbestos-containing waste material must meet the following standards:

A. There may be no visible emissions to the atmosphere during the collection, processing, packaging, transporting, or deposition of any asbestos-containing waste material that is generated by a facility.

B. Persons disposing of asbestos-containing waste material must notify the landfill operator of the type and volume of the asbestos-containing waste material.

(1) All asbestos-containing waste materials must be adequately wetted to ensure that they remain wet until delivered to an authorized landfill, and either:

(a) processed into nonfriable pellets or other shapes; or

(b) packaged in leak-tight containers such as two plastic bags with a minimum thickness of 6 mil., or fiber or metal drum. Containers must be labeled as follows:

(i) the name of the asbestos waste generator and the location where the asbestos waste was generated; and

(ii) a warning label that states:

**DANGER**  
**Contains Asbestos Fibers**  
**Avoid Creating Dust**  
**Cancer and Lung Disease Hazard**  
**Avoid Breathing Airborne**  
**Asbestos Fibers**

Alternatively, warning labels specified by 29 CFR  
1926.1101(k)(7)(8/ 19/94) may be used.

(2) The waste transporter shall immediately notify the landfill operator upon arrival of the asbestos-containing waste material at the disposal site. Off-loading of asbestos-containing waste shall be done under the direction and supervision of the landfill operator.

(3) Off-loading of asbestos-containing waste material shall occur at the immediate location where the asbestos-containing waste is to be buried.

(4) Off-loading of asbestos-containing waste material shall be accomplished in a

manner that prevents the leak-tight transfer containers from rupturing and prevents visible emissions to the air.

- C. If the asbestos-containing materials are not removed from a facility before demolition as described in 43-015-10.C, adequately wet the asbestos-containing waste material at all times after demolition and keep it wet during handling and loading for transport to a disposal site. Such asbestos-containing waste materials must be transported in lined and covered containers for bulk disposal.
- D. The interim storage of asbestos-containing waste material must protect the asbestos-containing waste from dispersal into the environment and provide physical security from tampering by unauthorized persons. The interim storage of asbestos-containing waste material is the sole responsibility of the contractor, owner or operator performing the asbestos abatement project.
- E. All asbestos-containing waste material must be deposited as soon as possible by the waste generator at:
  - (1) An asbestos-containing waste disposal site authorized by the Department and operated in accordance with the provisions of this rule; or
  - (2) A Department-approved site that converts asbestos-containing waste material into non-asbestos (asbestos free) material according to the provisions of OAR 340-248-0230 Asbestos to Nonasbestos Conversion Operations.
- F. For each asbestos-containing waste shipment, the following information must be recorded on an Agency form:
  - (1) The name, address, and telephone number of the waste generator;
  - (2) The number and type of asbestos-containing waste material containers and volume in cubic yards;
  - (3) A certification that the contents of this consignment are carefully and accurately described by the proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highways according to applicable regulations;
  - (4) The date transported;
  - (5) The name, address, and telephone number of the transporter(s);
  - (6) The name and telephone number of the disposal site operator;
  - (7) The name and address or location of the waste disposal site;
  - (8) The quantity of the asbestos-containing waste material in cubic yards;

- (9) The presence of improperly enclosed or uncovered asbestos-containing waste, or any asbestos-containing waste material not sealed in leak-tight containers; and
  - (10) The date asbestos-containing waste is received at the disposal site.
- G. For the transportation of asbestos-containing waste material, the waste generator must:
- (1) Maintain the waste shipment records for at least two years and ensure that all the information requested on the Agency form regarding waste generation and transportation has been supplied;
  - (2) Limit access into loading and unloading area to authorized personnel; and
  - (3) Mark vehicles, while loading and unloading asbestos-containing waste, with signs (20 in. X 14 in.) that state:

**DANGER**  
**ASBESTOS DUST HAZARD**  
**CANCER AND LUNG DISEASE HAZARD**  
**Authorized Personnel Only**

Alternatively, language that conforms to the requirements of 29 CFR 1926.1101(k)(6)(8/19/94) may be used.

- H. The waste transporter must:
- (1) Immediately notify the landfill operator upon arrival of the asbestos-containing waste at the disposal site; and
  - (2) Provide a copy of the waste shipment record to the disposal site owners or operators when the asbestos-containing waste material is delivered to the disposal site.
- I. After initial transport of asbestos-containing waste material, the waste generator must:
- (1) Receive a copy of the completed waste shipment record within thirty-five (35) days, or determine the status of the asbestos-containing waste shipment. A completed waste shipment record must include the signature of the owner or operator of the designated disposal site.
  - (2) Receive a copy of the completed waste shipment record within forty-five (45) days, or submit to the Agency a written report including:
    - (a) a copy of the waste shipment record when a confirmation of delivery was not received; and
    - (b) a cover letter signed by the waste generator explaining the efforts taken to locate the asbestos-containing waste shipment and the results of those

efforts.

- (3) Keep waste shipment records, including a copy signed by the owner or operator of the designated waste disposal site, for at least three (3) years. Make all disposal records available, upon request, to the Agency. For an asbestos abatement project conducted by a contractor licensed under OAR 340-248-120, the records must be retained by the licensed contractor. For any other asbestos abatement project, the records must be retained by the facility owner.
- J. Each owner or operator of an active asbestos-containing waste disposal site must, for all asbestos-containing waste material received, meet the following standards:
- (1) Ensure that off-loading of asbestos-containing waste material is done under the direction and supervision of the landfill operator or authorized agent, and that it is accomplished in a manner that prevents the leak-tight transfer containers from rupturing and prevents the release of visible emissions to the air.
  - (2) Ensure that off-loading of asbestos-containing waste material occurs at the immediate location where the asbestos-containing waste will be buried, and restrict public access to the off-loading area until asbestos-containing waste is covered in accordance with 9, below.
  - (3) Maintain waste shipment records for at least two years and ensure that all information requested on the Agency form regarding asbestos-containing waste disposal has been supplied.
  - (4) Immediately notify the Agency by telephone, followed by a written report to the Agency the following working day, of the presence of improperly enclosed or uncovered asbestos-containing waste. Submit a copy of the waste shipment record along with the report.
  - (5) As soon as possible and no more than thirty (30) days after receiving the asbestos-containing waste, send a copy of the signed waste shipment record to the waste generator.
  - (6) Upon discovering a discrepancy between the quantity of asbestos-containing waste designated on the waste shipment records and the quantity actually received, attempt to reconcile the discrepancy with the waste generator. Report in writing to the Agency any discrepancy between the quantity of asbestos-containing waste designated on the waste shipment records and the quantity actually received that cannot be reconciled between the waste generator and the waste disposal site within fifteen (15) days after receiving the waste. Describe the discrepancy and attempts to reconcile it, and submit a copy of the waste shipment record along with the report. Include the Agency-assigned asbestos abatement project number in the discrepancy report.
  - (7) Select the asbestos-containing waste burial site in an area of minimal work activity that is not subject to future excavation.

- (8) Cover all asbestos-containing waste material deposited at the disposal site with at least twelve (12) inches of soil or six (6) inches of soil plus twelve (12) inches of other waste before running compacting equipment over it, but not later than the end of the operating day.
- K. Maintain, until site closure, record of the location, depth and area, and quantity in cubic yards of asbestos-containing waste material within the disposal site on a map or diagram of the disposal area.
- L. Excavation or disturbance of asbestos-containing waste material that has been deposited at a waste disposal site and is covered is considered an asbestos abatement project. The notification for any such project must be submitted as specified in 43-015-9 except as follows:
- (1) Submit the project notification and project notification fee to the Agency at least forty-five (45) days before beginning any excavation or disturbance of asbestos-containing waste disposal site.
  - (2) State the reason for disturbing the asbestos-containing waste.
  - (3) Explain procedures for controlling emissions during the excavation, storage, transport and ultimate disposal of the excavated asbestos-containing waste material. The Agency may require changes in the proposed emission control procedures.
  - (4) State the location of any temporary storage site and the final disposal site.
- M. Upon closure of an active asbestos-containing waste disposal site, each owner or operator must:
- (1) Comply with all the provisions for inactive asbestos-containing waste disposal sites;
  - (2) Submit to the Agency a copy of records of asbestos-containing waste disposal locations and quantities; and
  - (3) Make available during normal business hours and furnish upon request, all records required under this section for inspection by the Agency.
- N. The owner or operator of an inactive asbestos-containing waste disposal site shall meet the following standards:
- (1) Maintain a cover of at least two (2) feet of soil or one (1) foot of soil plus one (1) foot of other waste.
  - (2) Grow and maintain a cover of vegetation on the area to prevent erosion of the non-asbestos-containing cover of soil or other waste materials; or in desert areas

where vegetation would be difficult to maintain, a layer of at least three (3) inches of well graded, non-asbestos crushed rock may be placed and maintained on top of the final cover instead of vegetation.

- (3) For inactive waste disposal sites for asbestos-containing tailings, a resinous or petroleum-based dust suppression agent that effectively binds dust to control surface air emissions may be used and maintained to achieve the requirements of (1) and (2) of this sub-section, provided prior written approval of the Agency is obtained.
  - (4) Excavation or disturbance at any inactive asbestos-containing waste disposal site is an asbestos abatement project. The notification for any such project must be submitted as specified in 43-015-9, except as follows:
    - (a) Submit the project notification and project notification fee to the Agency at least forty-five (45) days before beginning any excavation or disturbance of an inactive asbestos-containing waste disposal site.
    - (b) State the reason for disturbing the asbestos-containing waste.
    - (c) Explain the procedures to be used to control emissions during the excavation, storage, transport and ultimate disposal of the excavated asbestos-containing waste material. The Agency may require changes in the proposed emission control procedures to be used.
    - (d) State the location of any temporary storage site and the final disposal site.
  - (5) Within sixty (60) days of a site's becoming inactive, request in writing that the Commission issue an environmental hazard notice for the site. This environmental hazard notice will notify in perpetuity any potential purchaser of the property that:
    - (a) the land has been used for the disposal of asbestos-containing waste material;
    - (b) the survey plot and record of the location and quantity of asbestos-containing waste disposed of within the disposal site, required for active asbestos disposal sites, have been filed with the Agency; and
    - (c) the site is subject to the provisions of Title 43.
- O. Rather than meet these requirements, an owner or operator may use alternative packaging, storage, transport, or disposal methods after receiving approval by the Agency in writing.

19. **NONFRIABLE ASBESTOS DISPOSAL REQUIREMENTS.** Work practices and procedures of nonfriable asbestos-containing waste material: The owner or operator of a facility or an activity covered under the provisions of Title 43 and any other source of

nonfriable asbestos-containing material must meet the following standards:

- A. There may be no visible emissions to the atmosphere while collecting, processing, packaging, transporting, or disposing of any nonfriable asbestos-containing waste material that is generated by such source.
- B. All nonfriable asbestos-containing waste materials must be adequately wetted to ensure that they remain wet until deposited at an authorized landfill, and either:
  - (1) Processed into nonfriable pellets or other shapes; or
  - (2) Packaged in leak-tight containers that allow the nonfriable asbestos-containing waste material to remain adequately wet until deposited at an authorized landfill. Such containers must be marked as follows:
    - (a) the name of the asbestos-containing waste materials generator and the location where the waste was generated; and
    - (b) a warning statement:

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**ASBESTOS-CONTAINING MATERIAL**

- C. Nonfriable asbestos-containing roofing materials that are fully encapsulated in a petroleum-based binder and meet the conditions in 43-015-7.A(5) are exempt from 43-015-19.B.
- D. The interim storage of nonfriable asbestos-containing waste material must protect the waste from tampering by unauthorized persons. The interim storage of nonfriable asbestos-containing waste material is the sole responsibility of the contractor or the owner or operator performing the nonfriable asbestos abatement project.
- E. All nonfriable asbestos-containing waste material must be deposited as soon as possible by the asbestos waste generator at:
  - (1) A waste disposal site authorized by the Department and operated in accordance with this rule; or
  - (2) A Department-approved site that converts asbestos-containing waste material into nonasbestos (asbestos-free) material according to the provisions of OAR 340-248-0230, Asbestos to Nonasbestos Conversion Operations.
- F. Persons disposing of nonfriable asbestos-containing waste material must notify the landfill operator of the type and volume of the waste material and obtain the approval of the landfill operator before bringing the waste to the disposal site.
- G. For each nonfriable waste shipment, the waste generator must provide the generator information contained in 43-015-18F.

- H. For the transportation of nonfriable asbestos-containing waste material, the waste generator must follow the provisions 43-015-18G.
- I. After initial transport of nonfriable asbestos-containing waste material, the asbestos waste generator must follow the provisions of 43-015-18H.
- J. Each owner or operator of an active nonfriable asbestos-containing waste disposal site must meet the provisions of 43-015-18I.
- K. The owner or operator of an inactive nonfriable asbestos-containing waste disposal site must meet the provisions of 43-015-18J
- L. Rather than meet the requirements of this rule, an owner or operator may use alternative packaging, storage, transport, or disposal methods after receiving written approval from the Agency.

(Subsections 43-019-9.A(1) and (2) Amended 07/01/08; Subsections 43-015-9.A(1) and (2) Amended 07/01/07; Subsections 43-015-9.A(1) and (2) Amended 07/01/06; Subsections 43-015-9.A(1) and (2) Amended 07/01/05; Subsections 43-015-9.A(1) and (2) Amended 07/01/04; Subsections 43-015-9.A(1) and (2) Amended 07/01/03)

(Section 43-020 Emission Standard for Beryllium deleted from Title 43 on 06/11/02 and adopted by reference into new Title 37, Subsection 37-150-3.C)

(Section 43-025 Emission Standard for Beryllium Rocket Motor Firing deleted from Title 43 on 06/11/02 and adopted by reference into new Title 37, Subsection 37-150-3.D)

(Section 43-030 Emission Standard for Mercury deleted from Title 43 on 06/11/02 and adopted by reference into new Title 37, Subsection 37-150-3.E)

(Section 43-035 Work Practice Standard for Radon 222 Emissions from Underground Uranium Mines deleted from Title 43 on 06/11/02 and adopted by reference into new Title 37, Subsection 37-150-3.B)