

as elevator shafts and stairwells shall be enclosed in a manner which shall prevent the escape of fiber-containing material from the working area.

- b) The entire sprayed area, all ledges and surfaces including tarpaulins within the enclosure shall be thoroughly vacuumed upon completion of the spraying operation and immediately before the enclosure is dismantled.

Section 228.133 Enclosure for Asbestos Construction

- a) The cutting, trimming, fitting or stripping of asbestos-containing material in the construction, alteration or repair of a structure which is done at the site of such structure in an area open to the atmosphere shall be conducted within a special enclosure designed to preclude the escape of asbestos fiber from the immediate area of such enclosure.
- b) The mechanical exhaustion of dust from such enclosure to the ambient air is prohibited unless such exhaust system is equipped with a properly sized fabric filter for dust collection or an equivalent device as approved by the Agency.

Section 228.134 No Visible Emission

Compliance with Sections 228.132 and 228.133 notwithstanding, visible emissions of fiber-containing material in an area open to the atmosphere shall be considered a violation.

Section 228.135 Preclude Exposure to Circulating Air

Asbestos-containing material applied in the construction, alteration or repair of a structure shall be coated with a sealant, provided with a cover or installed in some other manner so as to preclude emission of the asbestos-containing material to the circulating air. Any plenum or other structure coated with or containing asbestos-containing insulation and used in the circulation of air in a building shall be thoroughly cleaned of all debris and waste insulation.

SUBPART D: DEMOLITION

Section 228.141 Necessary and Practicable Safeguards

Where the risk of public exposure to asbestos fiber from the dislodging of asbestos-containing materials is present, no demolition of a structure shall be initiated unless all safeguards necessary and practicable to reduce the emission of dust are taken. Such procedures shall include, but are not necessarily limited to:

- a) Boilers and pipes and steel members insulated or fireproofed with asbestos-containing material shall be wetted and stripped before toppling of walls is begun. This procedure shall be followed, where practicable, as to all other asbestos-lined surfaces. Such asbestos waste shall be immediately bagged and disposed of in accordance with Section 228.121(d).
- b) When demolition by toppling occurs such reasonable enclosure for dust emission control as is compatible with the character of the structure shall be employed.
- c) Before the demolition or toppling of any section of wall of the structure, adequate wetting to suppress the dust shall be employed.
- d) Asbestos-containing debris shall not be dropped or thrown from any floor but shall be transported by dust-tight chutes or buckets. Asbestos-containing debris in chutes or buckets shall be sufficiently wetted to preclude dust dispersion at the point of discharge.
- e) All asbestos-containing debris shall be thoroughly wetted before loading into trucks, other vehicles or containers. During transport such waste shall be enclosed or covered so as to prevent dust dispersion. Asbestos-containing debris shall be disposed by burial at a sanitary landfill.

SUBPART E: MANUFACTURING

Section 228.151 Emission Standards; Sampling and Counting Procedures

A factory, plant or enterprise which engages in the processing or manufacturing of any asbestos-containing product shall discharge no visible emission of particulate matter from such manufacturing or processing into the ambient air and shall emit no concentrations of asbestos fiber into the ambient air in excess of 2 fibers per cubic centimeter of air.

- a) Sampling of emissions shall be by the membrane filter method and according to the procedures recommended in the ASHE Power Test Code 27-1957, or other procedures generally accepted by persons knowledgeable in the state of the art.
- b) Counting shall be according to the procedure outlined in Edwards, G.H., and Lynch, J.R., "The Method Used by the U.S. Public Health Service for Enumeration of Asbestos Dust on Membrane Filters," Ann. Occupational Hyg. (Oxford), 11(1): 1-6, Jan. 1968, with 20 fields per sample, counted at random using phase contrast microscopy at 430 x magnification and counting only fibers 5 microns or greater in length, with a length to breadth ratio of 3 to 1 or greater.