

3.2.3 The work area shall have a vacuum cleanup system. This can be a system of hoses connected to a central vacuum system. All parts of the room must have daily vacuum cleanup of ledges, shelves, floors, and machines.

CAUTION: No dry sweeping shall be performed. Air hose is not to be used as an aid in cleanup.

3.3 Asbestos-Cement Mixing

3.3.1 Asbestos cement, mortar, coatings, grout, and plaster shall be mixed in closed bags or other containers.

3.3.2 Any dried-out cement should be discarded. Do not attempt to rework it.

3.4 Removal of Asbestos Insulation

3.4.1 Insulation to be removed and discarded should be dampened prior to and during removal whenever possible.

3.4.2 Employees engaged in dismantling asbestos insulation shall wear atmosphere supplying respirators, see 4.1.1.

3.4.2.1 The removal of insulation, fabricated and protected to withstand repeated removal and reinstallation for equipment maintenance or other reasons, is not considered "dismantling."

3.4.3 Scrap insulation shall be collected and disposed of in labeled and sealed bags or other containers and shall follow plant and local government regulations. For caution labels, see 6.6.

3.5 Asbestos Spraying. Employees engaged in spraying asbestos for insulation or fireproofing shall wear atmosphere supplying respirators, see 4.1.1.

3.6 Exhaust ventilation and dust collection system shall be in accordance with ANSI Z9.2, Fundamentals Governing the Design and Operation of Local Exhaust Systems.

3.6.1 Caps or dampers should be provided in each intake hose and machine connection to maintain capacity of the system. However, care should be taken to assure that connections are open at the equipment being operated.

3.6.2 Discharge should be into bag filters which meet the following criteria:

- a. Cotton bag filter having air flow permeability not exceeding 20 cfm/sq ft

- b. No bypass devices
- c. No leakage of unfiltered air
- d. Ability to empty hoppers without creating visible emissions of particulate matter
- e. No torn or ruptured bags
- f. No worn or threadbare bags
- g. No improperly positioned bags

4. RESPIRATORY EQUIPMENT

4.1 Respiratory protection shall be provided to all personnel in areas where the permissible exposure limits may be exceeded. Refer to S211 for general description of equipment.

4.1.1 Atmosphere supplying respirators (Type "C" supplied-air or self-contained), Bureau of Mines Schedule 19B, will provide complete protection. They are required for dismantling and spraying asbestos, or when the concentration exceeds 10 times the TWA or ceiling limit of 2.3.

4.1.2 Mechanical filter-type respirators, Bureau of Mines Schedule 21B, will afford adequate protection in lower concentration cases, and where ambient oxygen does not fall below 18 percent. They are required when the concentration is between 1 and 10 times the TWA or ceiling limit of 2.3. Manufacturers recommendations for their application and maintenance must be followed.

4.2 Each employee shall be instructed in testing respiratory devices for proper fit and be required to do so prior to each use.

5. HYGIENE

5.1 Respirators and masks must be kept clean and sterilized prior to reuse.

5.2 Special clothing, a change room, and duplicate lockers must be provided for employees exposed to concentrations which exceed the ceiling limit of 2.3. This is to prevent contamination of employees' street clothes from their work clothes.

5.3 Food, gum, tobacco, or other material placed in the mouth should not be kept or consumed in work areas.

Portions printed in red meet OSHA regulations, Section 1910.93a.



DUP 0902933

SAT, p.2