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2/1972

ASBESTOS REGULATION

Department of Labor

Occupational Safety and Health Administration

The ~~Occupational Safety and Health Administration~~ (OSHA) was established within the Department of Labor in ~~1971~~.

A standard for occupational exposure to asbestos was included in the ~~initial promulgation of OSHA standards~~ published on ~~May 20, 1971~~. The standard derived from the 1969 regulation issued under the Walsh-Healey Public Contracts Act, established an exposure limit of ~~particles~~ (greater than 5 microns in length) ~~per milliliter or 2 million particles per cubic foot of air~~. A petition for an emergency standard to control concentrations of asbestos dust was submitted to the Secretary of Labor by the Industrial Union Department of the AFL-CIO on November 4, 1971. As a result of that petition, an ~~emergency temporary standard~~ of ~~5 fibers per milliliter of air~~ for occupational exposure to asbestos dust was published by OSHA on ~~December 29, 1971~~. This was followed on ~~January 13, 1972~~, by OSHA's publication in the Federal Register of a "notice of proposed rulemaking" for a permanent standard of 5 fibers per milliliter of air for occupational exposure to asbestos dust.

On January 24, 1972, OSHA established an Advisory Committee on Asbestos Dust and charged its members to make recommendations with regard to the proposed standard. A criteria document on asbestos, which contained recommendations for a permanent asbestos standard, was submitted by the National Institute for Occupational Safety and Health (NIOSH) to OSHA on February 1, 1972. NIOSH recommended a 2 fiber per cc permissible level of exposure, to become effective two years after promulgation of a permanent standard. On February 25, 1972, OSHA's Advisory Committee on Asbestos Dust, by narrow margin, endorsed the NIOSH recommendations. OSHA held public hearings during the period March 14-17, 1972, to receive oral data, views, and arguments from interested parties concerning the proposed asbestos standard. A "permanent" standard for occupational exposure to asbestos dust was published in the Federal Register on June 7, 1972. The regulation, applicable "in every employment and place of employment" to every employee exposed to asbestos dust, except those workers otherwise covered by the Federal Coal Mine Health and Safety and the Federal Metal and Nonmetallic Mine Safety Acts as administered by the Mining Enforcement and Safety Administration, became effective July 7, 1972. The regulation established a permissible occupational exposure level or standard of five

fibers (longer than five micrometers) per cc of air, which was to be lowered to 2 f/cc as of July 1, 1976.

Less than two months after promulgation of the standard, the Industrial Union Department (IUD) of the AFL-CIO, along with other unions, filed suit (July 28, 1972) in the U.S. Court of Appeals challenging the regulation. Among other allegations, it was charged that OSHA's decision to delay implementation of the two fiber exposure limit for four years (until July 1, 1976) violated "highest degree of health protection" under section 6 (b) (5) of the OSH Act.

On April 15, 1974, a three-judge panel in the U.S. Court of Appeals for the District of Columbia ruled in the case, in effect, denying the IUD petition but ordered OSHA to:

- Review the 1976 implementation date for the two-fiber exposure level requirement, suggesting that OSHA might require the two-fiber level in those sectors of the industry where it was already feasible to achieve; and
- Provide a longer period for the retention of personal and environmental monitoring records. (The standard, as promulgated, provided for a three-year retention period.)

OSHA republished all its occupational safety and health standards on June 27, 1974, with changes made through June 3, 1974. There were no substantive changes to the asbestos regulation. On May 28, 1975, OSHA announced that the asbestos standard was recodified from 1910.93a (Subpart G) to 1910.1001 (Subpart Z). The purpose of this action was to simplify the reference system for toxic substance standards.

On October 9, 1975, OSHA proposed in the Federal Register to lower the permissible occupational exposure to asbestos to 500,000 fibers per cubic meter or 0.5 fibers per cc greater than five micrometers in length, with a length-to-diameter ratio of at least three to one and a maximum diameter of five micrometers. The proposed revision to the standard would apply to all employments covered by the Act except the construction industry. OSHA stated its intent to publish a separate revision to the standard applicable to the construction industry. In addition, OSHA stated that the record developed under the 1972 regulation was inadequate to resolve the court's remand in the IUD case and a new rulemaking proceeding should be initiated. Public hearing on OSHA's October 9, 1975, proposal has yet to be scheduled (copy at miscellaneous tab).

NIOSH, on December 15, 1976, recommended to OSHA that the asbestos standard "be set at the lowest level detectable by available analytical techniques." NIOSH defined this level as 0.1 fibers per cc.

Pursuant to the court remand regarding a longer period for the retention of personal and environmental records, OSHA issued an amendment to the standard on March 19, 1976, requiring that such records be maintained for "at least 20 years" vice "at least three years."

OSHA ASBESTOS STANDARD IN BRIEF

References: Federal Register, Vol 39, June 27, 1974
Federal Register, Vol 41, Mar. 19, 1976

The standard:

- Defines asbestos as chrysotile, amosite, crocidolite, tremolite, anthophyllite and actinolite, having fibers longer than five micrometers.
- Establishes an eight-hour time-weighted average permissible exposure level to airborne asbestos of two fibers (longer than five micrometers) per cc of air. As a ceiling concentration, the regulation states that no employee shall be exposed at any time to asbestos concentrations in excess of 10 fibers longer than five microns, per cc of air.
- Requires various methods of compliance including:
 - engineering methods and controls such as exhaust ventilation, and controls on hand and power tools.
 - work practices including rules governing wet methods, handling of asbestos products, and spraying, demolition, or removal of asbestos materials.
- Requires the use of personal protective equipment--respirators and work shift rotation -- in certain work situations. The regulations state that respirators must be selected from among those approved by the Bureau of Mines or NIOSH. Job rotation and rate retention provisions are applicable in instances where an employee is unable to function normally wearing a respirator or his health would be impaired by use of a respirator. In addition, the regulations provide requirements for personal protection including special clothing, change rooms, clothing lockers, laundering, and clothing disposal.
- Prescribes the method for measuring airborne concentrations of asbestos dust. The measurement is to be determined by the membrane filter method at 400-450 X (magnification) (4 millimeter objective) with phase contrast illumination.

- Requires monitoring of both the work environment and individual employees, including a requirement that employees or their representatives shall be given a reasonable opportunity to observe the monitoring and to have access to monitoring records.
- Requires and provides specifications for caution signs and labels.
- Establishes housekeeping requirements including waste disposal.
- Establishes recordkeeping requirements for personal and environmental monitoring and provides employee access right to exposure records. Employees must be notified if exposed to airborne concentrations of asbestos dust in excess of permissible limits.
- Requires medical examinations including preplacement, annual, and work termination. Defines requirements for retention of records and right of employee access to medical records.