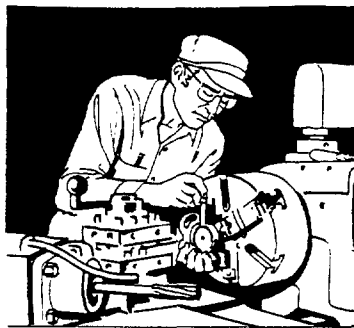
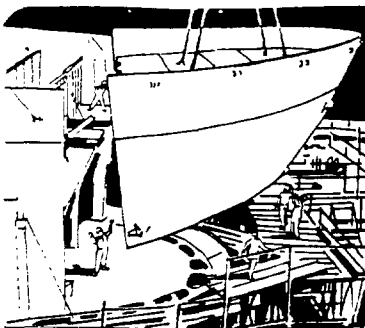




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OSHA TO CHANGE JOB HEALTH STANDARD ON ASBESTOS

Present OSHA Standard. Five asbestos fibers, longer than five micrometers, per cubic centimeter of air as an eight-hour time weighted average (TWA) and a ceiling limitation of ten such fibers per cubic centimeter.

NIOSH RECOMMENDATION (1972). Two asbestos fibers, longer than five micrometers, per cubic centimeter of air as an eight-hour TWA and a ceiling of ten such fibers determined by a minimum sampling time of 15 minutes.

OSHA Proposed Standard. The OSHA standard would:

- Reduce the permissible exposure limit to a TWA of 0.5 fibers per cubic centimeter (500,000 fibers per cubic meter) and reduce the ceiling limit to five fibers per cubic centimeter (five million fibers per cubic meter).
- Add a 15 minute sampling period for determination of the ceiling limit.
- Establish additional requirements for regulated areas, employee rosters, hygiene facilities, employee information and training, signs and labels, monitoring and medical surveillance.
- Extend the period for retention of monitoring and medical records to 40 years or for the duration of the employees' employment plus 20 years, whichever is longer.
- Exclude construction activities from revised standard but would continue coverage of these activities under the existing standard. It is intended that a separate revision would be proposed for the construction industry.

Major issues raised by this proposal and for which public comment is invited:

- Whether the permissible limit for an eight-hour time weighted average exposure (TWA) should be lowered to 500,000 fibers per cubic meter (0.5 fiber per cubic centimeter) and, if so, would such an exposure provide an adequate margin of safety to protect employees against known and suspected workplace hazards of asbestos.
- Whether the permissible ceiling limit should be reduced to five million fibers per cubic meter (five fibers per cubic centimeter) and, if so, would such an exposure provide an adequate margin of safety to protect employees against known and suspected workplace hazards.

- Whether the proposed retention period for medical and monitoring records of former employees would be appropriate and adequate.
- Whether the information gathering requirements of the proposal would create any administrative and economic burdens on employers, particularly those employing small numbers of employees or having workforces which are highly transient.
- Whether the provision for job reassignment on account of medical unsuitability adequately and effectively furthers the purposes of the Act.
- Whether compliance with the proposal would be technologically and economically feasible for all affected industries.
- What are the projected environmental and inflationary impacts of the proposal.

Asbestos has been in use for over 2000 years, but it did not come into widespread industrial use until the last quarter of the nineteenth century.

Asbestos is a generic term applied to a number of different hydrated silicates generally characterized as fibrous minerals with high tensile strength, flexibility, heat and chemical resistance, and favorable frictional properties.

The U.S. annual consumption of asbestos exceeds 800,000 tons. Approximate use distribution is:

• Asbestos cement pipe and sheet	27%
• Vinyl asbestos floor tile	19%
• Sheet vinyl flooring	12%
• Roofing papers	10%
• Gaskets and packing	9%
• Friction materials	8%
• Insulation, pipe and thermal	6%
• Coatings and compounds	4%
• Plastics	3%
• Miscellaneous	3%

Source: U.S. Bureau of Mines Minerals Yearbook, 1973

The total number of employees exposed to asbestos is not known. An estimated 50,000 workers are involved in the manufacture of asbestos-containing products. Additional workers are exposed in the use of these products.

Occupational exposure to asbestos may occur in a number of industries including:

- Asbestos Fiber Processing
- Manufacture of Asbestos-Containing Products
- Construction
- Shipbuilding
- Automotive Manufacturing
- Automotive Repair

Health Effects. The health consequences of exposure to asbestos were first recognized early in this century.

In industry, exposure to asbestos fibers in air has been shown to cause asbestosis, cancer of the lungs and digestive tract, and mesothelioma. Inhalation and retention of asbestos fibers into the lungs is the usual exposure mechanism.

Inflationary Impact Assessment. In accordance with Executive Order 11821 and OMB Circular A-107, OSHA intends to prepare a statement which will assess the inflationary impacts of the proposed standard. This statement will be made available to the public at least 30 days prior to a public hearing on the proposal. Written comments and oral testimony on the anticipated economic impact will be welcomed.

Effective Date. The proposal does not contain an anticipated effective date at this time. Following review of the environmental and inflationary impact assessments and the record of the public hearing, if one is held, OSHA will propose a date on which the final standard will become effective.

Written comments and requests for a public hearing on the proposal should be submitted (in four copies) within 60 days of publication of the proposal to the OSHA Docket Office, Docket Number H-033, Room N3620, U.S. Department of Labor, 3rd St. and Constitution Ave., NW, Washington, D.C. 20210.

The proposal appeared in the October 9, 1975 *Federal Register*.

OSHA PROPOSES REDUCING EMPLOYEE EXPOSURE LIMIT FOR BERYLLIUM

Beryllium, one of the lightest metals, has found commercial application in the U.S. since 1932. It is the only stable, lightweight metal with a high melting point (1,283°C). It has an especially high strength to weight ratio and its alloying properties confer to metals specific properties of resistance to corrosion, vibration, and shock. Beryllium alloyed with copper is the most commonly used form of the metal. This alloy has a tensile strength of over three times that of steel and possesses properties such as high electrical and thermal conductivity that suit it for many applications in the electrical industry.

Approximately 9,000 tons of ore from which forms of beryllium are extracted, have been processed in each of the past several years in the U.S. The most commonly used commercial forms of beryllium are beryllium metal (15 percent), beryllium copper alloy (70 percent), and beryllium oxide (5 percent).

NIOSH has estimated that approximately 8,000 workplaces and 30,000 employees are involved in the use of beryllium.

Occupational exposure to beryllium may occur in a number of industrial settings, including:

- Extraction Plants
- Ceramic Plants
- Foundries
- Machine Shops
- Propellant Plants
- Rocket-Motor Test Facilities
- Electronic Equipment Manufacturing

- Metallurgical Operations
Tool and Die Manufacturing
- Aerospace Equipment Specialty Products

Health Effects. The health consequences of exposure to beryllium have been recognized since 1946.

- Industrial exposure to beryllium occurs primarily through inhalation of beryllium-containing dust.
- Beryllium is deposited primarily in the lungs, liver, kidney, spleen, and bone. Removal of beryllium from the body occurs very slowly.
- Observed effects of beryllium exposure are: damage to the lungs, damage to the skin, damage to the eyes, and possibly the production of cancer in humans.

Present OSHA Standard. Two micrograms per cubic meter (2 ug/m), timeweighted average (TWA) for eight-hours with a ceiling limit of five ug/m which can only be exceeded up to 25 ug/m for 30 minutes.

NIOSH Recommendations. Criteria document recommended retention of 2 ug/m as the TWA and 25 ug/m as the ceiling, which is essentially the same as the present OSHA standard.

OSHA's Proposed Standard. OSHA's proposed standard:

- Establishes exposure limits of one ug/m as the TWA and five ug/m as the ceiling.
Establishes requirement for regulated areas when the concentration exceeds either the TWA or ceiling limit.
- Establishes additional requirements such as determination of employee exposure, use of protective equipment, training, and program of medical surveillance.
- Considers an "action level" of one-half of the TWA which could trigger such provisions as medical surveillance and full air monitoring program. This is designed to ensure a margin of safety for effective employee protection without unduly burdening the employer.

Implements requirements for maintenance of records on exposure measurements, employee training, and medical surveillance.

Major Issues Raised by the Proposal and for Which Public Comment Is Invited:

- Whether the proposed permissible exposure limits are biologically effective and technically and economically feasible.
- Whether the proposed limits should apply to all beryllium-containing substances.

- Whether the provisions for methods of compliance, protective equipment and clothing, hygiene facilities, recordkeeping, medical surveillance, and signs and labels are appropriate.
- Whether there are one or more appropriate sampling methods which can be used to determine compliance.
- Whether beryllium should be considered a human carcinogen.
- What are the projected environmental and inflationary impacts of the proposal.

Inflationary Impact Assessment. In accordance with Executive Order 11821 and OMB Circular A-107, OSHA intends to prepare a statement which will assess the inflationary impacts of the proposed standard. This statement will be made available to the public at least 30 days prior to a public hearing on the proposal. Written comments and oral testimony on the anticipated economic impact will be welcome.

Effective Date. The proposal does not contain an anticipated effective date at this time. Following review of the environmental and inflationary impact assessments and the record of the public hearing, if one is held, OSHA will propose a date on which the final standard will become effective. Public comments and requests for a hearing on the proposal are due within 60 days of publication of the proposal in the *Federal Register*.

Written comments and requests for public hearing on the proposal should be submitted (in four copies) within 60 days of publication of the proposal to the OSHA Docket Office, Docket Number H-005, Room N3620, U.S. Department of Labor, 3rd St. and Constitution Ave., N.W., Washington, D.C. 20210.

The proposal appeared in the October 17, 1975 *Federal Register*.

OSHA PROPOSES EXPANDED JOB HEALTH STANDARD ON TRICHLOROETHYLENE

The U.S. Department of Labor has proposed an expanded job health standard for trichloroethylene that would retain current eight-hour time weighted average exposure limits, but would reduce permissible ceiling limit and revoke the maximum peak exposures now allowed.

Officials of the Department's Occupational Safety and Health Administration (OSHA) said the key parts of the proposal are retention of current eight-hour time weighted average exposure limits of 100 parts per million (ppm) parts of air, reduction of the ceiling limit from 200 to 150 ppm (measured over a 15-minute period), and elimination of the current 300 ppm peak concentration.

Trichloroethylene is a clear, colorless, noncorrosive, nonflammable liquid, with the "sweet" odor characteristic of chlorinated hydrocarbons. Annual U.S. production is about 234,000 metric tons, some 90 percent of which is used as a solvent in vapor degreasing operations. The remainder is used as dry-cleaning solvents, extractive solvents and as a chemical intermediate in producing pesticides, waxes, gums, resins, tars, paints, varnishes, and other chemicals.

The primary effect of human overexposure to the chemical appears to be depression of the central nervous system, resulting in visual disturbance, mental confusion, fatigue, tremors, dizziness, nausea and vomiting. Continued overexposure may produce unconsciousness, eventually leading to death. The chemical also has a toxic action on the cardiovascular and gastrointestinal systems, with the deaths reported from ventricular fibrillation and cardiac arrest following severe exposure. There is also evidence suggesting that trichloroethylene may be a carcinogen, but more research is needed before a conclusive determination can be made.

Under the proposal, all employers in industries covered by OSHA, in whose workplace there are quantities of trichloroethylene, would be required to make an "initial determination" of whether employees are exposed to body contact with the chemical or whether their exposure to airborne concentrations exceeds an "action level" of 50 ppm.

Positive determinations that employees are exposed to repeated skin or eye contact with trichloroethylene would require that the employer furnish protective clothing and equipment since the proposal prohibits any such exposure.

Positive determinations that airborne concentrations exceed the 50 ppm airborne "action level" would require actual measurements of the employee believed to have the greatest exposure, repeating the measurements monthly or bi-monthly, depending on levels, and disclosure of the results to employees.

Where measured levels exceed either the permissible limit or the ceiling limit, the employer first would have to employ all "feasible engineering controls" to reduce exposures. Respirators could be used only where engineering controls and work practice measures are not feasible or do not reduce exposures to the proposed limits.

The proposal also would require employers to develop a written program and timetable to reduce exposure, updating it every six months.

The proposal, based on consideration of recommendations of the National Institute for Occupational Safety and Health and on other reference works, would become effective (for the most part) 30 days after publication of a final rule.

Other provisions of the proposal address such topics as requirements for measuring employee exposures, methods of compliance, respiratory protection, hazardous and emergency situations, protective equipment, housekeeping, training, signs and labels, medical surveillance, and recordkeeping.

Written statements on or objections to the proposal (in four copies) or requests for a public hearing should be submitted within 60 days of publication of the proposal to the OSHA Docket Officer, Docket Number H-048, Room N3620, U.S. Department of Labor, 3rd St. and Constitution Ave., NW, Washington, D.C. 20210.

Comments, available for public inspection and copying, are invited on all aspects of the proposed standard, including its environmental impact and any potential inflation impact.

The proposal appeared in the October 20, 1975 *Federal Register*.

COURT ORDERS BACK PAY IN JOB SAFETY DISCRIMINATION CASE

In a judgment filed recently by the U.S. District court, without content by the company, Morrison-Knudsen, Inc. was permanently enjoined and restrained from violating provisions of the Occupational Safety and Health Act of 1970, that protect employees against discrimination for exercising their rights under the act.

The company also was directed to post a notice at its Boise headquarters and in the company safety newsletter to the effect that it will not discharge employees for filing complaints about safety or health conditions.

The case arose from an incident at a railroad siding near Sutherland in October 1973. Five employees of the company were unloading large pieces of rock from railroad hopper cars in winds gusting up to 40 mph. The employees claimed they could not see, had difficulty breathing in the dust-filled work area, and were fearful of injury due to the poor visibility. They were unsuccessful in their attempts to have the conditions corrected, so they left the jobsite, returning home for the rest of the day. They were informed later they had been discharged.

Rules of the department's Occupational Safety and Health Administration (OSHA) recognize that occasions can arise where employees are confronted with a choice between not performing assigned work and subjecting themselves to conditions which are likely to cause immediate serious physical injury or death.

If these employees, with no reasonable alternative and with no attempt by the employer to correct the hazards on being informed of them, "refuse in good faith to expose themselves to the dangerous condition," they are protected from subsequent discrimination.

The court ordered that back pay with six percent interest per year be paid to the five employees for the period beginning October 24, 1973 (the date of the incident) to the date they received offers of reinstatement from the company. The amount totaled nearly \$3,000.