

KAISER CEMENT & GYPSUM CORPORATION
INTER-OFFICE MEMORANDUM

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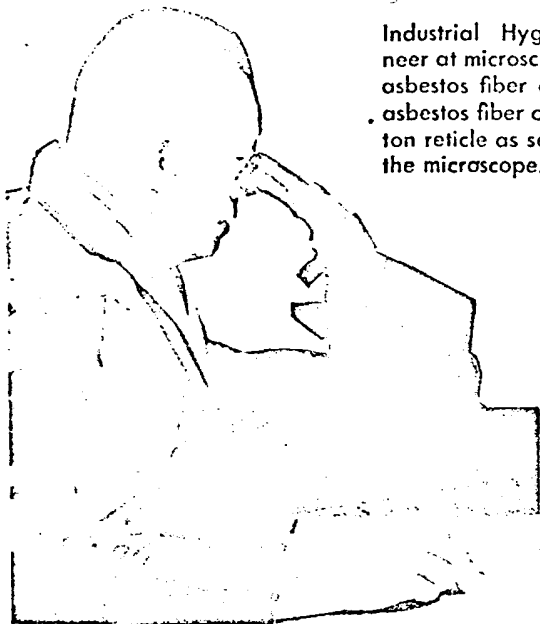

FROM J. H. Walton
Safety Director

SUBJECT CALIFORNIA ASBESTOS REGULATIONS

Attached, for your information, is a copy of the recently published California asbestos regulations. These regulations parallel Federal standards under OSHA, but they are more definitive as to medical examination requirements.

JHW:nlh
Attachment

DIVISION



Industrial Hygiene Engineer at microscope making asbestos fiber count. Note asbestos fiber crossing Porton reticle as seen through the microscope.

On January 22 and 23 the Industrial Safety Board held a public hearing on the asbestos safety standards. Some changes were made to bring them into closer conformance to the OSHA regulations.

Because of the new findings on asbestos toxicity and the number of employees exposed to excessive levels of asbestos fibres in the air the Safety Board wanted the standards adopted at the earliest feasible time, while yet allowing time to comment on the changes if necessary. The emergency adoption permitted both options. Within the next 120 days another hearing will be held by the Board to invite additional comments.

These Orders are effective as of March 30, 1973.

Article 110. Special Hazardous Substances and Processes

5208. Asbestos. (a) The 8-hour time-weighted average concentration of airborne asbestos fibers to which any employee may be exposed shall not exceed 5 fibers,* longer than 5 micrometers, per cubic centimeter of air as determined by the membrane filter method using phase contrast illumination and 400 to 450 $\times$ magnification. The ceiling or short time concentration to which employees are exposed shall not exceed 10 fibers per cubic centimeter.

* The 8-hour time-weighted average concentration of airborne asbestos fibers is scheduled to be reduced to 2 fibers per cubic centimeter on July 1, 1976.

(b) Engineering controls, such as but not limited to, isolation, enclosure, exhaust ventilation, and dust collection shall be used to meet the exposure limits in Section 5208 (a). All hand-operated and power-operated tools which may produce or release asbestos fibers in excess of such limit shall be provided with local exhaust ventilation systems. The American National Standards Institute Z9.2-1971 Standard Governing the Design and Operation of Local Exhaust Systems shall be used as a guide to design, construct, install, and maintain such systems.

(c) Asbestos shall be mixed, handled, applied, removed, cut, or otherwise worked wet insofar as practicable. Asbestos spills shall be cleaned up promptly. Asbestos-containing cement, mortar, coating, grout, plaster, or similar material shall not be removed from bags, cartons, or other containers without being wetted, unless it is enclosed and/or ventilated to effectively control airborne fibers as specified in Section 5208 (a).

(d) Respiratory Protective Equipment. When engineering controls and wet handling methods are not feasible or are incapable of controlling the concentration or in an emergency, respiratory protection shall be provided and worn in accordance with provisions of Section 5144 and the following requirements:

(1) Reusable or single-use air filtering respirators shall be used when the concentration exceeds the levels specified in Section 5208 (a), but may not be used when the concentration may reasonably be expected to exceed 10 times the limit.

(2) Powered air filtering respirators may be worn for lower concentrations, but shall be worn when the asbestos fiber concentration is reasonably expected to exceed 10 times, but not 100 times the limit in Section 5208 (a).

(3) Continuous flow or pressure demand air line respirators or self-contained breathing apparatus may be worn for lower concentrations, but shall be worn when the asbestos fiber concentration is reasonably expected to exceed 100 times the limit in Section 5208 (a).

(4) No employee shall be assigned to tasks requiring the use of respirators if based on his recent examination an examining physician determines that the employee will be unable to function normally wearing a respirator or that the safety or health of the employee or other employees will be impaired by his use of a respirator. Such employee shall be rotated to an equivalent job whose duties he is able to perform, if such a position is available.

(e) Change Rooms and Special Clothing.

(1) The employer shall provide and require the use of special clothing such as coveralls or similar whole body clothing, head coverings, gloves, and foot coverings for any employee exposed to airborne concentrations of asbestos fibers, which exceed the ceiling level prescribed in Section 5208 (a).

(2) At any fixed place of employment exposed to airborne concentrations of asbestos fibers in excess of the exposure limits prescribed in Section 5208 (a), the employer shall provide change rooms for employees working regularly at the place.

(3) The employer shall provide two separate lockers or containers for each employee, so separated or isolated as to prevent contamination of the employees street clothes from his work clothes.

(f) Laundering.

(1) Laundering of asbestos-contaminated clothing shall

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be done so as to prevent the release of airborne asbestos fibers in excess of the exposure limits prescribed in Section 5208 (a).

(2) Any employer who gives asbestos-contaminated clothing to another person for laundering shall inform such person of the requirement in Section 5208 (f)(1) to effectively prevent the release of airborne asbestos fibers in excess of the exposure limits prescribed in Section 5208 (a).

(3) Contaminated clothing shall be transported in sealed impermeable bags or other closed, impermeable containers, and labeled in accordance with Section 5208 (h).

(g) Monitoring and Record Keeping. The employer shall sample the air within the breathing zone of employees at locations where the airborne asbestos concentrations may reasonably be expected to exceed 1 fiber, longer than 5 micrometers, per cubic centimeter. Where the asbestos fiber concentration exceeds the level permitted in Section 5208 (a), the employer shall undertake a compliance program as specified in paragraphs (b),(c),(d),(e), and (f) of this section, and in addition, a schedule of monitoring shall be established so the time-weighted average concentration can be calculated with reasonable accuracy for each employee based on his working time at each concentration to which he is exposed. Records of these exposure calculations shall be available to the Division and to the employees and former employees or their representatives. The number of sampling locations, the number of samples, and the frequency of sampling may be reduced when sufficient experience has indicated that the concentration can be estimated reliably. However, the sampling frequency may not be reduced to less than once each 6 months where exposure may reasonably be expected to exceed levels specified in Section 5208 (a).

(h) Caution Signs.

(1) Posting. Caution signs shall be provided and displayed at each location where airborne concentrations of asbestos fibers may be in excess of the exposure limits prescribed in Section 5208 (a). Signs shall be posted at such a distance from such a location so that an employee may read the signs and take necessary protective steps before entering the area marked by the signs. Signs shall be posted at all approaches to areas containing excessive concentrations of airborne asbestos fibers.

(2) Sign Specifications. The warning signs required by subparagraph (h)(1) shall conform to the requirements of format signs specified in Section 6003 (d)(4) of the General Industry Safety Orders and to this subparagraph. The signs shall display the following legend in the lower panel, with the letter sizes and styles of a visibility at least equal to that specified in this subparagraph.

LEGEND	NOTATION
Asbestos	1" Sans Serif, Gothic or Block
Dust Hazard	¾" Sans Serif, Gothic or Block
Avoid Breathing Dust	¼" Gothic
Wear Assigned Protective Equipment	¼" Gothic
Do Not Remain in Area Unless Your Work Requires It	¼" Gothic
Breathing Asbestos Dust May Be Hazardous to Your Health	14 Point Gothic

Spacing between lines shall be at least equal to the height of the upper of any two lines.

(i) Caution Labels.

(1) Labeling. Caution labels shall be affixed to all raw materials, mixtures, scrap, waste, debris, and other products containing asbestos fibers or to their containers, except that no label is required where asbestos fibers have been modified by a bonding agent, coating, binder, or other material so that during any reasonably foreseeable use, handling, storage, disposal, processing, or transportation, no airborne concentrations of asbestos fibers in excess of the exposure limits prescribed in Section 5208 (a) will be released. For large outdoor storage such as mine ore tailings piles, labeling shall not be required if properly posted.

(2) Label Specifications. The caution labels required by subdivision (a) of this subparagraph shall be printed in letters of sufficient size and contrast as to be readily visible and legible. The label shall state:

CAUTION
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
BREATHING ASBESTOS DUST MAY
CAUSE SERIOUS BODILY HARM

(j) Medical Examination.

(1) The employer shall provide or make available at his cost a comprehensive preplacement examination of each employee working regularly with asbestos who has been or may be reasonably expected to be exposed to concentrations of asbestos fibers in excess of 1 fiber, longer than 5 micrometers, per cubic centimeter. Such examination shall be given within 90 days of the effective date of this regulation for existing employees who have not had an examination within 1 year and within 90 days following his first employment for new employees. Such examination shall include as a minimum a 14-inch by 17-inch chest X-ray (posterior and anterior), a history to elicit symptomatology of respiratory disease, and pulmonary function tests to include forced vital capacity (FVC) and forced expiratory volume at one second (FEV_{1.0}).

(2) At least annually every employer shall provide or make available at his cost a medical examination as specified in Section 5208 (j)(1).

(3) Records shall be kept of medical examinations required in Section 5208 (j)(2) for each employee; such records shall be maintained by the employer for at least 30 years. Access to records of medical examinations required in Section 5208 (j)(2) shall be made available for inspection and copying to the Division of Industrial Safety, the Department of Health, to authorized physicians or medical consultants of either of them, and upon request of an employee or former employee to his physician. Any physician who conducts a medical examination required by this section shall furnish the employer of the examined employee all the information specifically required in Section 5208 (j) and any other medical information related to occupational exposure to asbestos.