



Air Products and Chemicals, Inc.

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INTER-OFFICE
MEMORANDUMSubject Complying with the Temporary
Vinyl Chloride Standard

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(Location, Organization, or Department)

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In compliance with the regulations of the "Emergency Temporary Standard for Exposure to Vinyl Chloride" the following will be necessary:

A.) Breathing Air

- 1.) Provide breathing air supply having sufficient capacity for the maximum number of people anticipated under emergency conditions in any area where vinyl chloride is used, stored and transferred. The air supply per person should be sized for pressure demand respirators. (See Appendix 4)
- 2.) Provide for each person in the work area with a Type C, pressure demand respirator. This can be either a full mask or half mask respirator with a pressure demand valve and air supply hose.
- 3.) In addition to the respirator and air supply, each person should have a small cylinder of breathing air attached to a belt. This is to be used during periods the worker moves about in the work area between hook-up stations supplying breathing air, as well as when he leaves the area.
- 4.) The small breathing air cylinders will require frequent refill. An appropriate refill station should be provided using either bottled air or compressor.

The enclosed copy of a brochure is one example of the type of respirator described above. Other suppliers are:

Mine Safety Applicances
Scott Aviation

B.) Monitoring

- 1.) Ambient air monitoring for establishing the presence and average concentration of vinyl chloride in the work area.

(320)

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Current Report

Health Hazards

OSHA WILL ADOPT 50 PPM EXPOSURE LIMIT IN EMERGENCY VINYL CHLORIDE RULE

An emergency temporary health standard for vinyl chloride to be issued by the Occupational Safety and Health Administration will establish a ceiling exposure limit of 50 parts per million.

The emergency rule will be issued while OSHA proceeds with normal rulemaking procedures for a permanent standard.

The OSHA action followed disclosure by officials of the B. F. Goodrich Chemical Company plant in Louisville, Ky., of a possible connection between vinyl chloride exposure and the deaths of several employees of angiosarcoma, a rare form of liver cancer (Current Report, January 31, p. 1099).

Union support and management opposition to an emergency standard for vinyl chloride were registered during an OSHA public hearing on February 15 (Current Report, February 21, p. 1139).

The emergency standard will reduce permissible exposure levels of workers in industry from 500 ppm in air to a 50 ppm ceiling, and at the same time require workplace monitoring and, where exposure is greater than the 50 ppm level, personal protective measures and equipment.

The adoption of a 50 ppm ceiling would be a significant departure from the work practices standard recommended by the National Institute for Occupational Safety and Health (Current Report, March 14, p. 1276). NIOSH maintained that there was inadequate evidence to support the concept that exposure levels of less than 50 ppm were safe.

Under the Occupational Safety and Health Act, the emergency temporary standard serves as a proposed permanent standard. Assistant Labor Secretary John H. Stender said the permanent standard would also be based upon the NIOSH recommendations.

Proposed Standard

The proposed standard (the emergency standard) would establish methods of monitoring work areas for vinyl chloride, set work practices to be followed, institute a medical surveillance program for employees, and require specific personal protective equipment.

The rule is intended to limit exposure to vinyl chloride, a substance that is used widely in the manufacture of polyvinyl chloride, a form of plastic. Monitoring devices now available can measure exposures as low as one part per million in air.

The emergency standard, to be issued "soon," can remain in effect up to six months. It will be superseded, however, as soon as the permanent standard proposal is adopted.

Stender said that "theoretically, the permanent standard can be on the books as early as June. Meanwhile,

the emergency standard will serve to protect workers from the grave danger we know exists."

Following the OSHA hearing on February 15, Stender and other OSHA officials visited several chemical plants for on-the-spot investigations to determine possible means of limiting worker exposure to vinyl chloride.

Stender said scientific evidence presented at the February 15 hearing by Professor Cesare Maltoni, an Italian scientist, led to the emergency ceiling reduction. Maltoni's studies demonstrated that reduction from 500 to 50 ppm provides a considerable degree of protection from the 250 ppm concentration observed by Maltoni to be cancer-causing in animals, while those exposed only to 50 ppm showed no apparent ill effects.

Stender's visits and meetings followed a field study by a team of OSHA industrial hygienists and chemical engineers at a number of chemical plants in Louisiana to develop technical recommendations.

Although the emergency standard will become effective shortly after publication in the Federal Register, the permanent standard will not be adopted until the public has been given an opportunity to comment and, if requested, a public hearing is held.

Asbestos**OSHA ALERTS INDUSTRY TO NEW SOURCE OF HAZARDOUS EXPOSURE TO ASBESTOS FIBERS**

Industry and labor were alerted to a new potential source of occupational exposure to asbestos fibers contained in spackling and taping compounds used to cover seams in dry-wall joints, the Occupational Safety and Health Administration announced on March 27.

The compounds are used chiefly in the home construction industry. Workers sanding joints smooth before painting may expose themselves to three to 13.7 asbestos fibers per cubic centimeters of air, OSHA stated. The OSHA standard for asbestos limits worker exposure to five fibers per cubic centimeter for an eight-hour time-weighted average.

Trade associations, unions, employer groups, and representatives of construction industry are being asked by OSHA to join the effort to alert employers and employees to the potential hazard. OSHA was alerted to the hazard by Dr. Marcus M. Key, director, National Institute for Occupational Safety and Health.

Worker Examination

Current awareness of the potential hazard is based on examination of 17 members of the International Brotherhood of Painters and Allied Trades, New York City, conducted by Dr. Irving J. Selikoff, director, environmental sciences laboratory, Mount Sinai School of Medicine, City University of New York. X-rays revealed that the lungs of nine of the 17 workers examined