

K-17 - (60)
L19747

June, 1974
Volum 38, No. 6

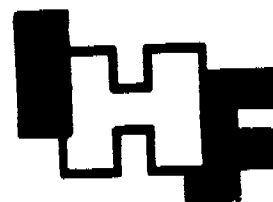
BEST AVAILABLE COPY

INDUSTRIAL HYGIENE DIGEST

**LITERATURE
ABSTRACTS**

•
**ENVIRONMENTAL
AND
OCCUPATIONAL
HEALTH AND
SAFETY NEWS**

Handwritten notes:
11-12
11-14
11-16
11-18
11-20
11-22
11-24
11-26
11-28
11-30
12-1
12-3
12-5
12-7
12-9
12-11
12-13
12-15
12-17
12-19
12-21
12-23
12-25
12-27
12-29
12-31



R&S 131328

INDUSTRIAL HEALTH FOUNDATION, INC.
5231 CENTRE AVENUE • PITTSBURGH, PA. 15232

INDUSTRIAL HYGIENE DIGEST

Literature and News

NEWS ITEMS

K1711

OSHA Proposes "No Detectable Level" Standard for Vinyl Chloride.

Moving with unaccustomed speed under great pressure from certain segments of labor and Congress, OSHA has proposed a permanent standard of "no detectable level" for worker exposure to vinyl chloride. Detection of any amount of vinyl chloride in the workplace would trigger work practices to prevent employee exposure, OSHA explained. This would apply to all manufacturing operations in which vinyl chloride is used. OSHA's proposed permanent standard, published in the Federal Register May 10, allows 30 days for comments. Before a final temporary standard is issued, expected in about six months. Spokesmen for organized labor, principally the United Rubber Workers, Oil, Chemical & Atomic Workers and the AFL-CIO's Industrial Union Department, expressed greater degree of satisfaction with the proposed standard, although they too indicated they would fight for even greater strengthening of the standard to tighten the language. The OSHA proposed standard would include: "Limiting manufacture, use or handling of vinyl chloride to certain "regulated areas." "Monitoring the regulated area atmosphere to detect measurable levels (1 ppm) of the chemical and to determine individual employee exposure." "Allowing employees or their designated representatives to observe non-working activities." "Initiating an engineering and work practice program and a respiratory protection program for employees in the regulated area when detectable levels of vinyl chloride are monitored. Respiratory protection would require continuous flow and pressure demand types of respirators. Establishing a requirement that protective clothing be provided by employers and used by employees in regulated areas. Food, beverage and like products would be prohibited in these regulated areas. "Requiring written operational and emergency plans with employee training in routine and emergency duties. "Providing initial and subsequent medical examinations at no expense to the employee. A beginning date would be based on public comment on the proposal. Records of the results would be retained for the duration of employment plus five years, or for 20 years, whichever is longer.

--Ore. Health and Safety Letter 4(9): 1, May 8, 1974

74 Withholding of Vinyl Chloride Data Hinted.

K1711

European and U.S. chemical firms, together with the Manufacturing Chemists Association, a U.S. trade group, held in confidence for at least a year preliminary, albeit significant, scientific findings on vinyl chloride as an agent causing liver cancer in rats, C & EN learned recently. U.S. chemical industry sources say they were bound by an agreement under which four European firms controlled any release of animal test data obtained by Prof. Cesare Maltoni, director, Istituto Di Oncologia, Bologna, Italy. The first public disclosure of Prof. Maltoni's findings came on Feb. 15, 1974, in the U.S. Prof. Maltoni's animal data have been a key to much of the regulatory actions taken by the Occupational Safety and Health Administration. At a May 10-11 meeting of the New York Academy of Sciences and American Cancer Society, Prof. Maltoni disclosed that he had found one liver angiosarcoma in his rats at 50 p.p.m., together with several other types of tumors. On April 18, MCA announced that preliminary findings on mice in its own study under way at Industrial Bio-Test Laboratories tended to confirm the Maltoni data then available publicly. Besides the animal data there is a wealth of new medical findings now appearing on vinyl chloride exposure, partly through the May 10-11 meeting. MCA's epidemiological study on 7,128 vinyl chloride workers, for example, finds that cancers of the liver (primarily angiosarcoma), respiratory system, brain, and cancers of unknown primary site, as well as lymphomas, "occurred more often than expected in those members of the study population with the greatest exposure." with the caveat added that although these excesses "were not statistically significant, the findings warrant further study." And a major bias in the study is the "discovery"--too late to include it--of 1,500 to 2,000 workers with the longest exposures, up to 35 years. Much remains to be answered in the way the release of the Maltoni data has been handled. There are allegations, unfounded from all that C & EN can learn, that word of early results was passed to U.S. and Italian government officials. A major question mark concerns what was said by MCA to the National Institute for Occupational Safety and Health in July 1973 and earlier.

--Chemical & Engineering News 52: 16, May 20, 1974

Theory on Vinyl Cl Hazard Sees Liver-Harming Steps.

L1711

A theory of the pathologic progression of the liver angiosarcomas seen in U.S. polyvinyl chloride workers has been developed by Dr. Louis Thomas, chief of the Pathology Laboratory of the National Cancer Institute, who has reviewed biopsy material taken from such workers at the B.F. Goodrich plant in Louisville, Ky., and Dr. Hans Popper, Distinguished Service Professor, Mount Sinai School of Medicine, N.Y., and a Fogarty International Center Scholar at NIH. "We think that exposure to the vinyl chloride gas at the factories apparently causes liver fibrosis, which leads to portal hypertension, which leads to splenomegaly and hepatomegaly.

...and patients' prognosis malignancy," Dr. Popper said. Both investigators cautioned that the data in their studies and their final conclusions can not yet be drawn about the cause of the tumors in the workers. Dr. Thomas noted that the tumors in the workers do not appear to be different from most other liposarcomas. Dr. Popper recently returned from Germany, where he collected a number of similar cases. "Certain skin changes were found in some of the workers in the plants, and they were sent to dermatologic clinics, where the enlarged spleens were found. In several laparoscopies demonstrated many cases of liver fibrosis. This happened more often than with the findings in the United States," Drs. Thomas and Popper note that detection of the disease was always rapid. All the affected workers have had at least three years' exposure, and the cause may be vinyl chloride gas, and, Dr. Thomas added, "I would be surprised if they were not exposed to other chemicals as well. We don't yet know for sure that it is only vinyl chloride."

--Hospital Tribune 8/9/77, 7, April 22, 1977

64-71 SHA Criticizes Vinyl Chloride Standard.

OSHA's proposed standard for work-place exposure to vinyl chloride is criticized as "excessively and unduly restrictive" by the Society of the Plastic Industry. SPI says it will urge the Occupational Safety and Health Administration to hold hearings on the "no-detectable" standard so that industry "can present its views to assure worker safety and still permit a vital industry to continue operating."

--Chemical & Engineering News 52, 8, May 20, 1977

64-74 Toxic and Source of Asbestos Fiber Exposure.

OSHA has alerted industry and labor to a new-found source of hazardous exposure to asbestos fibers. The agency has learned that many spackling and taping compounds used to cover seams in dry wall contain asbestos. Employees sanding joints smooth before painting may expose themselves to from 1 to 100 asbestos fibers/cc of air. OSHA's asbestos health standard limits exposure to 5 fibers/cc, on an 8-hour time-weighted basis.

--Plant Engineering 28, 13, May 22, 1977

70-74 Changes to the Delaney Clause are Planned.

Changes to the Delaney clause are planned. FDA chief Alexander M. Schmidt says, after the agency's publication of a study spurred by House debate in June 1973. The clause's anticancer language is the basis of FDA's barred use of such chemicals as cyclamates. Dr. Schmidt says that "growth of knowledge concerning carcinogenesis may eventually permit safe levels of carcinogenic (food) additives to be determined. But this day is not yet here."

--Chemical & Engineering News 52, 6, May 19, 1977

64-74 House Builds for Toxic Chemicals Bill.

Government measures to help reduce potential risks to human health from the ever-growing number of chemicals commercialized in the U.S. are moving ahead. But generally the pace is far from swift enough, to the critics of chemical technologies. And recently even those federal agency chiefs who take a largely unopposed approach toward chemicals have urged Congress to get cracking to close the regulatory gap that a National Toxicity Control Act is intended to fill. Bottled up since last fall in a Senate-House conference whose terms have seldom met, owing to more pressing matters, the legislation would require some form of pre-market testing for various chemicals beyond that now set for drugs, food additives, and pesticides. Funding and costs would rise--no one is certain exactly how much--and undoubtedly some products never would be marketed. Still, the legislation is needed as the "only way" to remove the Government from the "current reactive posture" it thus itself in toward unanticipated problems posed by chemicals, says Dr. Russell W. B. Brown, chairman of the Council on Environmental Quality. The CEQ head made these points in a speech to the annual meeting of the Institute of Environmental Sciences in Washington, D.C., last month. He used the recently well-publicized examples of liver cancer deaths from vinyl chloride exposure and contamination of a deep-well drinking water supplies by asbestos-like fibers from Reserve Mining's Silver Bay, Minn., plant as "the obvious need" for this legislation. Efforts to avert other "vinyl chloride" problems are under way in government labs and in private labs through federal funds. With the World Health Organization estimating that some 85% of human cancers are caused by environmental agents, the federal government is under way to shorten the time and cut carcinogen testing costs, a number of officials are questioning how scientific knowledge can keep abreast of the increasing number of new and old chemicals. With chemically linked health hazards often first detected in job-exposed populations, much interest is being turned on the findings and actions toward chemical products of NIOSH and the Labor Department's Occupational Safety and Health Administration. Particularly closely watched--perhaps since so few details are known--is a joint, \$3.5 million OSHA-NIOSH effort to update health standards for 400 toxic substances.

--Chemical & Engineering News 52, 14, May 27, 1977