

EJF → EMS → file

OCCUPATIONAL HEALTH & SAFETY LETTER

Vol. 4, No. 4

GERSHON W. FISHBEIN, PUBLISHER

February 22, 1974

Main Office • 1097 National Press Building • Washington, D.C. 20004 • (202) 347-3868

Published twice a month. Rate: \$75 per year; \$135 in combination with Environmental Health Letter
Includes free engraved binder for each publication.

W. S. F.

FEB 25 1974

Highlights of This Issue

Labor Dept. to reject union petition for emergency standard on vinyl chloride	Page 1
House hearings on OSHA to begin March 19	Page 2
Criteria document pinpoints occupational hazards of sulfur dioxide	Page 3
Moran criticizes states for adopting OSHA standards intact	Page 4
Southwest Research gets contract from DOT for physician's manual	Page 4
Review Commission defines its authority in rulings on penalties	Page 5
Regulation proposed to make it easier for states to change plans	Page 6
Health research group, OCAW sue on carcinogens	Page 6

LABOR DEPT. TO REJECT UNION PETITION FOR EMERGENCY STANDARD ON VINYL CHLORIDE:

The Labor Department, to the surprise of few, has decided to reject the petition of the AFL-CIO's Industrial Union Department for a temporary emergency standard on polymerization of polyvinyl chloride, which has now been implicated in at least six deaths due to liver angiosarcoma at the B.F. Goodrich plant in Louisville, Ky. (*OCCUPATIONAL HEALTH & SAFETY LETTER*, Feb. 8).

Instead, the Department has chosen to adopt the recommendation of the company that new safety standards and work practices in polyvinyl chloride operations should be developed through regular rule-making proceedings under Section 6(b) of the Occupational Safety and Health Act.

Meanwhile, NIOSH has moved to study employee records and exposures at eight PVC plants and fully expects to come up with additional cases. Dr. Joe Wagoner of NIOSH's Cincinnati program is directing the epidemiological program. The next plant to be studied is the Firestone facility at Pottstown, Pa. An effort is being made to recover the work histories of the employees so at least to identify those at risk. Kentucky has added PVC to its list of occupational carcinogens, and NIOSH has appealed to CDC for additional funds and personnel.

At the same time, Mount Sinai School of Medicine investigators reported finding several cases of serious liver disease among workers in a vinyl chloride plant of Goodyear Co. at Niagara Falls, N.Y. Other instances are due to be uncovered shortly, so intense is the investigation--perhaps the greatest in the three-year history of the Occupational Safety and Health Act.

What is unusual is that angiosarcoma of the liver is an exceedingly rare tumor. It is estimated that only 25 such cases occur annually in the United States. Six cases, therefore, among a small number of workers at a single plant is a most unusual event "and one which raises the possibility of some work-related carcinogen, conceivably vinyl chloride itself," a NIOSH report issued through the Center for Disease Control stated.

"Although no data are yet available concerning the occurrence of angiosarcoma among workers at other vinyl chloride plants in the United States, it seems distinctly possible that the problem may be industry-wide. Epidemiologic studies have started to determine the extent of the problem in the United States, with respect both to angiosarcoma of the liver and its possible relationship to post-toxic cirrhosis.

"Published data concerning the potential hepato-toxicity and oncogenicity of vinyl chloride are limited. Studies in Germany have suggested a link between hepatic damage and occupational exposure to vinyl chloride, while Italian workers have suggested that vinyl chloride may cause a wide variety of tumors in animals. The chemical concentrations used in these latter experiments, however, far exceeds levels likely to be encountered in industrial environments. Efforts to confirm such observations and to measure effects at lower dose levels are now in progress."

AST 000015456

At a public hearing called by OSHA Feb. 15, the star witness undoubtedly was Prof. Cesare Maltoni of the Instituto di Oncologia in Bologna, Italy, one of the foremost investigators of angiosarcoma. He described animal experiments on induction of various types of tumors following administration of varying doses of PVC. Liver angiosarcomas of low malignancy were reported in some rats.

On February 12 NIOSH sponsored a briefing for management and labor representatives from the vinyl chloride and polyvinyl chloride industries. Following the briefing NIOSH presented plans for future activities, including: (a) development of recommended standards; (b) medical surveillance and research programs; (c) industry-wide epidemiologic studies; and (d) additional toxicological investigations.

Development of the recommended standard began immediately following the NIOSH briefing when members of the NIOSH and CDC staff met with a small group of expert advisers selected from both industry and labor. NIOSH anticipates that such recommendations will be transmitted to the Labor Department in a few weeks.

"During the Federal agency briefing, NIOSH and other official agencies were advised by a Goodrich Co. representative as to the status of an ongoing study sponsored by European polyvinyl chloride producers and involving the exposure of small groups of rats to vinyl chloride monomer vapor," said Vernon E. Rose, Acting Assistant Director of NIOSH for Research and Standards Development.

"Although the results reported were only of a very preliminary nature, NIOSH considers that these data, which include histopathologic examination of tissue, identify vinyl chloride monomer as the causative agent in the induction tumors observed in the test animals, including angiosarcoma of the liver."

Pending development of recommendations, NIOSH suggested to the Manufacturing Chemists' Association a series of work practices, monitoring and control procedures which should be put into effect immediately as interim measures. They include general housekeeping procedures (storage of VC and PVC material, taking of inventories, removal of PVC material from overhead structures and conduits, no food products in area, etc.); wearing and daily changing of protective clothing; mandatory showers at the end of an eight-hour work shift for all workers with possible contact with VC-PVC; environmental and personal monitoring, and respiratory protection.

At the OSHA public hearing, Goodrich president Anton Vittone, Jr., said that the company—independently and through MCA—had stepped up its precautionary safety activities and research after European studies had indicated that tumors could be produced in rats at exposure levels far above those prescribed for PVC plant working conditions.

Through these and other efforts, the company has reduced exposure levels in all PVC operations below 50 ppm on a time-weighted average, Vittone said. This improvement was made through the use of new equipment, safety education for employees and the company's development of advanced monitoring systems, he said.

The company's cooperation in the investigation and prompt notification of NIOSH drew praise from Dr. Marcus M. Key, NIOSH Director, to Dr. Murray N. Johnson, Director of Environmental Health for Goodrich. Tabershaw-Cooper Associates, Berkeley, Calif., has been serving as a consultant to the company.

A major immediate concern both for VC-related industries and for the government in its projected epidemiologic investigation of the angiosarcoma question will be screening of industrial populations for clinical evidence potentially related to the VC polymerization process, NIOSH said following the Feb. 12 meeting in Cleveland.

6-7112
"Such disease encompasses not only angiosarcoma of the liver, but also non-malignant hepatic conditions (cirrhosis), and perhaps other types of cancer and non-hepatic disorders as well," it said. "To consider what medical screening procedures are appropriate in this setting, NIOSH/CDC plans in the near future to convene a panel of medical consultants specializing in liver disorders. This panel will review the clinical and pathologic material accumulated to date concerning VC related disease in this country and abroad, and will make specific recommendations to the government with respect to medical screening and follow-up of potentially at-risk industrial populations."

ASI 000015457

HOUSE HEARINGS ON OSHA TO BEGIN MARCH 19:

The House Select Subcommittee on Labor will begin a series of review hearings on administration of OSHA starting March 19.

Rep. Dominick Daniels (D-N.J.), chairman of the subcommittee, said that "it is my belief that OSHA has gone far toward achieving its stated objective without overburdening employers. The Act and its administration,