



INTER-OFFICE CORRESPONDENCE

To: Mr. R. E. Widing

Date: February 19, 1974

From: Zeb G. Bell, Jr.

Location: 19 East

Subject: Cleveland, Ohio, Meeting
of February 12, 1974
(NIOSH Presentation On
B. F. Goodrich Incident)

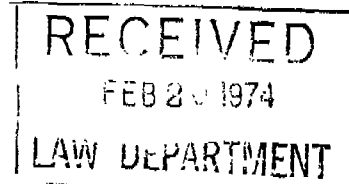
Mr. L. F. Sargert and this writer attended the informal public hearing in Cleveland on the developments concerning the B. F. Goodrich incident in Louisville, Kentucky, and the actions taken by NIOSH since its involvement. Dr. Marcus Key, Director of NIOSH, with his staff, admirably apprised the group of approximately 150 attendees of the events that have evolved concerning VCM-PVC.

This meeting went excellently and was not a potential bed of extremism, except for several commentators who somehow find fault in any program.

Dr. Irving J. Selikoff, Director of Environmental Sciences Lab, Mount Sinai School of Medicine, criticized the industry and the government for not earlier anticipating the hazards of VCM-PVC production. It was also quite apparent that he was in search of governmental contracts to do some epidemiological work and research in this area. Dr. Key, Vernon Rose, and others were aware of this pitch. (Note: Dr. Selikoff was at one time the largest recipient of NIOSH contracts. His work was primarily in the asbestos situation.)

Dr. Samuel Epstein (Case Western Reserve) was also critical of the failure of industry to adequately protect the workers' health and for overlooking literature references in both the United States and in Europe that should have caused concern among responsible individuals.

Dr. Jaeyer, Harvard School of Public Health, has been interested in the copolymer situation recently (meat wrappers' asthma), and his doctoral work was in the phthalates as plasticizers in resins. It was apparent from his comments that he was not convinced that the Louisville incident was restricted to the PVC homopolymers. This was based on the information that the last work place of the two deceased B. F. Goodrich workers was in the VDC copolymer buildings. Dr. Henry Falk of CDC-NIOSH related, upon talking to the workers at B. F. Goodrich's Louisville plant, that the other workers with VDCM copolymers thought the cancers might be related to the copolymer. This is not an unusual conclusion for the workers to express since they relate to the last work area as being responsible for the mortality of their co-workers.



Mr. R. E. Widing
February 19, 1974
Page 2

Miss Jane Brody, New York Times, asked the question of Dr. Key, toward the end of the meeting, as to why NIOSH was so slow in acting on the VCM information supplied to them in July, 1973. "Why wasn't some action taken by NIOSH based upon the information given to NIOSH?" Dr. Key talked around the subject without giving her a very satisfactory answer.

NIOSH discussed their involvement in chronological order and what they had tentatively found.

CDC epidemiologists, Falk and Heath, indicated that they were in the process of reviewing all deaths from cancer of the liver for proper reading of the tissue slides. There were approximately 2100 deaths from cancer of the liver in the U.S. in one year. It was estimated that between 20 to 30 of these were angiosarcoma. Some interesting information was presented involving the rare disease of angiosarcoma:

- 1) Ninard reported in the literature that since 1950 there had been only 44 cases of angiosarcoma to the end of his study (not given in the slide).
- 2) In two large community research centers, there have been only six cases seen of angiosarcoma.
- 3) In a U.S. cancer survey of a metropopulation, there had been only eight cases on record of angiosarcoma of the liver.
- 4) In a large metropolitan cancer survey over three years, there were only two angiosarcomas of the liver in 133 cancers of the liver, and only two angiosarcomas in a total of 16,528 cancer patients.
- 5) Rath has some information in a 1957 publication.
- 6) Harta also reported on the 1965 survey of cancers.

The problem with the present system is that angiosarcoma is so rare that it is not singled out as a specific cancer in the cancer-coding procedure. It is usually found as Code No. 197.8 malignant neoplasm of the liver (unspecified).

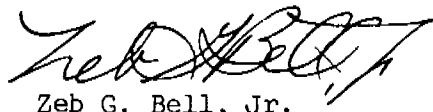
Mr. R. E. Widing
February 19, 1974
Page 4

CDC plans to assign a specific code number for angiosarcoma of the liver in the cancer register to get a better definition of the cause of death. In the interim period, all of the 2100 cancer of the liver deaths are to be reviewed.

Comment: It is possible that the incidence of angiosarcoma, when it is better defined, may be higher than expected, but it will still be a very, very rare type of cancer. Further, when these cases are identified, it can be anticipated that those who died with angiosarcoma of the liver will have their work history collected. This brings up a very interesting potential development that should be fully recognized. It is likely that a significant number of these cases will include in their work history some period of time during which these deceased workers might have contacted some types of chlorinated hydrocarbons during the course of their employment. One must recognize this potential finding since the ubiquity of chlorinated hydrocarbon use is well known. Such places as dry cleaning establishments, degreasing operations, and others are just a few examples.

Further, there is very little published toxicological information on the carcinogenesis of other chlorinated hydrocarbons of the sophistication of that being done on VCM. Particularly bothersome is the fact that VDCM is a greater liver toxicant than VCM. This does not mean that VDCM will produce angiosarcoma of the liver, but it does suggest that VDCM must be at least screened toxicologically to exclude it from being a carcinogen.

If we are not to be subject to another potential problem as has developed with VCM, this same screening would appear warranted for other chlorinated hydrocarbons, such as EDC, TCE, perchlor, and methylchloroform. This writer cannot overemphasize this need and the need for prompt action to get such screening tests underway immediately. The concern for other chlorinated hydrocarbons which might produce various types of cancers may be purely speculative; however, information as to their potential carcinogenic properties is likely to evolve as a result of the substantial reviews by the federal government.



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