



A Division of The Society of The Plastics Industry, Inc.

October 3, 1996

Dr. William Waddell
Department of Pharmacology
University of Louisville
Louisville, Kentucky 40292

Re: ACGIH Member Suggestion to Reduce Vinyl
Chloride TLV

Dear Dr. Waddell:

The Vinyl Institute (VI), a division of the Society of the Plastics Industry Inc. (SPI), appreciates this opportunity to offer its views on a proposal by a member of the American Conference of Governmental Industrial Hygienists (ACGIH) to lower the Threshold Limit Value (TLV) for vinyl chloride (CASRN 75-01-4) from 5 parts per million (ppm) to 0.5 ppm time-weighted average (TWA).^{1/} As explained below, we believe that it would be inappropriate for ACGIH to proceed with consideration of a proposal to change the TLV for vinyl chloride until on-going

^{1/} Members of the VI are responsible for the majority of the domestic production volume of vinyl chloride monomer (VCM) and polyvinylchloride (PVC). VI's members include: Borden Chemicals and Plastics Limited Partnership, CertainTeed Corporation, Colorite Polymers, Condea-Vista Company, The Dow Chemical Company, The Geon Company, Georgia Gulf Corporation, Occidental Chemical Corporation, PPG Industries, Inc., Shintech, Inc., Union Carbide Chemicals and Plastics, and West Lake PVC Corporation.

SPI is a 2,000 member not-for-profit trade organization representing all segments of the plastics industry in the United States. The Society's members include processors and manufacturers of plastics and plastics products, suppliers of raw materials, processors and converters of plastics resins, and manufacturers of accessory equipment for the plastics industry. Founded in 1937, SPI is the major national trade association of the plastics industry.

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studies are completed. For over 20 years, industry has been subject to a stringent 1 ppm permissible exposure limit issued by the Occupational Safety and Health Administration (OSHA) to protect workers' health.

The VI understands that the current suggestion comes from a projection by Dr. Carl Rosman based on a study by Simonato, et al., *Scandinavian Journal of Work and Environmental Health*, vol. 17, pages 159-169 (1991). While the VI has not formally reviewed the Simonato study, we understand that it is of good quality. However, we are unaware of the basis upon which Dr. Rosman determined that the TLV should be lowered, and industry scientists apparently have not interpreted the study results in the same fashion as Dr. Rosman.

We believe that the results of two studies, which are now underway and have already produced findings, could well have bearing on a worker exposure recommendation for vinyl chloride. Both studies are sponsored by the Vinyl Chloride Panel of the Chemical Manufacturers Association (CMA). One is an update of a large epidemiology study of workers in the vinyl industry that is expected to be completed in the fall of 1997. The second is a combined inhalation, two-generation reproductive and developmental toxicity study in rats being conducted at Huntingdon Life Sciences Laboratories, which, among other things, has provided valuable mechanistic data which should be examined.

In addition, the VI believes that it would be premature to consider modifying the TLV for vinyl chloride prior to completion of the CMA study, particularly because, given the size of the industry, the effects of modifying the TLV (even by a small amount) could be considerable. This impact is attributable not only to general industry recognition of the TLVs, but also to the use of TLVs as a basis for state workplace and environmental regulation. A changed TLV could affect both polyvinylchloride (PVC) resin manufacturing and product fabrication operations. But, more importantly, data from these studies will help refine and clarify the appropriate interpretation of the Simonato study. Collectively, this will lead to a better determination of whether the scientific literature shows that current exposure levels result in the "adverse effect" that the TLVs are intended to avoid based on continuous and repeated exposure.

The VI is committed to preserving the health of persons who work in the vinyl industry. Air emissions, water effluent, and solid wastes from the vinyl industry are highly regulated under a variety of federal, state, and local laws and regulations. As noted previously, workers are protected from exposure to vinyl chloride under OSHA's vinyl chloride standard. 29 C.F.R.

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§ 1910.1017. Under the OSHA standard, manufacturers must reduce or eliminate worker exposure to vinyl chloride by using a combination of engineering and work practice controls and personal protection equipment. The industry has also instituted a number of voluntary pollution prevention and worker safety and health programs. By instituting such programs, using new technologies and innovative procedures, and with the establishment of federal standards, the U.S. Environmental Protection Agency (EPA) estimates that the vinyl industry has reduced vinyl chloride emissions over 99 percent since the early 1970's.

We appreciate the opportunity to provide input in this regard and trust that you find these brief observations useful. Should you have any questions concerning this matter, or desire more detailed information or comments, please do not hesitate to contact us.

Sincerely,

Frank E. Borrelli/pd
Frank E. Borrelli