

April 8, 1974

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Technical Task Group on
Vinyl Chloride Research
Manufacturing Chemists Association
1825 Connecticut Avenue, N. W.
Washington, D. C. 20009

SUBJECT: Proposed Occupational Safety and Health
Work Practice Standard for the Manufacture of
Synthetic Polymer Containing Vinyl Chloride

Gentlemen:

The attached Occupational Safety and Health Work Practice Standard for the Manufacture of Synthetic Polymer Containing Vinyl Chloride is submitted for your consideration and approval.

In preparing this Work Practice, the Subcommittee set the following objectives for itself:

1. Workers in the industry must be protected from hazards related to vinyl chloride exposure.
2. The Work Practice Standard should be practical and clearly understandable. Performance standards were not to be rigid routines.
3. The hazards related to vinyl chloride exposure should be controlled within the monomer and polymer industry. Resin converters and compounds should be protected.
4. The Work Practice should not impose impossible or uneconomic limits on the monomer or resin industry, but should eliminate many of the past practices which may have caused or contributed to the health hazards attributed to vinyl chloride inhalation.

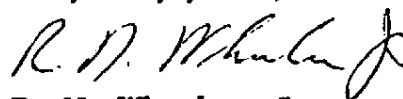
In light of the foregoing objectives, the Subcommittee chose a working level concentration of 50 ppm TWA based upon work reported by Torkelson, Oyen, and Rowe (Am. Ind. Hyg. Assoc. Journal, Volume 22, page 354, 1961) and the work currently underway by Dr. Cesare Maltoni. Since there is no data indicating that polyvinyl chloride resin is harmful, the Subcommittee does not feel that protection from this material is required other than that needed for nuisance dusts. Similarly, no identified hazard exists for absorption of vinyl chloride through the skin from low concentrations in air, thus, no impervious clothing and other protective devices are required.

Based upon the Work Practice Standards already established for human carcinogens, a concentration limit of 0.1% by weight or less was set on process and product streams to be exempt from the standard. The Subcommittee believed that with proper ventilation no hazard would exist for workers in waste treatment plants, in transportation operations, and in subsequent compounding and fabrication of the resin.

The desire of everyone in government, labor, and industry to minimize the hazards to workers in the resin and monomer industry has led to requests for goals such as no detectable level of vinyl chloride monomer in the air or levels of 5 or 10 ppm ceiling. The Subcommittee believes that these limits are uneconomic and all but impossible to meet, based upon present technology. The chosen limit of 50 ppm TWA in this standard represents a serious constraint on the industry but it is one that industry is prepared to accept in the interest of worker safety. An arbitrary reduction in the acceptable ceiling concentration to 0, 5, or 10 ppm at this time is simply a requirement for liquidation of a major industry.

The Subcommittee on Work Practices recommends approval of the attached Work Practice Standard for the Manufacture of Synthetic Polymer Containing Vinyl Chloride and that it be transmitted to the Department of Labor as an industry proposal.

Very truly yours,



R. N. Wheeler, Jr.

Chairman

Subcommittee on Work Practices

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Attachment