



CHEMICAL MANUFACTURERS ASSOCIATION

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Vice President
Technical Director

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HAND-DELIVERY

Document Control Officer
TS-790
Office of Toxic Substances
Room 220, East Tower
U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

RE: For Your Information Submission: Summary of
Draft Results of an Epidemiology Study
of Vinyl Chloride Workers

Dear Sir/Madam:

The Chemical Manufacturers Association (CMA) has just learned of the draft results of an epidemiology study of vinyl chloride workers conducted by Environmental Health Associates. The study was sponsored by the Vinyl Chloride Program Panel ("the Panel") of CMA. The significant findings from this study are reported here for your information on behalf of the Panel. The member companies of the Panel are listed on Attachment I.

The current study is an update of an earlier mortality study of vinyl chloride workers. The draft report received by CMA on the current study shows an excess mortality from three causes not previously associated with vinyl chloride exposure.

The study showed an excess of liver and biliary cancer over and above the observed mortality from angiosarcoma of the liver. Without the known angiosarcomas, there were 22 observed deaths from liver and biliary cancer versus 6 expected. Because some of the deaths from liver and biliary cancer may, in fact, be undiagnosed deaths from angiosarcoma, it is not certain at this time that there is, in fact, a vinyl chloride related excess in these cancers.

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In addition, the study showed an excess mortality from emphysema, which includes bronchitis and chronic obstructive pulmonary disease. However, the dose-response relationship is not consistent with vinyl chloride as a causal agent. If it were, one would expect that the excess would become greater with increasing duration of exposure when, in fact, the opposite is observed in the study. Also, one would expect that the excess would be greatest in those hired at the youngest ages. Again, the reverse is true. Finally, one would expect that persons whose exposure began a long time ago would have more emphysema than those whose exposure began recently, which was also not observed in the study. Therefore, although the excess deaths due to emphysema appear to be real, their relationship to vinyl chloride is questionable.

A final report is expected from the contractor in four to six weeks and will be submitted to the Agency for its detailed review. Meanwhile, please call Dr. Has Shah, Program Manager, of my staff at 887-1192, if you have specific questions.

Sincerely yours,



Geraldine V. Cox, Ph.D.

Vice President-Technical Director

cc: Vinyl Chloride Program Panel

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ATTACHMENT I

Participating Companies
of the
Chemical Manufacturers Association's
Vinyl Chloride Program Panel

Air Products and Chemicals, Inc.

BFGoodrich Company

Borden, Inc.

Certain Teed Corporation

Diamond Shamrock Chemicals Company

DiversiTech General

Dow Chemical USA

Ethyl Corporation

Exxon Chemical Company

The Goodyear Tire and Rubber Company

Gulf Oil Products Company

Monsanto Company

Occidental Chemical Corporation

PPG Industries, Inc.

Stauffer Chemical Company

Shell Oil Company

Union Carbide Corporation

Uniroyal Chemical Company

Vista Chemical Company

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