DOW CHEMICAL U.S.A.

1803 Building
22 October 1984

MIDLAND, MICHIGAN 48640

Brian Bennett, M.D.
Imperial Chemical Industries, Ltd.
Hillhouse Site
P.O. Box No. 4, Thornton-Celveleys
BLACKPOOL FY5 4QD
ENGLAND

Dear Dr. Bennett:

Our conversation with Dr. Maurey Johnson was most useful but I wish I had had the opportunity to be with you in Washington.

I'm enclosing a copy of the EPA Water Criteria Document as promised, as well as a copy of the Vinyl Institute comments.

We are awaiting the results of the European dietary study (CIVO). Perhaps it will become available to you before it is to me.

I am sure we will have further opportunity for discussion. I am pleased to hear John Stafford is enjoying his retirement.

Sincerely yours,

Theodore R. Torkelson, ScD.
Health & Environmental Sciences

Enc.

cc: C. Stack - CMA
M. Johnson, M.D.

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The Vinyl Institute

Roy T. Gottesman
Executive Director

September 26, 1984

Comment Clerk, Criteria and Standards Division
Office of Drinking Water, WH-550
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Gentlemen:

RE: 49 FR 24330 (June 12, 1984) National Primary Drinking Water Regulations; Volatile Synthetic Organic Chemicals, Proposed Rulemaking

The Vinyl Institute, an operating division of The Society of the Plastics Industry, Inc., is a trade association of manufacturers of vinyl chloride monomer and/or polyvinyl chloride (PVC) resins. We are pleased to provide these comments regarding the above referenced subject as they relate to the proposed rulemaking to amend 40 CFR 141 in order to establish RMCLs (recommended maximum contaminant levels) for a group of volatile organic chemicals (VOCs) in drinking water. This proposal establishes RMCLs for VOCs in drinking water including a zero RMCL for vinyl chloride.

We believe that there are a number of deficiencies with this proposal and wish to offer the following comments:

1. There is no demonstrated need for any RMCL on vinyl chloride.

Because the occurrence of detectable vinyl chloride in sampled water is so infrequent, there is no justification for national regulations. For example, Table I, p. 24334 shows that vinyl chloride was only detected once in 466 random samples taken during a ground water supply survey. Further EPA's ambient water quality criteria for vinyl chloride (October 1980) states that "vinyl chloride introduced into aquatic systems will most probably be quickly transferred to the atmosphere through volatilization."

The only information provided to show the presence of vinyl chloride in water is the collection of data provided in Table 5, p. 24335. As the

footnote accompanying this table states, the data "represent a collection of available data from various State agencies, are normally in response to contamination incidents and are not considered to be statistically representative of national occurrence (underline added for emphasis). To the extent that EPA sees a need to provide contamination response guidelines to the states, we believe this can be done in a much more limited fashion than through the promulgation of an RMCL for vinyl chloride. This view is further supported by the fact that the National Drinking Water Advisory Council (NDWAC) did not recommend regulating vinyl chloride.

2. A zero RMCL level for VOCs is scientifically unsupportable.

Setting a zero RMCL level for VOCs is not scientifically supportable, is not capable of being measured and is not enforceable. Setting the RMCLs at zero is actually equivalent to setting the analytical detection limit as the RMCL since zero is a relative, unmeasurable and unattainable goal. In addition, it is our view that the legislative record would not support a zero risk level.

If further consideration shows that there is the need for a national standard for vinyl chloride in drinking water, then the RMCL should be set at some risk level which includes human health effects data and is based on chronic effects. A scientifically valid risk assessment can be made incorporating all known human data, toxicity, exposure, epidemiology and environmental end results. It is our belief that a 10^{-5} lifetime risk is adequately indicative of a level showing "no known or anticipated adverse health effects", especially in view of the fact that, for the present case of vinyl chloride, the current EPA risk is estimated to be less than 10^{-10} -- a safety factor of 10^{5} under present conditions.

The Vinyl Institute greatly appreciates this opportunity to offer these comments for the Agency's consideration.

Sincerely yours,

R. J. Gottesman