



OFFICE OF TOXIC SUBSTANCES

MAR 13 1975

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

March 11, 1975

Mr. Milton Friefeld  
Manufacturing Chemist Association  
1825 Connecticut Avenue, N. W.  
Washington, D. C. 20009

Dear Mr. Friefeld:

Enclosed you will find a copy of EPA's Vinyl Chloride Task Force Report, which I indicated I would mail to you. You will also find attached, a recap of each of the EPA vinyl chloride recommendations identified in the task force report, with the lead office clearly identified in the column next to it.

Should have further questions, please contact

Dr. William Marcus of the Special Chemicals Branch (Telephone: 755-0300).

Sincerely yours,

*Don Marlow*

Don Marlow, Chief  
Special Chemicals Branch

Enclosures (2)

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## VINYL CHLORIDE TASK FORCE RECOMMENDATIONS

| Recommendations                                                                                                                                                                                                                                                                                                                                                                                      | Responsible Office* |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| 1. An air standard for VC should be established as soon as practical under the Clean Air Act for VC and PVC polymerization plants and, if warranted by further investigations, for PVC fabrication plants. The Agency should determine the ambient levels that are likely to be achieved and, to the extent possible, the health risks associated with such levels.                                  | OAQPS               |
| 2. Additional ambient air monitoring should be carried out to support regulatory action under the Clean Air Act. These efforts should include sampling at a number of carefully selected sites around a few VC, PVC polymerization, and PVC fabrication plants. The monitoring measurements made at these facilities should be correlated with specific in-plant activities such as reactor venting. | OAQPS               |
| 3. More detailed material balance studies should be conducted, in cooperation with industry, at a few VC and PVC polymerization plants. Specific VC leakage points should be more clearly identified, and attempts should be made to correlate the magnitude and timing of the estimated losses with the levels of VC detected in a monitoring program.                                              | OTS                 |
| 4. A program should be initiated to determine whether and to what extent background levels of VC are present in the ambient air -- indoors, and outdoors -- due to the presence of PVC products.                                                                                                                                                                                                     | OTS                 |
| 5. A limited VC monitoring program should be undertaken of drinking water supplies which might be contaminated from VC discharges from nearby PVC plants. Prior to undertaking the program sampling and analysis procedures should be carefully reviewed and refined as necessary.                                                                                                                   | OWPO                |

\* see last page

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| Recommendations                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Responsible Office |
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| 6. A study should be conducted to determine the amount of VC migrating out of PVC products used in water distribution systems - such as PVC pipe or storage tank liners. Prior to undertaking the program standardized sampling and analysis procedures should be carefully reviewed and refined as necessary.                                                                                                                                                                                               | ORD                |
| 7. To insure comparability of results between laboratories EPA should further develop its interim method into a standardized method for monitoring levels of VC. Concurrently, the Agency should also investigate the feasibility of developing a continuous air monitoring device.                                                                                                                                                                                                                          | ORD                |
| 8. Monitoring and bench-scale studies should be conducted around industrial, storage and disposal sites and municipal disposal sites to determine the types and quantities of toxic substances leached or discharged out of (a) semi-solid and solid wastes generated by VCM/PVC facilities, or (b) PVC products discarded by consumers. If these studies indicate that there could be a health or environmental hazard, guidelines should be developed to control the storage and disposal of these wastes. | OSWMP              |
| 9. The responsible Office should continue to support currently planned VC toxicological studies.                                                                                                                                                                                                                                                                                                                                                                                                             | ORD                |
| 10. The responsible Office should continue to support currently planned VC epidemiological studies.                                                                                                                                                                                                                                                                                                                                                                                                          | OTS/ORD            |
| ✓ 11. More intensive studies should be conducted on the behavior of VC in the atmosphere and in the aquatic environment, and particularly on its degradation products and related chemical reactions. These studies should be supported by both industry and Government.                                                                                                                                                                                                                                     | ORD                |

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**VINYL CHLORIDE TASK FORCE RECOMMENDATIONS**

| <b>Recommendations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Responsible Office</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| 12. The industries covered by the Effluent Guidelines for the Plastics Industry promulgated under the Federal Water Pollution Control Act should be expanded beyond the production of resins to include the compounding and directly associated activities that result in discharges into the water of toxic metals and other chemicals of particular concern.                                                                                        | OWQPS                     |
| 13. Enforcement efforts, including spot checks of manufacturers, distributors, and retail outlets, should continue to be pursued vigorously to insure that pesticidal sprays containing VC as a propellant are moved from the channels of trade as rapidly as possible.                                                                                                                                                                               | OBGC                      |
| 14. Regional, State, and local authorities should be kept fully informed of Agency efforts under the Clean Air Act and other authorities. As the Federal approach becomes clearer, they should be encouraged to undertake supportive actions as appropriate.                                                                                                                                                                                          | ORL                       |
| 15. The Agency should build on the experience gained in responding to the problems associated with VC in strengthening its organizational, manpower, and contractor resources to anticipate and respond to similar situations involving other chemicals. Readily available information on the handling of VC should be made available to the Regional Offices to assist them in responding to rail or barge accidents resulting in the release of VC. | OTS                       |
| 16. Laboratory procedures for safe handling of VC should be developed and distributed to all EPA laboratories. Consideration should be promptly given to how such procedures can most effectively be developed for a number of carcinogens that are likely to be of concern to the Agency.                                                                                                                                                            | ORD                       |

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## VINYL CHLORIDE TASK FORCE RECOMMENDATIONS

| Recommendations                                                                                                                                                                                                                                                                                                                                                                                                 | Responsible Office |
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| ✓ 17. Should the Toxic Substances Control Act be enacted, prompt consideration should be given to the need for and feasibility of (a) requirements for industrial testing of the toxicity of VC at low ambient levels and the persistence of VC in different media, and (b) limitations on the levels of unreacted VC monomer in selected PVC products.                                                         | OTS                |
| 18. The Agency should continue its leadership role in bringing together the interested Federal agencies to exchange views on regulatory actions, supporting activities, and research projects directed to problems associated with VC and PVC. In addition, an appropriate interagency mechanism should be developed to address a broader spectrum of potential problems associated with the plastics industry. | OTS                |
| 19. EPA should exercise leadership in stimulating Governmental and industrial efforts to analyze in depth the other high volume chemicals (e.g. to top 50 in terms of pounds of production) to identify those which deserve additional testing or controls to clarify or reduce potential environmental problems.                                                                                               | OTS                |

\* Codes    OAQPS - Office of Air Quality Planning and Standards  
            OTS    - Office of Toxic Substances  
            OWPO - Office of Water Program Operations  
            OSWMP - Office of Solid Waste Management Programs  
            ORD    - Office of Research and Development  
            OEGC - Office of Enforcement and General Counsel (subsequently became Office of Enforcement)  
            ORL    - Office of Regional Liaison

Received with Don Marlow's letter (EPA) of March 11, 1975 to M. Freifeld

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Notice

This document has not been formally released by EPA and should not now be construed to represent Agency policy. It is being circulated for comment on its technical accuracy and policy implications.

Standard Support-Environmental Impact Document

An Investigation of Health Effects and  
Emission Reduction of Vinyl Chloride  
in the Vinyl Chloride Monomer and  
Polyvinyl Chloride Industries

Volume I

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Volume II

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