



Air Products and Chemicals
INC.

ALLENTOWN, PENNSYLVANIA 18106

9 December 1977

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Mr. Howard Himmelman
Beveridge, Fairbanks and Diamond
One Farragut Square South
Washington, D.C. 20006

Dear Howard:

I am sending you my preliminary comments on the draft field inspection manual for vinyl chloride, transmitted by the December 6, 1977 letter from Joe Hadley.

There are many errors in this draft, particularly in chapter 3; so many, in fact, that only a total rewrite could make it acceptable. However, I will address only those which bear on the enforcement and inspection phase. The other errors are embarrassing to the Agency, but not critical to the purpose of the document.

1. It is incorrect that laboratory reactors between 50 and 1,100 gallons must comply only with the 10 ppm limit (pages 1 and 3). The "editorial" changes of June 7, 1977 added record keeping to the requirements. See 61.60 (c) 42FR 29006.
2. Each of the flow diagrams and tables of emission points shows a vent on the reactor, both oxychlorination and polymerization, and lists these as continuous. This is incorrect. These units do not vent directly during operation, but only on opening, and the reaction or process unit during operation is via the process stream to the abatement and recovery systems. This is critical, and misleading as it is shown.
3. The boiling point of anhydrous hydrogen chloride is -85°C not $+100^{\circ}\text{C}$ as shown in table 3.2. The higher temperature is for the 19% azeotrope with water. Therefore, the process description here is incorrect. See also page 38.
4. The reaction of cracking dichloroethane is endothermic, not exothermic as is stated on page 19. Here too, the resulting process explanation is wrong.
5. "Soap" is not a synonym for suspending agent as stated on page 21. Neither is it true that the polymerization process is "uncontrollable" above 85% conversion. It stops of its own accord (kinetics reasons) beyond this point.

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TO: Mr. Howard Himmelman

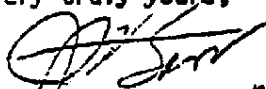
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6. Nowhere in this document is it stated that all emission points downstream of the stripper are excluded from the regulation if the stripper is operated in conformance with 61.64 (e). This should be emphasized.
7. The plural of equipment is equipment, not equipments, as used on pages 40 and 57.
8. No reason is given for a survey of the pressure gauges between the RD and SRV (question 12 on page 70). This gauge is not required, as is stated, and there is no information gained by this question, since this space is vented to the atmosphere, so the pressure should be zero.
9. There is no relationship between the RVCN in polymer and "reactor opening loss" as is stated in question 16, page 79. Reactor opening loss is determined by a totally different procedure.

All in all, this is a poor document, and shows little understanding of the process or the standard. Please advise if I can be of any further help.

Very truly yours,


John T. Barr — *LTB*
Assistant Director
Plastics Research and Development

JTB/sjl

cc: J. Hadley, Keller and Heckman
J. Lawrence, SPI
A. J. Diglio, APCI

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