



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL

89 KINGS HIGHWAY
P.O. BOX 1401
DOVER, DELAWARE 19903

OFFICE OF THE
SECRETARY

TELEPHONE: (302) 736-4403

February 27, 1986

Mr. Roy T. Gottesman
The Vinyl Institute
150 Route 46 West
Wayne, NJ 07470

Dear Mr. Gottesman:

Governor Castle has asked me to respond to the concerns that you raised in your letter to him dated January 8, 1986.

You have expressed concern that the containment system that we have required Formosa to install will be inadequate and only a partial solution to the problem of relief valve discharges of vinyl chloride. The Department is in complete agreement with your statement that a properly designed short-stop system and proper training and maintenance measures, coupled with close Department scrutiny, are the real solutions to the problem of VCM releases. However, Formosa presently has a short-stop system and that system has failed to prevent releases of VCM on at least forty occasions in the past five years. Admittedly, on many of these occasions, the releases were not related to the short-stop system, but were the result of past management policies, such as the practice of keeping a batch going when prudent management would have dictated the termination of the batch. Other releases, on the other hand, resulted from deficiencies inherent in the short-stop system itself, such as where the short-stop cannot be mixed into the batch because agitation has been lost due to a power failure. After a close examination of the causes of each of Formosa's discharges, the Department concluded that a containment system, in addition to the short-stop system, was essential if Formosa's repeated releases were to be curtailed.

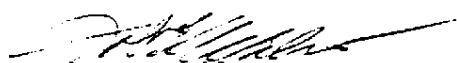
We appreciate your underlying concern that the requirement of a containment system in Formosa's case could establish a precedent for the imposition of a containment system throughout the industry. The State's only other PVC plant presently has both a short-stop system and a method for manually venting VCM to holding tanks to relieve excess pressure. The Department is closely monitoring this system to determine whether it is adequate to prevent releases, but

VVV 000004694

has no immediate plans to require a fully automated containment system of the type required at Formosa. Formosa was a unique case, where an aging physical plant, poor management, and inadequately trained operators combined to make the State's imposition of ordinary measures to assure compliance all but useless. Even after the Department and Formosa signed the consent order which required the containment system as well as other improvements, conditions at Formosa continued to deteriorate, and releases of VCM continued. Few other companies would pay a \$100,000 civil penalty and commit to plant improvements estimated at \$1,000,000 without taking a very close look at the circumstances which had brought that liability upon them, and without taking steps to avoid that liability in the future. Few other companies would require such heavy handed enforcement before compliance is achieved. The containment system requirement was designed to address a situation which resisted correction by any other method.

We are grateful for your offer to assist in the review of documents submitted to the State by Formosa as required by the consent orders. Formosa has requested confidentiality with regard to some documents which may contain trade secrets. Nevertheless, an open dialog between this Department and your organization will be beneficial both to the State and the industry. We look forward to working with you to resolve our common problems.

Sincerely,



John E. Wilson, III
Secretary

JEW/dp