



UNION CARBIDE CORPORATION
CHEMICALS AND PLASTICS

P. O. BOX 8004, SOUTH CHARLESTON, W. VA. 25303

26. 63
✓

SOUTH CHARLESTON PLANT

December 2, 1974

Mr. John Stender
Assistant Secretary of Labor
for Occupational Safety and Health
U. S. Department of Labor
14th Street and Constitution Avenue
Washington, D. C. 20004

Re: Occupational Safety and Health
Standard for Exposure to Vinyl Chloride

Dear Mr. Stender:

The Occupational Safety and Health Standard for Exposure to Vinyl Chloride promulgated on October 4, 1974 applies to the transportation of vinyl chloride and polyvinyl chloride..... The broad application of this standard is such that all employees of distributive organizations must be monitored for exposure and trained in the hazards of vinyl chloride, and that records of those employees monitoring and training be maintained for thirty years. A four-ounce sample of polyvinyl chloride shipped by parcel post in a sealed can would require monitoring, training, and records for a mass of postal employees despite the fact that no significant exposure to vinyl chloride monomer could occur. A single, fifty-pound, paper bag of resin is essentially treated the same as a rail car containing fifty tons. In the case of the large bulk container - be it ship, rail car, or truck, adherence to the letter of the standard regarding monitoring, training, and record keeping is relatively easy and the transportation company has an economic incentive to transport the product. In the case of the single bag shipment, the multi-bag shipment, or the sample shipment, the logical move on the part of the transportation company is simply to refuse shipment to spare themselves the obvious expense involved in monitoring, training, and record keeping. The same applies to the public warehouse man and the terminal operator. Many of these distributive companies have indicated that they plan to handle direct truck load or rail car load shipments only of polyvinyl chloride.

Union Carbide Corporation owns and operates major polyvinyl chloride resin production facilities at South Charleston, West Virginia and at Texas City, Texas. Production facilities at these locations produce a variety of polyvinyl chloride resins by four different processes - suspension polymerization, bulk polymerization, emulsion polymerization, and solution polymerization. Only one of these polyvinyl chloride resin products, suspension resins, *

UCC
060418

Mr. John Stender

-2-

December 2, 1974

27. 25

contains significant amounts of vinyl chloride monomer; this material is generally shipped by bulk and represents no considerable problem in distribution. Products from the other three processes are distributed world-wide via a network of warehouses and transportation companies. Of these resins, approximately one half or 100,000,000 pounds per year are ultimately delivered to about 1,500 customers in less-than-truck-load quantities. The average shipment is estimated to be 11,000 pounds. These less-than-truck-load shipments (9,500 per year) involve 41 public warehouses and up to 200 different common carrier trucking companies in the United States alone. The value of these sales to Union Carbide Corporation is approximately \$22,000,000 per year. A substantial number of trucking and warehouse companies have indicated they do not wish to handle these shipments in the future. Union Carbide Corporation thus finds itself with having to meet a very difficult standard in its production facilities and with being unable to supply many of its smaller customers. Other companies are faced with similar problems.

Union Carbide Corporation is also concerned about the distribution problem as it is related to its customers. Many of Union Carbide's customers are formulators of lacquers, plastisols, and organosols for coating and molding applications. These liquids are normally shipped in closed steel drums by common carrier truck. As required by the Standard, monitoring, training, and record keeping are needed. It is very hard to conceive how a vinyl resin containing no detectable vinyl chloride monomer, formulated into a coating material, and shipped in a sealed steel drum can be a hazard to a trucker or anyone else.

This problem was discussed with Mr. Grover Wren, Chief of Health Standards Development, by Dr. R. S. Brookman of Firestone Plastics Company, Mr. Wayne T. Brooks of Organization Resources Counselors, and me on November 26, 1974. The consensus of the discussion was that good monitoring studies of shipments correlated with type of PVC, weight of the shipment, vinyl chloride content of the PVC, the mode of shipment, and the resin container could be used to develop shipping rules, freight classifications, and resin containers to fulfill the spirit of the vinyl chloride standard without requiring all of the monitoring, et cetera burdens of the transportation company. With adequate guidelines for the shipper and the transportation company owners, application of the Standard's requirements for monitoring, training, and record keeping can be avoided without any sacrifice of employee safety.

Due to the diversity of the industry interests and the broad sweep of the vinyl chloride Standard in its safety objective, I think the Department of Labor should take the initiative in providing clear-cut rules and procedures for vinyl resin transportation and distribution. Certainly, a trucking company in

UCC
060419

Mr. John Stender

-3-

December 2, 1974

Des Moines, Iowa, hauling 2,000 pounds of solution polymerized VYHH resin containing no detectable vinyl chloride monomer, should not have to monitor its employee vinyl chloride exposure, train them in its hazard, and keep such records thirty years. A task force or committee, under the direction of the Assistant Secretary of Labor, should certainly be able to arrive at performance standards and rules for the distribution industry that achieve the objectives of the Standard. Union Carbide Corporation, Firestone Plastics Company, and many others would be willing to contribute data and alternative distribution techniques to such a group. The formation of such a group could do much to clear up other questions regarding this Standard and to demonstrate that the Department of Labor considers employee safety a cooperative effort by all concerned.

Very truly yours,



R. N. Wheeler, Jr.

RNWJz/ra

UCC
060420