

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration
WASHINGTON, D.C. 20210

DEC 17 1975



Mr. R. R. Wheeler, Jr.
Vinyl Chloride Resins Manager
Union Carbide Corporation
270 Park Avenue
New York, New York 10017

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R N WHEELER JR.

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Dear Mr. Wheeler:

This is in response to your joint letter with Mr. John Whittlesey dated June 17, 1975, petitioning for modifications of the Exposure to Vinyl Chloride Standard, 29 CFR 1910.1017 (formerly 1910.93 recodified May 28, 1975).

There are no plans presently to amend the Vinyl Chloride Standard. A revised program directive is contemplated, although we are not certain as to the date it will be available. Please be assured that your comments and suggestions are greatly appreciated and they will be considered fully in the revision of the program directive. In the meantime, the following administrative decisions have been made:

1. 29 CFR 1910.1017(a) and (b)(6) Scope and application (2), (3) and (b) Definitions (6)

The standard defines a fabricated product as being one which is "made wholly or partly from polyvinyl chloride, and which does not require further processing at temperatures, and for times, sufficient to cause mass melting of the polyvinyl chloride resulting in the release of vinyl chloride."

"Release of vinyl chloride" means the release of an amount of vinyl chloride which would likely result in employee exposure at or above the action level without regard to the use of engineering controls. Products which can be classified as fabricated products are exempt from the provisions of the vinyl chloride standard. All other products are subject to the requirements of the standard. If the employer uses or manufactures a product which is not a fabricated product, he must initiate monitoring procedures. If the monitoring reveals that the employees are not exposed to vinyl chloride at or above the action level, the employer's operations will be exempt from the

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provisions of the standard. However, if the monitoring reveals exposure at or above the action level, the employer must implement the procedures specified in the standard.

2. 29 CFR 1910.1017(b) Definitions (5).

The petition requests that the definition of "emergency" be revised to include specific examples, such as fire and explosion. We agree that the definition might well be expanded to include examples. Again, this matter will be addressed in a program directive and not as an amendment to the standard.

The definition of a "massive release" as being "greater than 100 parts per million (ppm)" found in the current Program Directive #200-35, will also be addressed in a revised directive. We agree that the 100 ppm should be changed.

3. 29 CFR 1910.1017(d) Monitoring (4)

The intent of paragraph (d)(4) is that the employer shall be 95% confident that his monitoring result is within 25%, 35% or 50% of the actual value depending on the concentration. Therefore, an employer using a method which has proven vinyl chloride detection accuracy of 25% or less need take only one measurement regardless of the actual vinyl chloride monomer concentration. In concentration ranges where accuracies of 35% or 50% are required, the employer need take only one measurement if the method accuracy is less than the specified accuracy. With methods of unknown accuracy or having errors greater than the specified accuracy requirements, repeated measurements are necessary. In these cases, one may use the coefficient of variation (CV) as a parameter to judge whether or not a sampling procedure is adequate to meet the standard. The CV in percentage units is defined as the standard deviation of the method, times 100, divided by permissible exposure limit. The required CV of the procedure is obtained by dividing the required accuracy by 1.96 (Z value for 95% confidence). Thus, for accuracies of 25%, 35% and 50%, method CV values should be less than 12.8%, 17.9%, and 25.5% respectively.

To repeat, there are no plans presently to amend the standard but your comments on monitoring will be considered in the program directive revision and also in future rulemaking where monitoring is a requirement.

4. 29 CFR 1910.1017(j) Training.

The standard does not specify a level of exposure to trigger training activities. Section 6(b)(7) of the Occupational Safety and Health Act of 1970 provides that employees shall be apprised of the nature of the hazardous substances with which they come in contact.

The evidence we have compiled on vinyl chloride has indicated that it is sufficiently hazardous to warrant training for all personnel who have any possibility of coming in contact with vinyl chloride. There is always the opportunity for accidents to occur and employees should be aware of the possible consequences. There has also been some indication that storage containers may yield high concentrations of vinyl chloride when opened after transporting.

Therefore, it is not likely that the training provisions will be amended. For those operations covered by the standard, training is a requirement.

5. 29 CFR 1910.1017(e), Signs and labels (4)

If there are situations where the blended polyvinyl chloride must be labeled yet contains less than 0.5 ppm residual vinyl chloride monomer, the following wording may be used:

BLENDING POLYVINYL CHLORIDE (PVC)

CONTAINS TRACE AMOUNTS (0.5 ppm)

OF VINYL CHLORIDE.

VINYL CHLORIDE IS A CANCER-SUSPECT AGENT.

We hope that the above clarifications will satisfy your petition for modification and amendment of the vinyl chloride standard. As previously stated, there are no plans presently to formally amend the standard. There will be an addendum or modification of the Program Directive #200-35. Should you wish to discuss any matter further do not hesitate to contact me or members of my staff.

Sincerely,



Barry J. White
Associate Assistant Secretary
for Regional Programs

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