

CHEMICALS  
RESEARCH

NOV 20 1974

## Interoffice Communication

To E. M. Smith  
From R. G. Weiss  
Date November 6, 1974  
Subject Interpretations of OSHA Standards on Vinyl Chloride

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To expedite the receipt of the interpretations, all answers were received by telephone conversations with the following:

Grover Wren - Chief, Division of Health Standards Development  
Don Lassiter - Special Assistant for Health Standards Development  
Eugene Regad - Technical Assistant, Vinyl Chloride  
Robert Shoots - Director of Testing, NIOSH

The interpretations were categorized by the above as legal hearsay, although written interpretations can be received by writing

Dr. Daniel P. Boyd  
Director of the Office of Standards Development  
OSHA  
1726 M Street, NW  
Washington, DC 20210

Clarification of some questions was not available from the OSHA officials due to problems of clarity within their own department. A program directive covering these grey areas will be issued. Date of issuance is not known.

### §1910.93g Vinyl Chloride

- (b) (5) Emergency--Emergency has been defined in terms of massive release of vinyl chloride, ie, dumping of a vessel. A leaking valve, whether it be relief valve or operational valve, does not constitute a massive release unless, of course, it is causing the forementioned dumping of the vessel. It should be noted that the written operational plan required by the standard need not be developed for minor excursions above the permissible exposure limit and that such excursions need not be reported.

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(c) (1) and (2) Permissible Exposure Limit--Both statements of limits (1) and (2) are in effect; it is not an and/or situation.

(d) (1) Monitoring--The program of initial monitoring and measurement, as stated, is to include "any employee exposed in excess of the action level." This does not include truckers, contractors, vendors, etc, who are not Conoco employees. Any Conoco employee exposed above the action level is required to be monitored. This does include casual and temporary workers, truckers, and Technical Center representatives, ie, PED engineers on temporary assignment to the plants, etc.

If the action level is exceeded, a program to determine exposure is necessary. This does not mean every employee has to be measured, although sufficient numbers to reach a 95 percent confidence level are necessary, nor does it mean that an eight-hour sample must be taken to get an eight-hour TWA. Any sample or interval of samples that can be developed by personnel, area, or continuous monitoring or combination of these to determine exposure is acceptable. The 95 percent confidence level and accuracy statements in the standard seem to be a key factor, for which I have yet to get an expanded definition.

(d) (3) Where initial monitoring and measuring results are at or below the action level, no further monitoring is required unless the employee has reason to suspect that any employee is exposed in excess of the action level or unless changes have been made in production, process, control, type of resin, etc. Determination of these exposures is the employer's.

(d) (4) The section of the "NIOSH Manual of Analytical Methods" that applies to VC is attached.

(d) (5) "Afforded reasonable opportunity to observe the monitoring and measuring" can be covered by posting a notice to all interested persons, giving them this opportunity.

- (e) (2) Regulated Areas--As stated in the preamble, the purpose of establishing regulated areas was to limit the risk of exposure to as few employees as possible. OSHA will take issue if it is not the intent of the employer to restrict exposure to these areas versus establishing a convenient way of recording a daily roster, ie, a plant attendance sheet or payroll. It was stated that the daily rosters are for recording area access data and not for tabulation of exposure information--meaning that the employer does not have to put the exposure data with the access roster. This would seem logical because the monitoring and/or measuring will be necessary either monthly or quarterly, depending upon the level of exposure, and the rosters are to be kept daily.

The daily roster should include all employees, contractors, vendors, consultants, etc, that enter the regulated areas.

If a plant is shut down, ie, turnaround, and is at or below the permissible exposure limit, it is not considered a regulated area. Although to be free of the need for medical surveillance of any additional Conoco employees, the exposure cannot exceed the action level.

- (g) (1) Respiratory Protection--Employees choosing not to wear an appropriate respirator must be informed at least quarterly of the hazards of vinyl chloride and the purpose, proper use, and limitations of respiratory devices. OSHA recommended this be done at the lower management level, ie, supervisors. More definition on the limitations of this notification is being sought.
- (g) (4) As of November 5, the information from the NIOSH Testing Lab in Morgantown, West Virginia, is as follows: The Technical Data Office of NIOSH in Cincinnati is currently sending respirator testing requirements to NIOSH in Rockville, Maryland, for printing and distribution to the equipment manufacturers and OSHA. OSHA have stated they will study these requirements. For what reason, I was unable to find out. The manufacturers have received early information on these requirements and have submitted their equipment for approval.

NIOSH testing of the respirators will not commence until at least December 1 due to preparation of the testing facilities. Testing of this equipment will be on a first-in, first-out basis. Approvals of said equipment will be made by a letter from NIOSH and MESA (Mining Enforcement and Safety Administration) to the manufacturer for each type of apparatus. Mass notification of approvals will be made in a NIOSH publication not due out til mid January, although I am sure the respective manufacturers will not keep this information a secret. Only the self-contained breathing apparatus has been approved by NIOSH for vinyl chloride use prior to this writing.

- (g) (6) (ii) Continuous Monitoring and Alarm System--It is acceptable to have an operator read the chart of the continuous monitoring system and then alert employees of high exposure. An automatic system is encouraged but not specified.
- (h) (1) (ii) Protective Garments--The garments do not have to be the disposable type, although exposure as a result of these soiled garments may have to be checked, ie, locker rooms. Protective garments are to be used according to the specific job; therefore, full body clothing is not always necessary, especially where less protection is adequate. Decision on what garments to be used is left to the employer. NIOSH has made no approval of garments to be used and plans no action in this area.
- (h) (2) (i) and (f) (3) Emergency Situations and the Written Method of Compliance--These plans should be developed for the individual plants.
- (j) Training--Details for this program will be handled by Vince Robertiello and will be complete for the plants by January 1, 1975.

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- (k) (3) Medical Surveillance--"Afforded appropriate medical surveillance" means that, after discussion between the plant doctor and plant hygienist, or reasonable facsimile, about the extent of the exposure, the medical department will decide if an examination is necessary with what specific tests.

Medical surveillance will be necessary for all employees exposed over the action level. If these persons are considered Conoco employees and exposed over the action level, they are to be included.

- (l) (1) Signs and Labels--Signs must be put on all containers both in the plant and outside if they contain PVC or VCM. These containers include columns, reactors, tanks, silos, dumpsters, etc.

- (m) (2) Records--All records of monitoring and measuring along with daily rosters have to be kept at the facility in question. There is still question on the necessary location of medical records. The program directive will contain that information.

Data charts from the continuous monitoring must be retained for not less than thirty years dated with point location identified.

Monitoring data collected prior to January 1, 1975, can be used as basis for exposure data as long as the needed accuracy is met.

Medical records can be carried over from the ETS, and a new program does not have to commence on January 1, 1975.

- (n) (2) Reports--OSHA area directors for reporting emergencies within 24 hours are as follows:

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Aberdeen - Mr. G. Larry Wyatt  
OSHA  
Todd Hall  
2047 Canyon Road  
Birmingham, Alabama 35216  
205-822-7100

Oklahoma City - Mr. James T. Knorpp  
OSHA  
Petroleum Building, Room 512  
420 South Boulder  
Tulsa, Oklahoma 74103  
918-581-7676

Lake Charles - Mr. James E. Powell  
OSHA  
546 Carondelet Street, Room 202  
New Orleans, Louisiana 70130  
504-589-5451

- (n) (3) Upon reading this part, "Within ten working days following any monitoring and measuring which discloses that any employee has been exposed without regard to the use of respirators in excess of the permissible exposure limit, each such employee shall be notified in writing of the results of the exposure measurement and the steps being taken to reduce the exposure to within the permissible exposure limit," it might imply that we would possibly be notifying employees everyday since our continuous monitoring system is "any monitoring and measuring." Clarification of this is to be included in a program directive.

An effort will be made to receive all interpretations in writing, although it will be difficult according to the OSHA representatives. They also stated that the program directive should answer many interpretation questions. As stated previously, an issuance date of this publication is not known.

*R. G. Weiss*

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CC:  
LNV:RTF:RDG:JADeB:RSM  
RAF:TRP:CP:FMW:CEG:JFP

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