

STANDARD FOR EXPOSURE TO VINYL CHLORIDE

Part 1910.93q, Title 29 CFR deals with the protection of the worker exposed to vinyl chloride. The Department of Labor's Occupational Safety and Health Administration has issued a standard, effective April 1, 1975, containing the following provisions:

1. The standard applies to the manufacture, reaction, packaging, repackaging, storage, handling, or use of vinyl chloride or polyvinyl chloride but not to the use of fabricated products.

OCD - Unit I: This plant manufactures vinyl chloride monomer (VCM).

2. No employee may be exposed to vinyl chloride at concentrations greater than 1 ppm averaged over any 8-hour period, nor to concentrations greater than 5 ppm averaged over any period not exceeding 15 minutes, not to direct contact with liquid vinyl chloride.

OCD - Unit I: Concentrations of VCM in this plant are normally below 1.0 ppm. However, isolated instances do occur in which concentrations are above 1.0 ppm and may possibly be above 5 ppm.

3. An action level of 0.5 ppm averaged over an 8-hour workday has been set. A monitoring program is required to determine if any employee is exposed in excess of the action level.

OCD - Unit I: A continuous air monitoring system is utilized in the detection of VCM leaks. The system alarms at 5 ppm VCM and the specific location of the leak is displayed in the control center via CRT. Immediate action is taken to evacuate all non-essential operating personnel from the area. Personnel monitoring is done on a routine basis for all chlorinated hydrocarbons that could reasonably be expected to exist in our plant atmosphere.

4. Areas where VCM may be in excess of permissible levels must be regulated so that only authorized persons may enter. A daily roster of all who enter the area must be maintained.

OCD - Unit I: The entire process unit outside the control building is a regulated area. The three finished vinyl storage spheres (near Hwy. 332) are in a regulated area. These areas are bounded on all sides by a yellow polyethylene rope barricade. The vinyl loading rack is classified as a "hazardous operation" and is regulated only when actual tank car loading is taking place. Any person who enters one of these areas must be placed on an "authorized persons" list.

5. Engineering and work practice controls must be used to maintain levels to, at, or below permissible exposure limits. If such action does not effectively reduce the levels, action still must be taken to reduce them to as low as possible and shall be supplemented by respiratory protection.