

South Carolina Department of Labor, Licensing and Regulation
Division of Labor
Office of Occupational Safety and Health
Columbia, South Carolina 29211

OSH Program Directive Number 80-1910.106-9 (REVISED)

Subject: U. S. Department of Transportation (DOT) Exemptions Which Allow Shipment of Combustible and Flammable Liquids in Polyethylene Containers—Reference: Article VI, Section 1910.106 (d) (2) (i).

Standard: Article VI, Section 1910.106 (d) (2) (i), Rules and Regulations, Commissioner of Labor, State of South Carolina.

Cross Reference to Federal Standards: 29 CFR 1910.106 (d) (2) (i).

Background:

- a. U. S. Department of Transportation exemptions permit the use of DOT specification and nonspecification polyethylene containers and nonregulated containers for transporting specifically identified Class B poisonous liquids and combustible and/or flammable liquids in motor vehicles, rail freight and cargo vessels. The Division of OSH does not permit the storage of these liquids in DOT or NON-DOT specification plastic containers. Therefore, a conflict exists and the Division of OSH is trying to resolve it by accepting plastic containers under certain conditions.
- b. The Division of OSH has determined that it is a de minimis departure from Article VI, Section 1910.106 to store ALL COMBUSTIBLE and FLAMMABLE LIQUIDS in plastic containers if the conditions set forth in the INTERPRETATION section of this directive are met. The terms combustible and flammable liquids are defined in the National Fire Protection Association Flammable and Combustible Liquids Code, NFPA No. 30, Chapter 1.

Interpretation: This interpretation is based upon the need to resolve the inconsistencies presently found involving the DOT exemptions which permit the shipping of certain liquids in plastic containers. Under Article VI, Section 1910.106, the Division of OSH prohibits the use of DOT nonmetal containers. However, the Division of OSH has determined that it is a de minimis violation of Section 1910.106 (d) (2) (i) to store COMBUSTIBLE and FLAMMABLE LIQUIDS in polyethylene containers under certain conditions. It is

thus permissible to use the DOT specification, nonspecification polyethylene and nonregulated containers for storing flammable and combustible liquids at inside storage areas under the following conditions:

- a. The liquid within the container has a DOT exemption in effect for shipment in polyethylene containers and is identified as meeting the requirements of the DOT exemptions.
- b. The container storage area is provided with a fire detection system designed and installed to detect incipient stage fires and interconnected with an employee emergency alarm system, which will effectively alert employees when fire is detected.
- c. In locations where employees are expected to perform fire fighting, the container storage area is provided with a fixed automatic fire suppression system designed and installed to control, if not extinguish, a fire involving the stored polyethylene containers.
- d. Employees, except members on fire brigades, will be totally evacuated from the container storage area at the time of initial fire detection. Where fire brigades are provided, member employees will be trained in the specific methods for fighting fires involving polyethylene drums or containers, and in the recognition of hazards associated with fire fighting in such storage areas.
- e. In general purpose public warehouses, the container storage area is provided with diking or curbing and drainage which will contain the volume of stored liquids and the anticipated flow of fire extinguishing agent or drain it to a remote impounding area having no employee exposure. Employee emergency exit routes may not intersect or pass over or under open drainage paths.

Effective Date: This instruction is effective upon receipt and will remain in effect until cancelled or superseded by amendment to the Rules and Regulations.

William M. Lybrand, Director
December 17, 1980