

**North Carolina Department of Labor  
Occupational Safety and Health Division**

**Raleigh, North Carolina**

Field Information System

Standards Notice 18A

**Subject:** Use of Plastic Containers to Store Flammable and Combustible Liquids

**A. Standard.**

**29 CFR 1910.106 (d)(2)(iii) - Size.** Flammable and combustible liquid containers shall be in accordance with Table H-12, except that glass or plastic containers of no more than 1 gallon capacity may be used for Class IA or IB flammable liquids if..."

**B. Discussion.**

29 CFR 1910.106(d)(2)(iii) specifies the maximum container size depending upon the class of flammable or combustible liquid and the type of material from which the container is made. CSHO's consistently see flammable and combustible liquids in plastic containers that are larger than allowed by the standard. However, in many cases the chemical is in the container in which it was shipped to the employer.

Plastic containers, larger than the sizes listed in Table H-12 (see below) and excepted in 29 CFR 1910.106 (d)(2)(iii), are approved for the storage of flammable and combustible liquids by nationally recognized testing laboratories. Additionally, the U.S. Department of Transportation (USDOT) exemptions permit the use of DOT specification and non-specification polyethylene containers and non-regulated containers for transporting specifically identified Class B poisonous liquids and combustible and flammable liquids in motor vehicles, rail freight, and cargo vessels.

NFPA 30 4-2.1 states "Plastic containers meeting the requirements of, and used for petroleum products within the scope of, one or more of the following specifications shall be acceptable: (a) ANSI/ASTM D 3435-80, Plastic Containers (Jerry Cans) for Petroleum Products (b) ASTM F 852-86, Standards for Portable Gasoline Containers for Consumer Use. (c) ASTM F 976-86, Standard for Portable Kerosene Containers for Consumer Use. (d) ANSI/UL 1313-83, Nonmetallic Safety Cans for Petroleum Products.

**C. Interpretation.**

OSHNC will not issue citations to employers using plastic containers larger than the sizes allowed by Table H-12 if they are constructed in accordance NFPA 30 4-2.1. Additionally, CSHO's will not issue citations if 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 exemption.

D. **Effective Date.**

SN 18 and STD 1-5.14A are canceled. This SN is effective on the date of signature. It will remain in effect until revised or canceled by the Director.

Signed on Original

Kevin O'Barr  
Safety Standards Officer

Signed on Original

Allen McNeely  
Director

8/09/05

Date of Signature

**Table H-12 -- Maximum Allowable Size of Containers and Portable Tanks**

<u>Container Type</u>	<u>Flammable Liquids</u>		<u>Combustible Liquids</u>		
	<u>Class IA</u>	<u>Class IB</u>	<u>Class IC</u>	<u>Class II</u>	<u>Class III</u>
Glass or approved plastic	1 pt	1 qt	1 gal	1 gal	1 gal
Metal (other than DOT drums)	1 gal	5 gal	5 gal	5 gal	5 gal
Safety cans	2 gal	5 gal	5 gal	5 gal	5 gal
Metal drums (DOT spec.)	60 gal	60 gal	60 gal	60 gal	60 gal
Approved portable tanks	660 gal	660 gal	660 gal	660 gal	660 gal