

*Revised 4/15/02*

1-1.5 In particular installations the provisions of this code may be altered at the discretion of the authority having jurisdiction after consideration of the special features such as topographical conditions, barricades, walls, adequacy of building exits, nature of occupancies, proximity to buildings or adjoining property and character of construction of such buildings, capacity and construction of proposed tanks and character of liquids to be stored, nature of process, degree of private fire protection to be provided and the adequacy of facilities of the fire department to cope with flammable or combustible liquid fires.

1-1.6 Existing plants, equipment, buildings, structures and installations for the storage, handling, or use of flammable or combustible liquids which are not in strict compliance with the terms of this code may be continued in use at the discretion of the authority having jurisdiction provided they do not constitute a recognized hazard to life or adjoining property. The existence of a situation which might result in an explosion or sudden escalation of a fire, such as inadequate ventilation of confined spaces, lack of adequate emergency venting of a tank, failure to fireproof the supports of elevated tanks, or lack of drainage or dikes to control spills may constitute such a hazard.

1-1.7 This code shall not apply to:

1-1.7.1 Transportation of flammable and combustible liquids. These requirements are contained in the U.S. Department of Transportation regulations or in NFPA 385, *Recommended Regulatory Standard for Tank Vehicles for Flammable and Combustible Liquids*.

1-1.7.2 Storage, handling and use of fuel oil tanks and containers connected with oil burning equipment. These requirements are covered separately in NFPA 31, *Standard for the Installation of Oil Burning Equipment*.

1-1.7.3 Storage of flammable and combustible liquids on farms and isolated construction projects. These requirements are covered separately in NFPA 395, *Standard for the Storage of Flammable and Combustible Liquids on Farms and Isolated Construction Projects*.

1-1.7.4 Liquids without flash points that can be flammable under some conditions, such as certain halogenated hydrocarbons and mixtures containing halogenated hydrocarbons. (See NFPA 321, *Basic Classification of Flammable and Combustible Liquids*.)

1-1.7.5 Mists, sprays or foams. (Except flammable aerosols in containers, which are included in Chapter 4.)

1-1.8 Installations made in accordance with the applicable requirements of standards of the National Fire Protection Association: NFPA 32, *Dry Cleaning Plants*; NFPA 33, *Spray Application Using Flammable and Combustible Materials*; NFPA 34, *Dip Tanks Containing Flammable or Combustible Liquids*; NFPA 35, *Manufacture of Organic Coatings*; NFPA 36, *Solvent Extraction Plants*; NFPA 37, *Installation and Use of Stationary Combustion Engines and Gas Turbines*; NFPA 45, *Fire Protection for Laboratories Using Chemicals*; and NFPA 56C, *Laboratories in Health-Related Institutions*, shall be deemed to be in compliance with this code.

## 1-2 Definitions.

**Aerosol.** A material which is dispensed from its container as a mist spray or foam by a propellant under pressure.

**Apartment House.** A building or that portion of a building containing more than two dwelling units.

**Approved.** Means "acceptable to the authority having jurisdiction."

**NOTE:** The National Fire Protection Association does not approve, inspect or certify any installations, procedures, equipment, or material nor does it approve or evaluate testing laboratories. In determining the acceptability of installations or procedures, equipment or materials, the authority having jurisdiction may base acceptance on compliance with NFPA or other appropriate standards. In the absence of such standards, said authority may require evidence of proper installation, procedure or use. The authority having jurisdiction may also refer to the listings or labeling practices of an organization concerned with product evaluations which is in a position to determine compliance with appropriate standards for the current production of listed items.

**Assembly Occupancy.** The occupancy or use of a building or structure or any portion thereof by a gathering of persons for civic, political, travel, religious or recreational purposes.

**Atmospheric Tank.** A storage tank which has been designed to operate at pressures from atmospheric through 0.5 psig.

**Authority Having Jurisdiction.** The "authority having jurisdiction" is the organization, office or individual responsible for "approving" equipment, an installation or a procedure.

I-4  
10/17/84  
50-400-0L

Docket No. 50-400  
In the matter of Sherman Harris  
NUCLEAR REGULATORY COMMISSION

Staff  
Applicant  
Intervenor  
Con'tg Off'r  
Contractor  
Other  
Recorder

Official Exh. No. 7

IDENTIFIED ✓

RECEIVED ✓

REJECTED ✓

DATE 10-17-84  
Witness

uwb



The flash point of a liquid having a viscosity of 45 SUS or more at 100°F (37.8°C) or a flash point of 200°F (93.4°C) or higher shall be determined in accordance with ASTM D-93-73, *\* Standard Method of Test for Flash Point by the Pensky Martens Closed Tester*.

As an alternate, ASTM D-3243-73T, *Standard Methods of Tests for Flash Point of Aviation Turbine Fuels by Setaflash Closed Tester*, may be used for testing aviation turbine fuels within the scope of this procedure.

As an alternate, ASTM D-3278-73, *Standard Method of Tests for Flash Point of Liquids by Setaflash Closed Tester*, may be used for paints, enamels, lacquers, varnishes and related products and their components having flash points between 32°F (0°C) and 230°F (110°C), and having a viscosity lower than 150 stokes at 77°F (25°C).

**Hotel.** Building or groups of buildings under the same management in which there are sleeping accommodations for hire, primarily used by transients who are lodged with or without meals including but not limited to inns, clubs, motels and apartment hotels.

**Institutional Occupancy.** The occupancy or use of a building or structure or any portion thereof by persons harbored or detained to receive medical, charitable or other care or treatment, or by persons involuntarily detained.

**Labeled.** Equipment or materials to which has been attached a label, symbol or other identifying mark of an organization acceptable to the "authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

**Liquid.** For the purpose of this code, any material which has a fluidity greater than that of 300 penetration asphalt when tested in accordance with ASTM D-5-73\*, *Test for Penetration for Bituminous Materials*. When not otherwise identified, the term liquid shall mean both flammable and combustible liquids.

**Combustible Liquid.** A liquid having a flash point at or above 100°F (37.8°C).

\*Available from American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103.

*I believe*

Combustible Liquids shall be subdivided as follows:

Class II liquids shall include those having flash points at or above 100°F (37.8°C) and below 140°F (60°C).

Class IIIA liquids shall include those having flash points at or above 140°F (60°C) and below 200°F (93.4°C).

Class IIIB liquids shall include those having flash points at or above 200°F (93.4°C).

**Flammable Liquid.** A liquid having a flash point below 100°F (37.8°C) and having a vapor pressure not exceeding 40 pounds per square inch (absolute) at 100°F (37.8°C) shall be known as a Class I liquid.

Class I liquids shall be subdivided as follows:

Class IA shall include those having flash points below 73°F (22.8°C) and having a boiling point below 100°F (37.8°C).

Class IB shall include those having flash points below 73°F (22.8°C) and having a boiling point at or above 100°F (37.8°C).

Class IC shall include those having flash points at or above 73°F (22.8°C) and below 100°F (37.8°C).

**Unstable (Reactive) Liquid.** A liquid which in the pure state or as commercially produced or transported will vigorously polymerize, decompose, condense, or will become self-reactive under conditions of shock, pressure, or temperature.

**Listed.** Equipment or materials included in a list published by an organization acceptable to the "authority having jurisdiction" and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

**NOTE:** The means for identifying listed equipment may vary for each organization concerned with product evaluation, some of which do not recognize equipment as listed unless it is also labeled. The "authority having jurisdiction" should utilize the system employed by the listing organization to identify a listed product.

**Low Pressure Tank.** A storage tank designed to withstand an internal pressure above 0.5 psig (3.45 kPa) but not more than 15 psig (103.4 kPa).

**Mercantile Occupancy.** The occupancy or use of a building or structure or any portion thereof for the displaying, selling or buying of goods, wares, or merchandise.

**Office Occupancy.** The occupancy or use of a building or structure or any portion thereof for the transaction of business, or the rendering or receiving of professional services.

**Portable Tank.** Any closed vessel having a liquid capacity over 60 U.S. gallons (227.1 L) and not intended for fixed installation.

**Pressure Vessel.** Any fired or unfired vessel within the scope of the applicable section of the ASME Boiler and Pressure Vessel Code, available from American Society of Mechanical Engineers, United Engineering Center, 345 East 47th St., New York, NY 10017.

**Protection for Exposures.** Fire protection for structures on property adjacent to liquid storage. Fire protection for such structures shall be acceptable when located (1) within the jurisdiction of any public fire department, or (2) adjacent to plants having private fire brigades capable of providing cooling water streams on structures on property adjacent to liquid storage.

**Refinery.** A plant in which flammable or combustible liquids are produced on a commercial scale from crude petroleum, natural gasoline, or other hydrocarbon sources.

**Safety Can.** An approved container, of not more than five gallons capacity, having a spring-closing lid and spout cover and so designed that it will safely relieve internal pressure when subjected to fire exposure.

**Separate Inside Storage Area.** A room or building used for the storage of liquids in containers or portable tanks, separated from other types of occupancies. Such areas may include:

**Inside Room.** A room totally enclosed within a building and having no exterior walls.

**Cut-Off Room.** A room within a building and having at least one exterior wall.

**Attached Building.** A building having only one common wall with a building having other type occupancies.

#### Service Stations.

**Automotive Service Station.** That portion of property where liquids used as motor fuels are stored and dispensed from fixed equipment into the fuel tanks of motor vehicles and shall include any facilities available for the sale and service of tires, batteries and accessories, and for minor automotive maintenance work. Major automotive repairs, painting, body and fender work are excluded.

**Marine Service Station.** That portion of a property where liquids used as fuels are stored and dispensed from fixed equipment on shore, piers, wharves, or floating docks into the fuel tanks of self-propelled craft, and shall include all facilities used in connection therewith.

**Service Station Located Inside Buildings.** That portion of an automotive service station located within the perimeter of a building or building structure that also contains other occupancies. The service station may be enclosed or partially enclosed by the building walls, floors, ceilings, or partitions, or may be open to the outside. The service station dispensing area shall mean that area of the service station required for dispensing of fuels to motor vehicles. Dispensing of fuel at manufacturing, assembly, and testing operations is not included within this definition.

**Vapor Pressure.** The pressure, measured in pounds per square inch (absolute), exerted by a volatile liquid as determined by ASTM D323-72\*, *Standard Method of Test for Vapor Pressure of Petroleum Products (Reid Method)*.

**Vapor Processing Equipment.** Those components of a vapor processing system which are designed to process vapors or liquids captured during filling operations at service stations, bulk plants, or terminals.

**Vapor Processing System.** A system designed to capture and process vapors displaced during filling operations at service stations, bulk plants, or terminals by use of mechanical and/or chemical means. Examples are systems using blower-assist for capturing vapors, and refrigeration, absorption and combustion systems for processing vapors.

\*Available from American Society for Testing and Materials, 1916 Race St., Philadelphia, PA 19103.