



## **CITY OF MANTECA - FIRE DEPARTMENT**

### **FIRE PREVENTION BUREAU**

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## **FLAMMABLE AND COMBUSTIBLE LIQUIDS SHOW PERMIT REQUIREMENTS**

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**105.6.17 Flammable and Combustible liquids.** An operational permit is required for storage, handling or use of Class I liquids in excess of 5 gallons inside a building or in excess of 10 gallons outside of a building. Storage, handling or use of Class II or IIIA liquids in excess of 25 gallons inside a building or in excess of 60 gallons outside of a building. Storage, handling or use of Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment.

**Combustible liquid.** A liquid having a closed cup flash point at or above 100°F. Combustible liquids shall be subdivided as following:

**Class II.** Liquids having a closed cup flash point at or above 100°F and below 140°F.

**Class IIIA.** Liquids having a closed cup flash point at or above 140°F and below 200°F.

**Class IIIB.** Liquids having a closed cup flash points at or above 200°F.

The category of combustible liquids does not include compressed gases or cryogenic fluids

**Flammable liquid.** A liquid having a closed cup flash point below 100°F. Flammable liquids are further categorized into a group known as Class I liquid. The Class I category is subdivided follows:

**Class IA.** Liquids having flash point below 73°F and having boiling point be 100°F.

**Class IB.** Liquids having a flash point below 73°F and having a boiling point at or above 100°F.

**Class IC.** Liquids having a flash point at or above 73°F and below 100°F.

The category of flammable liquids does not include compressed gases or cryogenic fluids.

**901.6. Inspection, testing and maintenance.** Fire suppression, detection and alarm systems are tested and maintained.

**911.1. Explosion Control.** Explosion control is provided and maintained at Class IA and IB flammable liquid storage and use areas exceeding maximum allowable quantities. Table 5003.1.1(1)

**5003.4. Material Safety Data Sheets.** Material Safety Data Sheets (MSDS) are readily available on site.

**5003.3. Release of hazardous materials.** Flammable and combustible liquids are not discharged onto the ground, into the atmosphere or into sewers, storm drains, etc.

**5003.5. Hazard identification signs.** Hazard identification (i.e. NFPA 704 placard) is provided on containers, tanks and building entrances.

**5703.5.3 Warning labels.** Flammable and combustible liquid containers and tanks are labeled with their contents (i.e. chemical name and hazard class).

**5704.2.3.1 Smoking and open flame.** “No Smoking” and “No Open Flame” signage is posted.

**5003.7.2. Open flames.** Open flame and high temperature devices are not present.

**5003.1.3. Performance-based design alternative.** Flammable and combustible liquid storage and use does not exceed maximum allowable quantities and/or number of control area(s).

**5704.2.7. Design, fabrication and construction requirements for tanks.** Flammable and combustible liquid containers, portable tanks, tanks, piping, valves and appurtenances shall comply with NFPA 30.

**5703.1. Electrical.** Class I, Division 1 electrical is provided where applicable.

**5704.3.7.5.2. Portable fire extinguishers.** For storage only: 2A20 BC rated fire extinguisher(s) is provided and travel distance shall not be less than 10 feet and does not exceed 50-feet.

**5004.2.1. Spill control for hazardous material liquids.** Spill control and secondary containment is provided for areas having individual vessels of more than 55 gallons or aggregate vessel capacity of more than 1,000 gallons.

**5703.6.4. Protection from vehicles.** Flammable and combustible liquid container, tank, piping, valves and fittings are protected against vehicle impact and physical damage.

**5003.9.8. Separation of incompatible materials.** Incompatible materials in containers exceeding 5 pounds or 0.5 gallons are separated by minimum 20 feet, non-combustible barrier, storage cabinet or gas cabinet.

**5704.2.9.6. Above-ground tanks outside of buildings.** Flammable and combustible liquid outdoor, aboveground tank minimum separations are provided and maintained.

**5704.2.9.7.8. Tank openings.** 5 gallon spill container is provided for each protected aboveground flammable and combustible liquid tank fill connection.

**5704.2.15. Maintenance.** Flammable and combustible liquid tank, connected piping and ancillary equipment are maintained.

**5704.3.2.1. Design and construction of storage cabinets.** Flammable and combustible liquid cabinets are UL listed, or constructed of approved wood or metal per code. Cabinets shall be labeled and equipped with self-closing, three point latch door.

**5704.3.2.2. Capacity.** Flammable and combustible liquid container storage in liquid storage cabinets does not exceed 120 gallons.

**5704.3.3.3. Clear means of egress.** Flammable and combustible liquid storage is not near exit(s) and does not obstruct egress route.

**5704.3.3.4. Empty containers or portable tank storage.** Empty flammable and combustible liquid containers and portable tanks are stored as required for full containers and portable tanks.

**5704.3.3.5.2. Displacement protection.** Shelving used for flammable and combustible liquid storage is of substantial construction, braced, anchored and provided with a lip or guard.

**5704.3.3.7. Pile or palletized storage.** Flammable and combustible liquid solid pile and palletized storage aisles and separation are provided and maintained.

**5704.3.3.8. Limited combustible storage.** Flammable and combustible liquid storage and ordinary combustible storage is separated by 8 feet or more and is not located in the same pile or rack.

**5704.3.5.2. Storage pile heights.** Class I or II flammable and combustible liquid containers less than 30 gallons are stacked no more than 3 feet or 2 containers high, whichever is greater, unless on fixed shelf. Class I or II flammable and combustible liquid containers 30 gallons or more are stacked no more 1 container high.

**5704.3.5.3. Storage distance for ceiling and roofs.** Flammable and combustible liquid container and portable tank storage is 3 feet or more from beams, chords, girders and sprinkler deflectors.

**5704.3.6.2. Container capacity.** In wholesale and retail occupancies Class I liquid containers are metal and contain no more than 5 gallons.

**5704.3.6.3. Fire protection and storage arrangements.** Flammable and combustible liquid maximum storage height is maintained in wholesale and retail occupancies.

**5704.3.7. Liquid storage rooms.** Flammable and combustible liquid storage room spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained.

**5704.3.8. Liquid storage warehouse.** Flammable and combustible liquid warehouse spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained.

**5704.4.2.3. Security.** Outdoor flammable and combustible liquid storage tanks are protected against tampering and vehicle impact.

**5704.4.6. Clearance from combustibles.** Outdoor flammable and combustible liquid container and portable tanks are located more than 15 feet from weeds, debris and other combustible material.

**5705.2.5. Manual container filling operations.** Nozzles for manual flammable and combustible liquid container filling are electrically interconnected to container.

**5705.3.1. Closure of mixing or blending vessels.** Flammable and combustible liquid blending vessels are bonded and provided non-combustible, self-closing lids.

**5705.3.3. Heating, Lighting and cooking appliances.** Heating, lighting or cooking appliances using Class I liquids are not used inside building.

**5705.3.2 Bonding vessels.** Flammable and combustible liquid processing vessel minimum separations are provided and maintained. Table 5705.3.4(1)

**5705.3.6.1. Cleaning operations.** Cleaning with Class IA liquids is not conducted and cleaning with Class IB, IC or II liquids is conducted in fire rated, fire sprinklered room or cleaning machine.

Additional requirements may apply.