



# Sacramento Metropolitan Fire District

Community Risk Reduction Division

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10545 Armstrong Ave., Suite 310 · Mather, CA 95655 · Phone (916) 859-4330 · Fax (916) 859-3717

## FLAMMABLE AND COMBUSTIBLE LIQUID STORAGE CHECKLIST

California Fire Code Chapter 57

### Scope

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, CFC 105.6.16

### Conditions:

#### Storage

- Material Safety Data Sheets (MSDS) are readily available on site. (CFC 5003.4)
- Flammable and combustible liquids are not discharged onto the ground, into the atmosphere or into sewers, storm drains, etc. (CFC 5003.3)
- Hazard identification (i.e. NFPA 704 placard) is provided on containers, tanks and building entrances. (CFC 5704.2.3.2 & 5003.5)
- Flammable and combustible liquid containers and tanks are labeled with their contents (i.e. chemical name and hazard class). (CFC 5703.5.3)
- "No Smoking" and "No Open Flame" signage is posted. (CFC 5704.2.3..1)
- Open flame and high temperature devices are not present. (CFC 5003.7.2)
- Flammable and combustible liquid storage and use does not exceed maximum allowable quantities and/or number of control area(s). (CFC 5003.1.3)
- Flammable and combustible liquid containers, portable tanks, tanks, piping, valves and appurtenances—shall comply with NFPA 30. (CFC 5704.2.7)
- Class I, Division 1 electrical is provided where applicable. (CFC 5703.1)
- Fire suppression, detection and alarm systems are tested and maintained. (CFC 901.6)

- 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. (CFC 5704.3.7.5.2)
- 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. (CFC 5004.2.1)
- Flammable and combustible liquid container, tank, piping, valves and fittings are protected against vehicle impact and physical damage. (CFC 5703.6.4 & 5704.2.9.7.5)
- Explosion control is provided and maintained at Class IA and IB flammable liquid storage and use areas exceeding maximum allowable quantities. (CFC 911.1 & Table 5003.1.1(1))
- 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. (CFC 5003.9.8)
- Flammable and combustible liquid outdoor, aboveground tank minimum separations are provided and maintained. (CFC 5704.2.9.6)
- 5 gallon spill container is provided for each protected aboveground flammable and combustible liquid tank fill connection. (CFC 5704.2.9.7.8)
- Flammable and combustible liquid tank, connected piping and ancillary equipment are maintained. (CFC 5704.2.15)
- 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. (CFC 5704.3.2.1)
- Flammable and combustible liquid container storage in liquid storage cabinets does not exceed 120 gallons. (CFC 5704.3.2.2)
- Flammable and combustible liquid storage is not near exit(s) and does not obstruct egress route. (CFC 574.3.3.3)
- Empty flammable and combustible liquid containers and portable tanks are stored as required for full containers and portable tanks. (CFC 5704.3.3.4)
- Shelving used for flammable and combustible liquid storage is of substantial construction, braced, anchored and provided with a lip or guard. (CFC 5704.3.3.5.2)
- Flammable and combustible liquid solid pile and palletized storage aisles and separation are provided and maintained. (CFC 5704.3.3.7)
- 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. (CFC 5704.3.3.8)

- 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. (CFC 5704.3.5.2)
- Class I or II flammable and combustible liquid containers 30 gallons or more are stacked no more 1 container high. (CFC 5704.3.5.2)
- Flammable and combustible liquid container and portable tank storage is 3 feet or more from beams, chords, girders and sprinkler deflectors. (CFC 5704.3.5.3)
- In wholesale and retail occupancies Class I liquid containers are metal and contain no more than 5 gallons. (CFC 5704.3.6.2)
- Flammable and combustible liquid maximum storage height is maintained in wholesale and retail occupancies. (CFC 5704.3.6.3)
- Flammable and combustible liquid storage room spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained. (CFC 5704.3.7)
- Flammable and combustible liquid warehouse spill control, secondary containment, ventilation, storage arrangement, supports and fire protection is provided and maintained. (CFC 5704.3.8)
- Outdoor flammable and combustible liquid storage tanks are protected against tampering and vehicle impact. (CFC 5704.4.2.3 & 5704.4.5)
- Outdoor flammable and combustible liquid container and portable tanks are located more than 15 feet from weeds, debris and other combustible material. (CFC 5704.4.6)

#### Dispensing, Mixing, Use and Handling

- Nozzles for manual flammable and combustible liquid container filling are electrically interconnected to container. (CFC 5705.2.5)
- Flammable and combustible liquid blending vessels are bonded and provided non-combustible, self-closing lids. (CFC 5705.3.1)
- Heating, lighting or cooking appliances using Class I liquids are not used inside building. (CFC 5705.3.3)
- Flammable and combustible liquid processing vessel minimum separations are provided and maintained. (CFC 5705.3.2 & Table 5705.3.4(1))
- 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. (CFC 5705.3.6.1)

- Cleaning machines are listed and approved, do not exceed maximum solvent quantities, are ventilated and separated from other machines by minimum 30-feet or 1-hour barrier. (CFC 5705.3.6.2)
- Flammable and combustible liquid use, dispensing or mixing exceeding maximum allowable quantities is in fire rated, fire sprinklered building or room. (CFC 5705.3.7)
- Ventilation, explosion control, spill control and secondary containment is provided and maintained at flammable and combustible liquid use, dispensing or mixing in open and closed systems. (CFC 5705.3.7.5 & CFC 5705.3.7.6)
- Outside flammable and combustible liquid use, dispensing and handling spill control, drainage control and minimum separations are provided and maintained. (CFC 5705.3.8)
- Solvent distillation unit is listed, labeled, provided 40B:C rated fire extinguisher within 10-30 feet and is located and separated in accordance with listing. (CFC 5705.4)
- Class I or II flammable and combustible liquid, alcohol-based hand rub dispenser maximum capacities, separation, mounting location and minimum corridor width is maintained. (CFC 5705.5)

Additional Requirements may apply.