



# Sacramento Metropolitan Fire District

Community Risk Reduction Division

[www.metrofire.ca.gov](http://www.metrofire.ca.gov)

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## COMPRESSED GAS CHECKLIST

California Fire Code Chapter 53

### Scope

Storage, use and handling of compressed gases in compressed gas containers, cylinders, tanks and systems shall comply with this chapter, including those gases regulated elsewhere in this code. Partially full compressed gas containers, cylinders or tanks containing residual gases shall be considered as full. Permits shall be required as set forth in California Fire Code Section 105.6

**Exception:** 1. Gases used as refrigerants in refrigeration systems (see Section 606).

2. Compressed natural gas (CNG) for use as a vehicular fuel shall comply with Chapter 23, NFPA 52 and the California Mechanical Code.

### Conditions:

- Equipment, machinery and associated suppression, detection and alarm systems are tested and maintained. (CFC 5003.2/5003.2.6)
- Material Safety Data Sheets (MSDS) are readily available on site. (CFC 5003.4)
- Compressed gases 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, cylinders, tanks and building entrances. (CFC 5003.3)
- Containers, cylinders and tanks are labeled with their contents (i.e. chemical name and hazard class). (CFC 5301.4 and 5003.5/5003.6)
- "No Smoking" signage is posted. (CFC 5003.7.1)
- Open flame and high temperature devices are not used in a manner which creates a hazardous condition. (CFC 5303.7.7)
- Storage does not exceed maximum allowable quantities and/or number of control area(s). (CFC TABLE 5003.1.1(1)).

- Pressure relief devices shall be provided to protect containers, cylinders and tanks containing compressed gases from rupture in the event of overpressure. (CFC 5303.3)
- Piping systems are marked with the content name and direction of flow at 20 foot intervals and at each valve change of direction and at wall, floor, or ceiling penetrations. (CFC 5303.4.3)
- Containers, cylinders and tanks are protected against tampering, physical damage and vehicle impact. (CFC 5303.16.6)
- Containers, cylinders and tanks are secured to a fixed object, on a cart, nested or in a rack. (CFC 5303.5.3)
- Containers, cylinders, tanks and tank valves have protective caps, collars or other protective device. (CFC 5303.6)
- Incompatible materials are separated by minimum 20 feet, non-combustible barrier, storage cabinet or gas cabinet. (CFC 5303.7)
- Containers, cylinders and tanks are located more than 10 feet from combustible waste, vegetation and similar materials. (CFC 5303.7.2)
- Containers, cylinders and tanks are not exposed to temperatures exceeding 125°F (52°C) or sub ambient (low) temperatures, unless designed for use under the exposed conditions. (CFC 5303.7.4)
- Class I electrical and electronic equipment is provided and maintained where applicable. (CFC 5303.8)
- Leaking, damaged or corroded containers, cylinders and tanks are removed from service. (CFC 5303.12)
- Containers, cylinders and tanks are stored and used in the upright, valve end up position, unless designed for horizontal use. (CFC 5304.1)
- Medical gas room one-hour construction or gas cabinet is maintained. (CFC 5306.2)
- Medical gas emergency shut-off valves are clearly visible and identified.
- Ventilation is adequate for compressed gases not specifically regulated in the California Fire Code. (CFC 5307.2)
- 4A:80B:C rated fire extinguisher(s) is provided and travel distance does not exceed 50-feet. (CFC 906)

Additional Requirements may apply.