

**STANDARDS PRESENTATION
TO
CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD**

Attachment No. 1

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PROPOSED STATE STANDARD,
TITLE 8, DIVISION 1, CHAPTER 4

Amend Section 1933 to read as follows:

§1933. Fire Control.

(a) Suitable fire control devices, such as small hose or portable fire extinguishers, shall be available at locations where flammable or combustible liquids are stored.

(b) At least one portable fire extinguisher having a rating of not less than 20-B units shall be located outside of, but not more than 10 feet from, the door opening into any room used for storage.

(c) At least one portable fire extinguisher having a rating of not less than 20-B units shall be located not less than 25 feet, nor more than 75 feet, from any flammable liquid storage area located outside.

(d) When sprinklers are provided, they shall be installed in an approved manner. ~~The Standard for the Installation of Sprinkler Systems, NFPA 13-1984, provides information on the installation of sprinkler systems.~~

NOTE: For information on proper sprinkler system installation, consult the California Fire Code, California Code of Regulations, Title 24, Section 903.3 "Installation Requirements" for Automatic Sprinkler Systems and/or your local jurisdiction fire department.

(e) At least one portable fire extinguisher having a rating of not less than 20-B:C units shall be provided on all tank trucks or other vehicles used for transporting and/or dispensing flammable or combustible liquids.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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Amend Section 5541 to read as follows:

§5541. Flammable and Combustible Liquid Warehouses or Storage Buildings.

- (a) If storage building is located 50 feet or less from a building or line of adjoining property that may be built upon, the exposing wall shall have a fire-resistance rating of at least two hours with any openings protected by approved fire doors.
- (b) The total quantity of liquids within a building shall not be restricted, but the arrangement of storage shall comply with Tables FL-4 or FL-5.
- (c) Containers in piles shall be separated by pallets or dunnage where necessary to provide stability and to prevent excessive stress on container walls.
- (d) Portable tanks stored over one tier high shall be designed to nest securely, without dunnage, and adequate materials handling equipment shall be available to handle tanks safely at the upper tier level.
- (e) No pile shall be closer than three feet to the nearest beam, chord, girder or other obstructions, and shall be three feet below sprinkler deflectors or discharge orifices of water spray, or other overhead fire protection systems.
- (f) Aisles at least three feet wide shall be provided where necessary for reasons of access to doors, windows or standpipe connections. (~~Title 24, T8-5541~~)

Table FL-4
Indoor Container Storage

<i>Class Liquid</i>	<i>Storage Level</i>	<i>Protected Storage*</i>	<i>Unprotected Storage</i>
		<i>Maximum Per Pile</i>	<i>Maximum Per Pile</i>
		<i>Gals.</i>	<i>Gals.</i>
IA	Ground	2,750	660
	& Upper Floors	(50)	(12)
	Basement	Not permitted	Not permitted
IB	Ground	5,500	1,375
	& Upper Floors	(100)	(25)
	Basement	Not Permitted	Not Permitted
IC	Ground	16,500	4,125
	& Upper Floors	(300)	(75)
	Basement	Not permitted	Not permitted

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II	Ground & Upper Floors	16,500 (300)	4,125 (75)
	Basement	5,500 (100)	Not permitted
III	Ground & Upper Floors	55,000 (1,000)	13,750 (250)
	Basement	8,250 (150)	Not permitted

* A sprinkler or equivalent fire protection system installed in an approved manner, ~~accordance with the applicable NFPA Standard.~~

(Numbers in parentheses indicate corresponding number of 55-gallon drums.)

NOTE: 1: When two or more classes of materials are stored in a single pile, the maximum gallonage permitted in that pile shall be the smallest of the two or more separate maximum gallonages.

NOTE: 2: Aisles shall be provided so that no container is more than 12 feet from an aisle. Main aisles shall be at least eight Feet wide and side aisles at least four feet wide.

NOTE: 3: Each pile shall be separated from each other pile by at least four feet. When stored on suitably protected racks or when the storage is suitably protected, containers may be piled up to the height limits in Section 5541(e).

Table FL-5
Indoor Portable Tank Storage

<i>Class</i>	<i>Storage Level</i>	<i>Protected Storage*</i>	<i>Unprotected Storage</i>
		<i>Maximum Per Pile</i>	<i>Maximum Per Pile</i>
<i>Liquid</i>		<i>Gals.</i>	<i>Gals.</i>
IA	Ground & Upper Floors	Not permitted	Not Permitted
	Basement	Not permitted	Not permitted
IB	Ground & Upper Floors	20,000	2,000

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	Basement	Not Permitted	Not Permitted
IC	Ground & Upper Floors	40,000	5,500
	Basement	Not permitted	Not permitted
II	Ground & Upper Floors	40,000	5,500
	Basement	20,000	Not permitted
III	Ground & Upper Floors	60,000	22,000
	Basement	20,000	Not permitted

* A sprinkler or equivalent fire protection system installed in an approved manner, ~~accordance with the applicable NFPA Standard.~~

NOTE: 1: When two or more classes of materials are stored in a single pile, the maximum gallonage permitted in that pile shall be the smallest of the two or more separate maximum gallonages.

NOTE: 2: Aisles shall be provided so that no portable tank is more than 12 feet from an aisle. Main aisles shall be at least eight feet wide and side aisles at least four feet wide.

NOTE: 3: Each pile shall be separated from each other pile by at least four feet. When stored on suitably protected racks or when the storage is suitably protected, portable tanks may be piled up to the height limits in Section 5541(e).

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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Amend Section 5543 to read as follows:

§5543. Fire Control.

(a) Suitable fire control devices, such as small hose or portable fire extinguishers, shall be available at locations where flammable or combustible liquids are stored.

(1) At least one portable fire extinguisher having a rating of not less than 10-B units shall be located outside of, but not more than 10 feet from, the door opening into any room used for storage.

(2) At least one portable fire extinguisher having a rating of not less than 10-B units shall be located not less than 10 feet, nor more than 25 feet, from any Class I or Class II liquid storage area located outside of a storage room but inside a building.

(b) When sprinklers are provided, they shall be installed in an approved manner. ~~The Standard for the Installation of Sprinkler Systems, NFPA 13-1974, provides information on the installation of sprinkler systems.~~

NOTE: For information on proper sprinkler system installation, consult the California Fire Code, California Code of Regulations, Title 24, Section 903.3 "Installation Requirements" for Automatic Sprinkler Systems and/or your local jurisdiction fire department.

(c) Open flames and smoking shall not be permitted in flammable or combustible liquid storage areas.

(d) Materials which will react with water shall not be stored in the same room with flammable or combustible liquids. ~~(Title 24, T8-5543)~~

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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Amend Section 5559 to read as follows:

§5559. Fire Control.

(a) Approved portable fire extinguishers of appropriate size, type and number shall be provided. See Article 157.

(b) When sprinklers or an equivalent extinguishing system are provided, they shall be installed in an approved manner. ~~An approved automatic sprinkler system or an equivalent extinguishing system shall be installed when required by state or local regulations. Such systems shall comply with the applicable NFPA standard. (Title 24, T8-5559)~~

NOTE: For information on proper sprinkler system installation, consult the California Fire Code, California Code of Regulations, Title 24, Section 903.3 "Installation Requirements" for Automatic Sprinkler Systems and/or your local jurisdiction fire department.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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Amend Section 5600 to read as follows:

§5600. Installation of Tanks Inside of Buildings.

(a) Location. Tanks shall not be permitted inside of buildings except as provided in Articles 142, 143, 144 or 148.

(b) Vents. Vents for tanks inside of buildings shall be as required in Sections 5592, 5593, 5594(b) and 5598 except that emergency venting by the use of weak roof seams on tanks shall not be permitted. Automatic sprinkler systems installed in an approved manner, designed in accordance with the requirements of the Standard for the Installation of Sprinkler Systems, NFPA No. 13-1974 may ~~shall~~ be accepted as equivalent to approved water spray systems for purposes of calculating the required air flow rates for emergency vents in Section 5593(g). Except for tanks containing Class IIIB liquids, vents shall terminate outside the buildings.

(c) Vent Piping. Vent piping shall be constructed in accordance with Article 146.

NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

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Amend Section 6170 to read as follows:

§6170. Automatic Sprinkler Systems.

(a) Scope and Application.

(1) The requirements of this section apply to all automatic sprinkler systems.

(2) For automatic sprinkler systems used to meet Title 8 requirements and installed prior to the effective date of this standard, compliance with the National Fire Protection Association (NFPA) or the National Board of Fire Underwriters (NBFU) standard in effect at the time of the system's installation will be acceptable as compliance with this Section.

(3) ~~When sprinklers are provided, they shall be installed in an approved manner. When required automatic sprinkler systems are provided they shall meet design requirements of the National Fire Protection Association's Standard for the Installation of Sprinkler Systems NFPA No. 13-1978.~~

NOTE: For information on proper sprinkler system installation, consult the California Fire Code, California Code of Regulations, Title 24, Section 903.3 "Installation Requirements" for Automatic Sprinkler Systems and/or your local jurisdiction fire department.

(c) General Requirements.

(2) Maintenance.

(A) The employer shall properly maintain an automatic sprinkler system installed to comply with this Section. The employer shall assure that a main drain flow test is performed on each system annually. The inspector's test valve shall be opened at least every two years to assure that the sprinkler system operates properly.

~~NOTE: See NFPA 131978 for further guidance, and Section 6181 where applicable.~~

NOTE: Authority and reference cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.