

ORDINANCE NO. _____

An ordinance amending Article 4 of Chapter IX of the Los Angeles Municipal Code and incorporating by reference the 2013 Edition of the California Plumbing Code (C.P.C.) with certain exceptions.

**THE PEOPLE OF THE CITY OF LOS ANGELES
DO ORDAIN AS FOLLOWS:**

Section 1. Section 94.100.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.100.0. BASIC PROVISIONS.

Chapter 1, Division II of the 2013 California Plumbing Code (C.P.C.) is adopted by reference with the following exceptions: Sections 101.0, 101.1, 101.2, 101.3, 103.0, 103.1, 103.4, 103.5, and Table 1-1 of the California Plumbing Code are not adopted and, in lieu, Sections 94.101.0, 94.101.1, 94.101.2, 94.101.3, 94.101.6, 94.101.7, 94.103.0, 94.103.1, 94.103.4, 94.103.5, 94.103.10 through 94.103.20 and Table 1-A are added as provided in this Article.

Sec. 2. Subdivision a of Subsection 1 of Section 94.101.3.6 of the Los Angeles Municipal Code is amended to read as follows:

- a. Drainage and vent systems involving fixtures that discharge 217 or more fixture units.

Sec. 3. Section 94.200 of the Los Angeles Municipal Code is added to read as follows:

SEC. 94.200. BASIC PROVISIONS.

Chapter 2 of the 2013 California Plumbing Code is adopted by reference with the following exceptions: Sections 203, 204, 205, 206, 207, 210, 212, 215, 219, 220, and 221 of the California Plumbing Code are not adopted and, in lieu, Sections 94.203.0, 94.204.0, 94.205.0, 94.206.0, 94.207.0, 94.210.0, 94.212.0, 94.215.0, 94.219.0, 94.220.0, and 94.221.0 are added as provided in this Article.

Sec. 4. Section 94.204.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.204.0. B.

Section 204 of the C.P.C. is adopted by reference with the following additions and amendments.

Board. The Board of Building and Safety Commissioners of the City of Los Angeles.

Sec. 5. Section 94.206.0 of the Los Angeles Municipal Code is amended by adding a new definition in alphabetical order to read as follows:

Department. The Department of Development Building and Safety of the City of Los Angeles.

Sec. 6. Section 94.210.0 of the Los Angeles Municipal Code is amended by adding a new definition in alphabetical order to read as follows:

Handwashing Sink. A lavatory for hand and arm washing in commercial food preparation areas, not intended to be utilized in conjunction with restrooms in commercial establishments. A handwashing sink shall be considered Private or Public Use as defined in this Code.

Sec. 7. The definition of Monitor Nozzle in Section 94.215.0 of the Los Angeles Municipal Code is deleted in its entirety:

Sec. 8. The definition of Reclaimed Water in Section 94.220.0 of the Los Angeles Municipal Code is deleted in its entirety:

Sec. 9. The following notation in Division 3 of Article 4, Chapter IX of the Los Angeles Municipal Code is deleted in its entirety:

* The following sections in Division 3 are deleted in entirety by Ord No. 172,594.

94.301.0 thru 94.317.0.

Sec. 10. Section 94.300.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.300.0. BASIC PROVISIONS.

Chapter 3 of the 2013 C.P.C. is adopted by reference.

Sec. 11. Section 94.400.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.400.0 BASIC PROVISIONS.

Chapter 4 of the 2013 C.P.C. is adopted by reference excepted that Sections 403.1, 403.2, 403.3 and 403.4 are not adopted and, in lieu, Sections 94.403.2, 94.403.3, 94.403.3.1.1 and 94.403.4 and Table 4-0 are added.

Sec. 12. Section 94.402.1.1 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 13. Table 4-0 of Division 4 of Article 4, Chapter IX of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 14. Section 94.403.2 of the Los Angeles Municipal Code is added to read as follows:

94.403.2. All plumbing fixtures shall meet the following flow rate requirements:

Fixture Type	Maximum Flow Rate
Shower heads	2 gpm
Lavatory faucets for private use	1.5 gpm
Metered faucets	0.25 gallons per cycle
Kitchen faucets	2.2 gpm
Pre-rinse spray valves in commercial kitchens	1.6 gpm
All other faucets	2.2 gpm
Wash fountains	2.2 gpm
Water closets	1.28 gallons per flush
Urinals	0.125 gallons per flush
Domestic dishwashers	5.8 gallons per washing cycle
Commercial dishwashers	The maximum water use for high efficiency commercial dishwashers shall be in accordance with Table 4-0

TABLE 4-0

Water Use for Commercial Dishwasher Use,^{1,2}

Type	High-Temperature Maximum gallons per rack	Chemical Maximum gallons per rack
Conveyer	0.7	0.62
Door	0.95	1.16
Under-counter	0.90	0.98

1. The maximum water use per washing cycle for high efficiency domestic dishwashers shall be 5.8 gallons

2. All installed dishwashers shall be Energy Star® rated

Sec. 15. Section 94.403.3 of the Los Angeles Municipal Code is added to read as follows:

94.403.3. Urinals. Urinal shall have an average consumption not to exceed 0.125 gallon (0.5 L) per flush.

94.403.3.1.1. Non-Water Urinal Drainage Connections. Where non-water urinals are installed in any, not less than one water-supplied fixture rated at not less than 1 drainage fixture unit shall be installed upstream on the same drain line to facilitate drain line flow and rinsing.

Sec. 16. Section 94.403.4 of the Los Angeles Municipal Code is added to read as follows:

94.403.4. Metered Faucets. All faucets in public restrooms shall be self-closing or self-closing metering faucets.

Sec. 17. The following notation in Division 5 of Article 4, Chapter IX of the Los Angeles Municipal Code is deleted in its entirety:

* The following sections in Division 5 are deleted in entirety by Ord No. 172,594:

94.501.0 thru 94.526.0.

Sec. 18. Section 94.500.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.500.0. BASIC PROVISIONS.

Chapter 5 of the 2013 C.P.C. is adopted by reference.

Sec. 19. Section 94.600.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.600.0. BASIC PROVISIONS.

Chapter 6 of the 2013 C.P.C. is adopted by reference except Section 604.11 is not adopted an in lieu thereof Section 94.604.11 is added.

Sec. 20. Section 94.604.11 of the Los Angeles Municipal Code is added to read as follows:

94.604.11. Lead Content. Water pipe, plumbing fittings, fixtures, solder, and flux with lead content used to convey potable water shall comply with the California Health and Safety Code Section 116875.

Sec. 21. The following notation in Division 7 of Article 4, Chapter IX of the Los Angeles Municipal Code is deleted in its entirety:

* The following sections in Division 7 are deleted in entirety by Ord No. 172,594:

94.701.0 thru 94.722.0.

Sec. 22. Section 94.700.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.700.0. BASIC PROVISIONS.

Chapter 7 of the 2013 C.P.C. is adopted by reference.

Sec. 23. The following notation in Division 8 of Article 4, Chapter IX of the Los Angeles Municipal Code is deleted in its entirety:

* The following sections in Division 8 are deleted in entirety by Ord No. 172,594:

94.801.0 thru 94.812.0.

Sec. 24. Section 94.800.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.800.0. BASIC PROVISIONS.

Chapter 8 of the 2013 C.P.C. is adopted by reference.

Sec. 25. Section 94.900.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.900.0. BASIC PROVISIONS.

Chapter 9 of the 2013 C.P.C. is adopted by reference.

Sec. 26. Section 94.1000.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1000.0. BASIC PROVISIONS.

Chapter 10 of the 2013 C.P.C. is adopted by reference.

Sec. 27. Section 94.1100.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1100.0. BASIC PROVISIONS.

Chapter 11 of the 2013 C.P.C. is adopted by reference, except Sections 1101.11.2.2(B), 1101.13 and 1104.3 are not adopted and in lieu Sections 94.1101.11.2.2, and 94.1101.13 are added.

Sec. 28. Section 94.1101.11.2.2 of the Los Angeles Municipal Code is added to read as follows:

94.1101.11.2.2. Secondary Roof Drain. Secondary roof drains shall be provided. The secondary roof drains shall be located not less than 2 inches (51mm) above the roof surface. The maximum height of the roof drains shall be a height to prevent the depth of ponding from exceeding that for which the roof was designed as determined by Section 1101.11.1. The secondary roof drains shall connect to a piping system in accordance with Section 1101.11.2.2(A).

Sec. 29. Section 94.1101.13 of the Los Angeles Municipal Code is amended to read as follows:

94.1101.13. Rainwater Sumps. Rainwater water sumps serving "public use" occupancy buildings shall be provided with dual pumps arranged to function alternatively in case of overload or mechanical failure. All rainwater shall drain by gravity to a place of disposal satisfactory to the Department. If the rainwater cannot be drained by gravity, discharge into a sump may be permitted. Roof drainage shall not have a direct connection to a sump having an airtight cover. Rainwater sumps serving "public use" occupancy buildings shall be provided with dual pumps arranged to function alternately in case of overload or mechanical failure. The pumps shall have an audio and visual alarm, readily accessible, that signals pump failure or an overload condition.

The lowest inlet shall have a minimum clearance of two (2) inches (51mm) from the high-water or “starting” level of the sump.

Sec. 30. Section 94.1200.0 of the Los Angeles Municipal Code is added to read as follows:

SEC. 94.1200.0. BASIC PROVISIONS.

Chapter 12 of the 2013 C.P.C. is adopted by reference and Section 94.1217 is added.

Sec. 31. Section 94.1217.0 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 32. Section 94.1218.0 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 33. Section 94.1219.0 of the Los Angeles Municipal Code is renumbered as 94.1217.0 and amended to read as follows:

94.1217.0. Seismic Gas Shutoff Valves.

94.1217.1. Definitions. For purposes of this section, certain terms shall be defined as follows:

Downstream of the Gas Utility Meter shall refer to all customer owned gas piping.

Residential Building shall mean any single-family dwelling, duplex, apartment building, condominium, townhouse, lodging house, congregate residence, hotel, or motel.

Seismic Gas Shutoff Valve shall mean a system consisting of a seismic sensing means and actuating means designed to automatically actuate a companion gas shutoff means installed in a gas piping system in order to shut off the gas downstream of the location of the gas shutoff means in the event of a severe seismic disturbance. The system may consist of separable components or may incorporate all functions in a single body. The terms “Seismically Activated Gas Shutoff Valves” are synonymous.

Upstream of the Gas Utility Meter shall refer to all gas piping installed by the utility up to and including the meter and the utility’s bypass tee at the connection to the customer owned piping.

94.1217.2. Scope. An approved seismic gas shutoff valve shall be installed downstream of the gas utility meter on each fuel gas line where the gas line serves the following buildings or structures:

94.1217.2.1. A building or structure containing fuel gas piping for which a building permit was first issued on or after September 1, 1995.

94.1217.2.2. An existing building or structure which is altered or added to; and

94.1217.2.2.1. That building or structure has fuel gas piping supplying the existing building or structure or the addition to the building or structure; and

94.1217.2.2.2. The alteration or addition is valued at more than \$10,000 and a building permit for the work in commercial buildings was first issued on or after September 1, 1995. Alterations or additions to individual units or tenant spaces shall be installed for all gas piping serving that individual unit or tenant space; or

94.1217.2.2.3. The alteration or addition is valued at more than \$10,000 and a building permit for the work in residential buildings, including condominium units, is first issued on or after January 10, 1998. Alterations or additions to an individual condominium unit shall require a seismic gas shutoff valve to be installed for all gas piping serving that individual condominium unit; or

94.1217.2.2.4. The alteration or addition is to the fuel gas piping system and involves the alteration or replacement of the gas meter.

94.1217.2.3. Prior to entering into an agreement of sale, or prior to the close of escrow when an escrow agreement has been executed in connection with the sale,

1. Buildings or structures which contain fuel gas piping shall have a seismic gas shutoff valve installed.
2. The sale of an individual condominium unit in a building shall require the installation of a seismic gas shutoff valve for all gas piping serving that individual unit.

EXCEPTIONS:

(a) Seismic gas shutoff valves may be installed upstream of a gas utility meter provided they meet the requirements of this section.

(b) Seismic gas shutoff valves installed on a building or structure prior to September 1, 1995, are exempt from the requirements of this section provided they remain installed on the building or structure and are maintained for the life of the building or structure.

(c) Notwithstanding Subsections 1218.2.1, 1218.2.2 and 1218.2.3 above, these provisions shall not apply to a building or structure if the Department determines that a building or structure satisfies all three of the following criteria:

- (i) That the building or structure is owned, operated, and maintained by a governmental entity or public utility; or that the building or structure is owned by a private concern and provides a public benefit, such as a co-generation facility which shares its excess power with a public utility or with a large industrial facility which has governmental contracts;
- (ii) That the building or structure has available 24-hour, year round maintenance staffing; and

(iii) That the gas piping system contained in the building or structure is designed to withstand seismic effects of earthquakes.

(d) A single seismic gas shutoff valve may be installed upstream of the gas utility meter at the discretion of the gas utility.

94.1217.3. General Requirements. Seismic gas shutoff valves installed either in compliance with Section 1218.2, et seq., or voluntarily with a permit issued on or after September 1, 1995, shall comply with the following requirements:

94.1217.3.1. Seismic gas shutoff valves shall be installed by a contractor licensed in the appropriate classification by the State of California.

EXCEPTIONS:

(a) A person who has been determined by the Department to meet the qualification of a Qualified Installer pursuant to the definition of a Qualified Installer set forth in Chapter 2 of this Code may install a seismic gas shutoff valve to a single family dwelling which is or is intended to be occupied by the Qualified Installer.

(b) Seismic gas shutoff valves may be installed, without a permit, by a gas utility or a contractor authorized by the gas utility when the valves are installed upstream of the gas utility meter and the valves are installed and approved in accordance with this section.

94.1217.3.2. Seismic gas shutoff valves shall be mounted rigidly to the exterior, or other approved location, of the building or structure containing the fuel gas piping.

EXCEPTION: If the Department determines that the seismic gas shutoff valve has been tested and listed for an alternate method of installation, then a seismic gas shutoff valve need not be mounted rigidly to the exterior of the building or structure containing the fuel gas piping.

94.1217.3.3. Be certified by the Office of the State Architect.

94.1217.3.4. Be approved by the Department of Building and Safety, Mechanical Testing Laboratory.

94.1217.3.5. Have a thirty year warranty which warrants that the valve is free from defects and will continue to properly operate for thirty years from the date of installation.

94.1217.3.6. Where seismic gas shutoff valves are installed as required by this section, they shall be maintained for the life of the building or structure or be replaced with a valve complying with the requirements of this section.

94.1217.3.7. Be in compliance with all requirements of California Referenced Standard 12-16-1.

Sec. 34. Section 94.1300.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1300.0. BASIC PROVISIONS.

Chapter 13 of the 2013 C.P.C. is not adopted.

Sec. 35. Section 94.1400.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1400.0. BASIC PROVISIONS.

Chapter 14 of the 2013 C.P.C. is adopted by reference.

Sec. 36. Section 94.1500.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1500.0. GENERAL.

Chapter 15 of the 2013 C.P.C. is not adopted.

Sec. 37. The Title of Division 16 of Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

ARTICLE 4, DIVISION 16

ALTERNATIVE WATER SOURCES FOR NONPOTABLE APPLICATIONS

Sec. 38. Section 94.1600.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1600.0. BASIC PROVISIONS.

Chapter 16 of the 2013 C.P.C. is adopted by reference.

Sec. 39. Section 94.1600.1 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 40. The Title of Division 17 of Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

ARTICLE 4, DIVISION 17

NONPOTABLE RAINWATER CATCHMENT SYSTEMS

Sec. 41. Section 94.1700.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1700.0. BASIC PROVISIONS.

Chapter 17 of the 2013 C.P.C. is adopted.

Sec. 42. Section 94.1800.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.1800.0. BASIC PROVISIONS.

The 2012 Uniform Solar Energy Code, Chapters 2 through 8, is adopted by reference.

Sec. 43. The Title of Division 19 of Article 4, Chapter IX of the Los Angeles Municipal Code is amended to read as follows:

ARTICLE 4, DIVISION 19

UNIFORM SWIMMING POOL, SPA, AND HOT TUB CODE

Sec. 44. Section 94.1900.0 of the Los Angeles Municipal Code is added to read as follows:

SEC. 94.1900.0. BASIC PROVISIONS.

The 2012 Uniform Swimming Pool, Spa, and Hot Tub Code is adopted by reference.

Sec. 45. Section 94.2002.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2002.0. Reserved.

Sec. 46. Section 94.2003.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2003.0. Reserved.

Sec. 47. Section 94.2004.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2004.0. Reserved.

Sec. 48. Section 94.2007.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2007.0. Reserved.

Sec. 49. Section 94.2010.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2010.0. NFPA-13.

NFPA 13-2013 is adopted by reference with the following exceptions and modifications.

94.2010.1. NFPA Section 2.2 is amended as follows:

2.2 NFPA Publications.

National Fire Protection Association, 1 Battery March Park, Quincy, MA 02169-7471.

NFPA 11, *Standard for Low-, Medium-, and High-Expansion Foam*, 2013 edition.

NFPA 14, *Standard for the Installation of Standpipes and Hose Systems*, 2013 edition.

NFPA 15, *Standard for Water Spray Fixed Systems for Fire Protection*, 2012 edition.

NFPA 16, *Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems*, 2011 edition.

NFPA 17, *Standard for Dry Chemical Extinguishing Systems*, 2009 edition.

NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*, 2013 edition.

NFPA 22, *Standard for Water Tanks for Private Fire Protection*, 2013 edition.

NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*, 2013 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 2006 California edition.

NFPA 30, *Flammable and Combustible Liquids Code*, 2012 edition.

NFPA 30B, *Code for the Manufacture and Storage of Aerosol Products*, 2011 edition.

NFPA 33, *Standard for Spray Application Using Flammable or Combustible Materials*, 2011 edition.

NFPA 40, *Standard for the Storage and Handling of Cellulose Nitrate Film*, 2011 edition.

NFPA 51B, *Standard for Fire Prevention During Welding, Cutting, and Other Hot Work*, 2009 edition.

NFPA 70®, *National Electrical Code®*, 2011 edition.

NFPA 72®, *National Fire Alarm and Signaling Code*, 2013 edition.

NFPA 82, *Standard on Incinerators and Waste and Linen Handling Systems and Equipment*, 2009 edition.

NFPA 96, *Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations*, 2011 edition.

NFPA 101®, *Life Safety Code®*, 2012 edition.

NFPA 120, *Standard for Fire Prevention and Control in Coal Mines*, 2010 edition.

NFPA 170, *Standard for Fire Safety and Emergency Symbols*, 2009 edition.

NFPA 214, *Standard on Water-Cooling Towers*, 2011 edition.

NFPA 259, *Standard Test Method for Potential Heat of Building Materials*, 2008 edition.

NFPA 400, *Hazardous Materials Code*, 2013 edition.

NFPA 409, *Standard on Aircraft Hangars*, 2011 edition.

NFPA 703, *Standard for Fire Retardant-Treated Wood and Fire Retardant Coatings for Building Materials*, 2012 edition.

NFPA 750, *Standard on Water Mist Fire Protection Systems*, 2010 edition.

NFPA 780, *Standard for the Installation of Lightning Protection Systems*, 2011 edition.

NFPA 804, *Standard for Fire Protection for Advanced Light Water Reactor Electric Generating Plants*, 2010 edition.

NFPA 909, *Code for the Protection of Cultural Resource Properties — Museums, Libraries, and Places of Worship*, 2010 edition.

NFPA 1963, *Standard for Fire Hose Connections*, 2009 edition.

94.2010.2. NFPA 13-2013 Section 3.3.25 is amended to read as follows:

3.3.25. Water Curtain is a line of closely spaced fire sprinklers (or a single sprinkler) aligned adjacent to openings to keep fire from penetrating those openings.

94.2010.3. NFPA 13-2013 Section 3.4.1.1 is amended to read as follows:

3.4.1.1. Premixed Antifreeze Solution. A mixture of an antifreeze material with water that is prepared by the manufacturer with a quality control procedure in place that ensures that the antifreeze solution remains.

94.2010.4. NFPA 13-2013 Section 6.9.4.1 is amended to read as follows:

6.9.4.1. Electrically operated alarm attachments forming part of an auxiliary, proprietary, remote station or local signaling system shall be installed in accordance with the Los Angeles Fire Code.

94.2010.5. NFPA 13-2013 Section 7.6.2.1 is amended to read as follows:

7.6.2.1. Antifreeze solutions shall be limited to premixed antifreeze solutions of glycerin (chemically pure or United States Pharmacopoeia 96.5%) at a maximum concentration of 50% by volume, or propylene glycol at a maximum concentration of 40% by volume.

94.2010.6. NFPA 13-2013 Section 7.6.2.1.1 is added to read as follows:

7.6.2.1.1. Premixed antifreeze solutions of propylene glycol exceeding 40% concentration by volume shall be permitted for use with ESFR sprinklers where the ESFR sprinklers are listed for such use in a specific application.

94.2010.7. NFPA 13-2013 Section 7.6.2.1.2 is added to read as follows:

7.6.2.1.2. Premixed antifreeze solutions other than those described in 7.6.2.1 that are listed for use in sprinkler systems shall be permitted to be used.

94.2010.8. NFPA 13-2013 Section 7.6.2.1.3 is added to read as follows:

7.6.2.1.3. All premixed antifreeze solutions shall be provided with a certificate from the manufacturer indicating the type of antifreeze, concentration by volume, and freezing point.

Table 7.6.2.2 is deleted in its entirety.

94.2010.9. NFPA 13-2013 Section 8.15.1.2.15 is amended to read as follows:

8.15.1.2.15. Exterior columns under 10 ft² (0.93 m²) in total area, formed by studs or wood joist, with no sources of ignition within the column, supporting exterior canopies that are fully protected with a sprinkler system, shall not require sprinkler protection.

94.2010.10. NFPA 13-2013 Section 8.15.4.5 is added to read as follows:

8.15.4.5. Water curtains shall consist of closely spaced sprinklers in combination with draft stops. The draft stops shall be located immediately adjacent to the opening, shall be at least 18 inches deep and shall be of noncombustible or limited-combustible material. Sprinklers shall be spaced not more than six feet apart and placed six to 12 inches from the draft stop on the side away from the opening. Where sprinklers are closer than six feet, cross baffles shall be provided in accordance with Section 8.6.3.4.2 of NFPA-13.

94.2010.11. NFPA13-2013 Section 8.15.5.7.2 is amended to read as follows:

8.15.5.7.2. The sprinkler required at the top and bottom of the elevator hoistway by 8.15.5.7.1 shall not be required where permitted by Chapter 30 of the Los Angeles Building Code.

94.2010.12. NFPA 13-2013 Section 8.15.7.1 is amended to read as follows:

8.15.7.1. Unless the requirements of 8.15.7.2, or 8.15.7.3 are met, sprinklers shall be installed under exterior roofs, canopies, porte-cochere, balconies, decks, or similar projections exceeding 4 ft (1.2 m) in width.

94.2010.13. NFPA 13-2013 Section 8.15.7.2 is amended to read as follows:

8.15.7.2. Sprinklers shall be permitted to be omitted where the canopies, roofs, balconies, decks, or similar projections are constructed with materials that are noncombustible, limited-combustible, or fire retardant treated wood as defined in NFPA 703, *Standard for Fire Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials*.

94.2010.14. NFPA 13-2013 Section 8.15.7.3 is amended to read as follows:

8.15.7.3. Sprinklers shall be permitted to be omitted from below the canopies, roofs, balconies, decks, or similar projections of combustible construction, provided the exposed finish material on the roof, or canopy is noncombustible, limited-combustible, or fire retardant-treated wood as defined in NFPA 703, *Standard for Fire Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials*, and the roofs, or canopies contain only sprinklered concealed spaces or any of the following unsprinklered combustible concealed spaces:

1. Combustible concealed spaces filled entirely with noncombustible insulation;
2. Light or ordinary hazard occupancies where noncombustible or limited-combustible ceilings are directly attached to the bottom of solid wood joists so as to create enclosed joist spaces 160 ft³ (4.5 m³) or less in volume, including space below insulation that is laid directly on top or within the ceiling joists in an otherwise sprinklered attic [see 11.2.3.1.4(4)(d)]; or
3. Concealed spaces over isolated small roofs, or canopies not exceeding 55 ft² (5.1 m²) in area.

94.2010.15. NFPA 13-2013 Section 8.15.7.4 is not adopted.

94.2010.16. NFPA 13-2013 Section 8.15.7.6 is added to read as follows:

8.15.7.6. Sprinklers may be omitted for the following structures:

1. Solar photovoltaic structures with no use underneath. Signs may be provided, as determined by the enforcing agency prohibiting any use underneath including storage.
2. Solar photovoltaic (PV) panels supported by framing that have sufficient uniformly distributed and unobstructed openings throughout the top of the array (horizontal plane) to allow heat and gasses to escape, as determined by the enforcing agency.

94.2010.16. NFPA 13-2013 Section 8.16.1.1.1.4 is added to read as follows:

8.16.1.1.1.4. Where a system includes floor control valves, a hydraulic design information sign containing information for the floor shall be provided at each floor control valve. A hydraulic design information sign shall be provided for each area calculated. The installing contractor shall identify a hydraulically designed sprinkler system with a permanently marked weatherproof metal or rigid plastic sign secured with corrosion resistant wire, chain, or other approved means. Such signs shall be placed at the alarm valve, dry pipe valve, preaction valve, or deluge valve supplying the corresponding hydraulically designed area.

94.2010.17. NFPA 13-2013 Section 8.16.1.1.1.5 is added to read as follows:

8.16.1.1.1.5. Control valves, check valves, drain valves, antifreeze valves shall be readily accessible for inspection, testing, and maintenance. Valves located more than 7 feet above the finished floor shall be provided with a means of opening and closing the valve from the floor level.

94.2010.18. NFPA 13-2013 Section 8.16.1.5.4 is added to read as follows:

Locations. Floor control valves shall be within a stairway enclosure or within the vestibule or on the access balcony of a smoke proof enclosure.

EXCEPTIONS:

1. In buildings with three or fewer stories or where there is no stairway that serves a floor, control valves may be located elsewhere on the floor level.
2. Unenclosed stairways in parking garages.

94.2010.19. NFPA 13-2013 Section 9.1.3.9.1.1 is added to read as follows:

9.1.3.9.1.1. Powder-driven studs used for attaching hangers to the building structure are prohibited in Seismic design Categories C, D, E and F.

94.2010.20. NFPA 13-2013 Section 9.3.5.11.4 is amended to read as follows:

9.3.5.11.4. Where threaded pipe is for sway bracing, it shall have a wall thickness of not less than Schedule 40.

94.2010.21. NFPA 13-2013 Section 9.3.5.12.4 is amended to read as follows:

9.3.5.12.4. Lag screws or power-driven fasteners shall not be used to attach braces to the building structure.

94.2010.22. NFPA Section 9.3.5.12.6 is amended to read as follows:

9.3.5.12.6. Fastening methods other than those identified in 9.3.5.12 shall not apply to other fastening methods, which shall be acceptable for use if certified by a registered professional engineer to support the loads determined in accordance with the criteria in 9.3.5.9. Calculations shall be submitted to the authority having jurisdiction.

94.2010.23. NFPA 13-2013 Section 9.3.5.12.7.2 is amended to read as follows:

9.3.5.12.7.2. Concrete anchors other than those shown in Figure 9.3.5.12.1 and identified in 9.3.5.11.11 shall be acceptable for use where designed in accordance with the requirements of the building code and certified by a registered professional engineer.

94.2010.24. NFPA 13-2013 Section 9.3.6.1(3) is amended to read as follows:

9.3.6.1(3). No. 12, 440 lb (200Kg) wire installed at least 45 degrees from the vertical plane and anchored on both sides of the pipe. Powder-driven fasteners for attaching restraint are allowed to be used provided that the restraint component does not support the dead load.

94.2010.25. NFPA 13-2013 Section 9.3.7.7 is not adopted:

94.2010.26. NFPA 13-2013 Section 10.6.4 is amended to read as follows:

10.6.4. Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall not contain mechanical joints.

EXCEPTIONS:

1. Where allowed in accordance with 10.6.2.

2. Alternate designs may be utilized where designed by a registered professional engineer and approved by the enforcing agency.

94.2010.27. NFPA 13-2013 Section 10.9.1 is amended to read as follows:

10.9.1. Backfill shall be well tamped in layers or puddle under and around pipes to prevent settlement or lateral movement. Backfill shall consist of clean fill sand or pea gravel to a minimum of 6" below and to a minimum of 12" above the pipe and shall contain no ashes cinders, refuse, organic matter, or other corrosive materials. Other backfill materials and methods are permitted where designed by a registered professional engineer and approved by the enforcing agency.

94.2010.28. NFPA 13-2013 Section 11.2.3.1.4 (4) (i) is amended as follows:

11.2.3.1.4 (4) (i). Exterior columns under 10 ft² (0.93m²) in total area formed by studs or wood joists, with no sources of ignition within the column, supporting exterior canopies that are fully protected with a sprinkler system.

94.2010.29. NFPA 13-2013 Section 11.2.3.2.3.1 is amended to read as follows:

11.2.3.2.3.1. Where listed quick-response sprinklers, excluding extended coverage quick-response sprinklers, are used throughout a system or portion of a system having the same hydraulic design basis, the system area of operation shall be permitted to be reduced without revising the density as indicated in Figure 11.2.3.2.3.1 when all of the following conditions are satisfied:

1. Wet pipe system;
2. Light hazard occupancy;
3. 20 ft (6.1 m) maximum ceiling height; and
4. There are no unprotected ceiling pockets as allowed by 8.6.7 and 8.8.7 exceeding 32 ft² (3 m²).

94.2010.30. NFPA 13-2013 Section 11.2.3.2.3.2 is amended to read as follows:

11.2.3.2.3.2. The number of sprinklers in the design area shall never be less than seven.

94.2010.31. NFPA 13-2013 Section 11.3.3.5 is added to read:

11.3.3.5. Water curtains shall be hydraulically calculated in accordance with Section 11.3.

94.2010.32. NFPA 13-2013 Section 12.1.1.2 is amended to read as follows:

12.1.1.2. Early suppression fast-response (ESFR) sprinklers shall not be used in buildings with automatic heat or smoke vents unless the vents use a standard response operating mechanism with a minimum temperature rating of 360°F (182°C) or 100°F (56°C) above the operating temperature of the sprinklers, whichever is higher.

94.2010.33. NFPA 13-2013 Section 24.1.7 is not adopted.

94.2010.34. NFPA 13-2013 Section 25.1 is amended to read as follows:

25.1. Approval of Sprinkler Systems and Private Fire Service Mains.

The installing contractor shall do the following:

1. Notify the authority having jurisdiction and the property owner or property owner's authorized representative of the time and date testing will be performed;
2. Perform all required testing (see Section 25.2);
3. Complete and sign the appropriate contractor's material and test certificate(s) (see Figure 25.1);
4. Remove all caps and straps prior to placing the sprinkler system in service; and
5. Upon system acceptance by the authority having jurisdiction a label prescribed by Title 19 California Code of Regulations, Chapter 5 shall be affixed to each system riser.

94.2010.35. NFPA 13-2013 Section 25.4 is amended to read as follows:

25.4. Instructions. The installing contractor shall provide the property owner or the property owner's authorized representative with the following:

1. All literature and instructions provided by the manufacturer describing proper operation and maintenance of any equipment and devices installed;
2. NFPA 25, Standard for the Inspection, testing, and maintenance of Water-Based Fire Protection Systems, 2006 California Edition;

3. Title 19, California Code of Regulations, Chapter 5, "Fire Extinguishing Systems".

94.2010.36. NFPA 13-2013 Section 25.5.1 is amended to read as follows:

25.5.1. The installing contractor shall identify a hydraulically designed sprinkler system with a permanently marked weatherproof metal or rigid plastic sign secured with corrosion resistant wire, chain, or other approved means. Such signs shall be placed at the alarm valve, dry pipe valve, preaction valve, or deluge valve supplying the corresponding hydraulically designed area. Pipe schedule systems shall be provided with a sign indicating that the system was designed and installed as a pipe schedule system and the hazard classification(s) included in the design.

94.2010.37. NFPA 13-2013 Section 25.5.2 is amended to read as follows:

25.5.2. The sign shall include the following information:

1. Location of the design area or areas;
2. Discharge densities over the design area or areas;
3. Required flow and pressure of the system at the base of the riser;
4. Presence of high piled storage;
5. Maximum height of storage planned;
6. Aisle width planned;
7. Required flow and pressure of the system at the water supply source;
8. Required flow and pressure of the system at the discharge side of the fire pump where a fire pump is installed;
9. Type or types and number of sprinklers or nozzles installed including the orifice size, temperature rating, orientation, K-Factor, Sprinkler Identification Number (SIN) for sprinkler heads when applicable and response type;
10. The minimum discharge flow rate and pressure required from the hydraulically most demanding sprinkler;

11. The required pressure settings for pressure reducing valves;
12. For deluge sprinkler systems, the required flow and pressure at the hydraulically most demanding sprinkler or nozzle;
13. The protection area per sprinkler based on the hydraulic calculations;
14. The edition of NFPA 13 to which the system was designed and installed.

94.2010.38. NFPA 13-2013 Section 25.6.1 is amended to read as follows:

25.6.1. California Edition NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems

Sec. 50. Section 94.2010.39 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 51. Section 94.2010.40 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 52. Section 94.2010.41 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 53. Section 94.2010.42 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 54. Section 94.2010.43 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 55. Section 94.2010.44 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 56. Section 94.2010.45 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 57. Section 94.2010.46 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 58. Section 94.2010.47 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 59. Section 94.2010.48 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 60. Section 94.2010.49 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 61. Section 94.2010.50 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 62. Section 94.2010.51 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 63. Section 94.2010.52 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 64. Section 94.2010.53 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 65. Section 94.2010.54 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 66. Section 94.2010.55 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 67. Section 94.2010.56 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 68. Section 94.2010.57 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 69. Section 94.2010.58 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 70. Section 94.2010.59 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 71. Section 94.2010.60 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 72. Section 94.2010.61 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 73. Section 94.2011.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2011.0. Reserved.

Sec. 74. Section 94.2012.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2012.0. Reserved.

Sec. 75. Section 94.2013.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2013.0. NFPA 13R.

NFPA 13R-2013 is adopted by reference with the following exceptions, additions and modifications:

94.2013.1. NFPA 13R-2013 Section 2.2 is amended to read as follows:

2.2. NFPA Publications. NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2006 California edition.

94.2013.2. NFPA 13R-2013 Section 6.3.5 is added to read as follow as follows:

6.3.5. Instructions. The installing contractor shall provide the property owner or the property owner's authorized representative with the following:

1. All literature and instructions provided by the manufacturer describing proper operation and maintenance of any equipment and devices installed;
2. NFPA 25, Standard for the Inspection, Testing, and Maintenance of water-Based Fire Protection Systems 2006 California edition and Title 19, California Code of regulations, Chapter 5; and
3. Once the system is accepted by the authority having jurisdiction a label as prescribed by Title 19, California Code of regulations, Chapter 5, shall be affixed to each system riser.

94.2013.3. NFPA 13R-2013 Section 6.6.7.1 is added to read as follow as follows:

6.6.7.1. Sprinklers shall be permitted to be omitted for the following structures:

1. Solar photovoltaic structures with no use underneath. Signs may be provided, as determined by the enforcing agency prohibiting any use underneath including storage.
2. Solar photovoltaic (PV) panels supported by framing that have sufficient uniformly distributed and unobstructed openings

throughout the top of the array (horizontal plane) to allow heat and gasses to escape, as determined by the enforcing agency.

Sec. 76. Section 94.2013.4 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 77. Section 94.2013.5 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 78. Section 94.2013.6 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 79. Section 94.2013.7 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 80. Section 94.2013.8 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 81. Section 94.2013.9 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 82. Section 94.2013.10 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 83. Section 94.2013.11 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 84. Section 94.2013.12 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 85. Section 94.2013.13 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 86. Section 94.2013.14 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 87. Section 94.2013.15 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 88. Section 94.2013.16 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 89. Section 94.2013.17 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 90. Section 94.2013.18 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 91. Section 94.2013.19 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 92. Section 94.2013.20 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 93. Section 94.2013.21 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 94. Section 94.2013.22 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 95. Section 94.2013.23 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 96. Section 94.2013.24 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 97. Section 94.2013.25 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 98. Section 94.2013.26 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 99. Section 94.2013.27 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 100. Section 94.2014.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2014.0. NFPA 13D.

NFPA 13D-2013 is adopted by reference with the following exceptions, modifications and additions:

94.2014.1. NFPA 13D-2013 Section 3.3.6 is modified to read as follows:

3.3.6. Premixed Antifreeze Solution. A mixture of an antifreeze material with water that is prepared and factory-mixed by the manufacturer with a quality control procedure in place that ensures that the antifreeze solution remains homogeneous.

94.2014.2. NFPA 13D-2013 Section 5.1.4 is added to read as follows:

5.1.4. Fire Department Connections. A Fire Department connection shall be provided for any system protecting over 10,000 square feet of habitable space and shall meet the following requirements:

1. A single Fire Department connection pipe may be as small as the sprinkler riser, provided the riser is three inches or smaller; and
2. The hose inlet fitting may be 1-1/2 inches with 1.5-9 N.H. thread of 2.5-7.5 N.H. standard threads.

94.2014.3. NFPA 13D-2013 Section 6.2 is amended to read as follows:

6.2. Water Supply Sources. The following water supply sources shall be considered to be acceptable by this standard:

1. A connection to a reliable waterworks system with or without an automatically operated pump;
 2. An elevated tank;
 3. A pressure tank designed to American Society of Mechanical Engineers (ASME) standards for a pressure vessel with a reliable pressure source;
 4. A stored water source with an automatically operated pump;
- or
5. A well with a pump of sufficient capacity and pressure to meet the sprinkler system demand. The stored water requirement of 6.1.2 or 6.1.3 shall be permitted to be a combination of the water in the well (including the refill rate) plus the water in the holding tank if such tank can supply the sprinkler system.

94.2014.4. NFPA 13D-2013 Section 6.2.2 is modified to read as follows:

6.2.2. Where a well, pump, tank or combination thereof is the source of supply for a fire sprinkler system the water supply shall serve both domestic and fire sprinkler systems, and the following shall be met:

1. The test connection shall be provided downstream of the pump that creates a flow of water equal to the smallest sprinkler on the system. The connection shall return water to the tank;
2. Any disconnecting means for the pump shall be approved;
3. A method for refilling the tank shall be piped to the tank;

4. A method of seeing the water level in the tank shall be provided without having to open the tank; and

5. The pump shall not be permitted to sit directly on the floor.

94.2014.5. NFPA 13D-2013 Section 6.2.2.1 is added to read as follows:

6.2.2.1. Where a fire sprinkler system is supplied by a stored water source with an automatically operated means of pressurizing the system other than an electric pump, the water supply may serve the sprinkler system only.

94.2014.6. NFPA 13D-2013 Section 6.2.4 is added to read as follows:

6.2.4. Where a water supply serves both domestic and fire sprinkler systems, 5 gpm (19 L/min) shall be added to the sprinkler system demand at the point where the systems are connected, to determine the size of common piping and the size of the total water supply requirements where no provision is made to prevent flow into the domestic water system upon operation of a sprinkler.

94.2014.7. NFPA 13D-2013 Section 8.3.4 is amended to read as follows:

8.3.4. Sprinklers shall not be required in detached garages, open attached porches, carports with no habitable space above, and similar structures.

94.2014.8. NFPA 13D-2013 Section 10.2.1(6) is added to read as follows:

6. Single family dwellings having more than 10,000 square feet of habitable space shall follow the design requirements of Section 94.2013 of this Chapter.

Sec. 101. Section 94.2014.9 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 102. Section 94.2014.10 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 103. Section 94.2014.11 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 104. Section 94.2014.12 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 105. Section 94.2014.13 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 106. Section 94.2020.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2020.0. NFPA 14.

NFPA 14-2013 is adopted by reference with the following exceptions, modifications and additions:

94.2020.1. NFPA 14-2013 Section 5.1.3 is modified to read as follows:

5.1.3. The spacing and location of standpipes and hose connections shall be in accordance with Section 905 of the 2013 Los Angeles Building Code.

94.2020.2. NFPA 14-2013 Section 5.1.4 is not adopted.

94.2020.3. NFPA 14-2013 Section 5.3.3 is modified to read as follows:

5.3.3. Class III Systems. A Class III standpipe system shall provide 1 1/2 in. (40 mm) hose stations to supply water for use by trained personnel and 2 1/2 in. (65 mm) hose connections to supply a larger volume of water for use by fire departments and those trained in handling heavy fire streams. Hose connections for Class III systems may be made through 2-1/2 hose valves with easily removable 2-1/2 inch by 1-1/2 inch reducers.

94.2020.4. Reserved.

94.2020.5. NFPA 14-2013 Section 6.1.2.5 is modified to read as follows:

6.1.2.5. To minimize or prevent pipe breakage where subject to earthquakes, standpipe systems shall be protected in accordance with Section 94.2010 of this Article.

94.2020.6. NFPA 14-2013 Section 6.3.7.1 is modified to read as follows:

6.3.7.1. System water supply valves, isolation control valves, and other valves in fire mains shall be supervised in an approved manner in the open position by one of the following methods:

1. Where a building has a fire alarm system or a sprinkler monitoring system installed, the valve shall be supervised by:

a. A central station, proprietary, or remote supervising station; or

b. A local signaling service that initiates an audible signal at a constantly attended location.

2. Where a building does not have a fire alarm system or a sprinkler monitoring system installed, the valve shall be supervised by:

- a. Locking the valves in the open position; or
- b. Sealing of valves and an approved weekly recorded inspection where valves are located within fenced enclosures under the control of the owner.

94.2020.7. NFPA 14-2013 Section 6.4.5.3.1 is added to read as follows:

6.4.5.3.1. Fire Department inlets shall supply all Class I and Class III standpipes:

1. In buildings which have multiple zones, each zone shall be provided with separate inlet connections.
2. Where the Fire Department inlet connection does not serve the entire building, the portions served shall be suitably identified.
3. The Fire Department connection shall be adequate to supply the required flow and pressure.

94.2020.8. NFPA 14-2013 Sections 7.3.2.2 and 7.3.2.3 are not adopted. Location of Class I standpipe hose connections shall comply with section 905.4 of the 2013 City of Los Angeles Building Code.

94.2020.9. NFPA 14-2013 Section 7.9.1.2 is amended to read as follows:

7.9.1.2. Pumps that are arranged in series shall be on the same level.

94.2020.10. NFPA 14-2013 Section 7.9.3 is not adopted.

94.2020.11. NFPA 14-2013 Section 9.1.5 is amended to read:

9.1.5. Water supplies from the following sources shall be permitted:

1. A public waterworks system where pressure and flow rate are adequate;
2. Automatic fire pumps connected to an approved water source in accordance with NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*;
3. Pressure tanks installed in accordance with NFPA 22, *Standard for Water Tanks for Private Fire Protection*; or

4. Gravity tanks installed in accordance with NFPA 22, *Standard for Water Tanks for Private Fire Protection*.

94.2020.12. NFPA 14-2013 Section 9.2.1 is added to read as follows:

9.2.1. Buildings Over 200 Feet High.

1. Redundancy. The system shall be adequate when either one pump, one pump driver, one riser or zone pressure regulator is out of operation.

2. Power. Pumps shall be either diesel engine or electric motor driven. Electric fire pump motors shall be supplied from normal and the emergency standby power system. At least half of the required water flow shall be supplied by an electric motor driven pump.

The normal and emergency power system shall have adequate capacity and rating to simultaneously operate all pumps, including redundant pumps, serving any two adjacent zones.

94.2020.13. NFPA 14-2013 Section 11.2.3 is added to read as follows:

11.2.3. Flushing the System Riser. Water shall flow from the topmost outlet of each riser until the system is clear of debris.

11.2.3.1. Roof Outlets. Standpipe risers going through the last floor of the building, through a floor under a roof, or adjacent to a roof shall be designed so that they can be flushed through outlets located on the roof.

11.2.3.2. Flow. All standpipes shall be flushed individually through the roof, or in the absence of roof outlets, through the topmost outlet at a residual pressure of at least 65 psi. The flow for Class I and III standpipes shall be at least 500 g.p.m. through each riser.

94.2020.14. NFPA 14-2013 Sections 11.5.7.3.1 through 11.5.7.3.5 are added to read as follows:

11.5.7.3. Pressure Regulator Valve Test.

11.5.7.3.1. Test Required. When required by the Department, 2-1/2 inch pressure regulator valves installed on standpipe outlets shall be tested for proper operation at a flow of 300 g.p.m. with a minimum residual pressure of 125 psi in the presence of a representative of the Department.

11.5.7.3.2. Safety. Test nozzles and other equipment shall be adequately secured so as to eliminate danger to personnel.

11.5.7.3.3. Opening. An accessible 2-1/2 inch capped or plugged test opening shall be installed adjacent to each pressure regulator valve.

11.5.7.3.4. Drain. The test openings shall drain to a minimum 3-inch drain line constructed and installed as required for fire sprinkler drains. The drains shall not discharge where they may cause damage. Where available, drains shall terminate to the fire water storage tank.

11.5.7.3.5. Interconnection. The test drain shall either be separate or connect to a fire sprinkler drain.

94.2020.15. NFPA 14-2013 Section 12.1 is amended to read as follows:

A standpipe system, either temporary or permanent, shall be provided in accordance with this chapter in buildings under construction.

Sec.107. Section 94.2020.16 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.108. Section 94.2020.17 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.109. Section 94.2020.18 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.110. Section 94.2020.19 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.111. Section 94.2020.20 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.112. Section 94.2020.21 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.113. Section 94.2020.22 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.114. Section 94.2020.23 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.115. Section 94.2020.24 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.116. Section 94.2020.25 of the Los Angeles Municipal Code is deleted in its entirety.

Sec.117. Section 94.2020.26 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 118. Section 94.2030.0 of the Los Angeles Municipal Code is amended to read as follows:

SEC. 94.2030.0. NFPA 20 FIRE PUMP AND DRIVERS.

FIRE PUMPS AND DRIVERS. Fire pumps, their drivers and associated piping and equipment shall conform to the requirements set forth in NFPA 20-2013 with the following exceptions and modifications:

94.2030.1. NFPA 20-2013 Sections 1.4 through 1.4.3 are not adopted.

94.2030.2. NFPA 20-2013 Section 4.7.1 is modified to read as follows:

4.7.1. Fire pumps, equipment used with fire pumping systems, devices and attachments shall be dedicated to and listed for fire protection service. A copy of the manufacturer's certified pump test characteristic curve shall be available for comparison of results of field acceptance tests. The fire pump as installed shall equal the performance as indicated on the manufacturer's certified shop test characteristic curve within the accuracy limits of the test equipment.

94.2030.3. NFPA 20-2013 Section 4.11.1.4 is modified to read as follows:

4.11.1.4. The relief valve shall discharge to an approved location.

94.2030.4. NFPA 20-2013 Section 4.14.2 is modified to read as follows:

4.14.2. Installation. Suction pipe shall be installed and tested in accordance with section 94.2040 of this chapter. The installation of above-ground suction piping shall conform to Section 94.2010 of this chapter.

94.2030.5. NFPA 20-2013 Section 4.14.4.1 is modified to read as follows:

4.14.4.1. Where the suction supply is of sufficient pressure to be of material value without the pump, the pump shall be installed with a bypass having a check valve. (See Figure A.5.14.4.)

94.2030.6. NFPA 20-2013 Section 4.14.11 is added to read as follows:

4.14.11. Fire Department Connections. Fire Department connections shall not be connected on the suction side of the fire pump.

Sec. 119. Section 94.2030.7 of the Los Angeles Municipal Code is deleted in its entirety.

Sec. 120. Section 94.2030.8 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.7. NFPA 20-2013 Sections 4.20.2.2 through 4.20.2.4 are not adopted.

Sec. 121. Section 94.2030.9 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.8. NFPA 20-2013 Section 4.20.3.1.4 is added to read:

4.20.3.1.4. The discharge from the test header shall terminate to the fire storage tank where available.

Sec. 122. Section 94.2030.10 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.9. NFPA 20-2013 Section 4.20.3.5 is added read as follows:

4.20.3.5. Label. The discharge from test headers hose valves shall be labeled "TEST CONNECTIONS."

EXCEPTION: Temporary Fire Pumps and Outlets.

Sec. 123. Section 94.2030.11 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.10. NFPA 20-2013 Section 4.25.9 is added to read as follows:

4.25.9. Pressure Maintenance (Jockey or Makeup) Pumps. A pressure maintenance (jockey or makeup) pump shall be installed with each fire pump system.

EXCEPTION: Fire pump serving class II standpipes, temporary standpipes and fire pumps serving fire systems in one- and two-family dwellings.

Sec. 124. Section 94.2030.11 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.11. NFPA 20-2013 Section 4.31.1(1) is not adopted.

Sec. 125. Section 94.2030.12 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.12. NFPA 20-2013 Chapter 9 is not adopted.

Sec. 126. Section 94.2030.13 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.13. NFPA 20-2013 Sections 10.1 through 10.4.8 are not adopted.

Sec. 127. Section 94.2030.14 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.14. NFPA 20-2013 Sections 10.6 through 10.10.12.5 are not adopted.

Sec. 128. Section 94.2030.15 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.15. NFPA 20-2013 Section 11.4 is added and modified to read as follows:

11.4. Fuel Supply and Arrangement. Fuel supply and arrangement shall be installed as required by the Los Angeles Fire Code.

Sec. 129. Section 94.2030.16 of the Los Angeles Municipal Code is amended to read as follows:

94.2030.16. NFPA 20-2013 Sections 11.4.1 through 11.4.6.4 are not adopted.

Sec. 130. Section 94.2040.0 of the Los Angeles Municipal Code is amended to read as follows:

94.2040.0. NFPA 24 Underground Fire Protection Piping.

This section regulates underground fire protection piping between the City main or other sources of supply and fire hydrants, fire sprinkler risers, and monitor nozzles. Above ground standpipe piping and water spray systems shall conform to applicable code requirements for fire sprinkler piping and to the requirements set forth in NFPA 24 2013 with following exceptions and modifications:

94.2040.1. NFPA 24-2013 Chapter 2 is not adopted.

94.2040.2. NFPA 24-2013 Section 4.2.1 is modified to read as follows:

4.2.1. Installation work shall be done by fully experienced and responsible contractors. Contractors shall be appropriately licensed in the State of California to install private fire service mains and their appurtenances.

94.2040.3. NFPA 24-2013 Section 4.2.2 is modified to read:

4.2.2. Installation or modification of private fire service mains shall not begin until plans are approved and appropriate permits secured from the authority having jurisdiction.

94.2040.4. NFPA 24-2013 Section 4.2.2.1 is added to read:

4.2.2.1. As approved by the authority having jurisdiction, emergency repair of existing system may start immediately, with plans being submitted to the authority having jurisdiction within 96 hours from the start of the repair work.

94.2040.5. NFPA 24-2013 Section 5.6 is modified to read:

5.6. Pumps. A single automatically controlled fire pump installed in accordance with Section 94.2030 of this chapter shall be an acceptable water supply source.

94.2040.6. NFPA 24-2013 Section 5.7 is added and modified to read:

5.7. Tanks shall be installed in accordance with Section 94.2050 of this Article.

94.2040.7. Reserved.

94.2040.8. NFPA 24-2013 Section 5.9.1.2 is amended to read as follows:

5.9.1.2. Fire department connections shall be properly supported and protected from mechanical damage.

94.2040.9. Reserved.

94.2040.10. NFPA 24-2013 Section 5.9.5.1 is added to read:

5.9.5.1. Fire department connections shall be located at the nearest point of the department apparatus accessibility or at a location approved by the authority having jurisdiction.

94.2040.11. NFPA 24-2013 Section 6.1.5 is modified to read:

6.1.5. A non-indicating valve such as an underground gate valve with approved roadway box, complete with T wrench, and accepted by the authority having jurisdiction shall be permitted to be used as sectional isolation valves in private service mains that do not supply fire sprinklers.

94.2040.12. NFPA 24-2013 Section 6.2.11 (5) is not adopted.

94.2040.13. Reserved.

94.2040.14. NFPA 24-2013 Section 6.4.1 is modified by changing the reference "NFPA 13" to "Section 94.2050 of this Article."

94.2040.15. NFPA 24-2013 Section 6.6.2 is added to read:

6.6.2. A sectional valve shall be provided at the following locations:

1. On each bank where a main crosses a body of water; and
2. Outside the building foundation(s) where a main or a section of a main runs under a building.

94.2040.16. NFPA 24-2013 Sections 6.6.2.1 through 6.6.2.4 are added to read as follows:

6.6.2.1. Sectional control valves are not required when the fire service main system serves less than six fire appurtenances.

6.6.2.2. Sectional control valves shall be indicating valves in accordance with Section 94.2010 of this Article.

6.6.2.3. Sectional control valves on looped systems shall be located so that no more than five fire appurtenances are affected by shut-down of any single portion of the fire service main. Each fire hydrant, fire sprinkler system riser, and standpipe riser shall be considered a separate fire appurtenance. In-rack sprinkler systems shall not be considered as a separate appurtenance.

6.6.2.4. The number of fire appurtenances between sectional control valves is allowed to be modified by the authority having jurisdiction.

94.2040.17. Reserved.

94.2040.18. NFPA 24-2013 Section 7.1.1.1 is added and modified to read as follows:

7.1.1.1. Hydrant Valves. Each fire hydrant shall be isolated by listed key-type gate valve located at least four feet and not more than ten feet from the fire hydrant. The valve shall not be located in a parking space. No fire sprinkler riser valve shall control any fire hydrant.

94.2040.19. NFPA 24-2013 Section 7.1.4 is modified to read:

7.1.4. Water Supplies. Water supplies for fire hydrant, monitoring nozzle and water spray systems shall be approved by the Fire Department.

94.2040.20. NFPA 24-2013 Section 10.6.4 is modified to read as follows:

10.6.4. Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall not contain mechanical joints.

EXCEPTIONS:

- I. Where allowed in accordance with 10.6.2.
- II. Alternate designs may be utilized where designed by a registered professional engineer and approved by the enforcing agency.

94.2040.21. NFPA 24-2013 Section 10.9.1 is amended to read as follows:

10.9.1. Backfill shall be well tamped in layers or puddled under and around pipes to prevent settlement or lateral movement. Backfill shall consist of clean fill sand or pea gravel to a minimum of 6" below and to a minimum of 12" above the pipe and shall contain no ashes cinders, refuse, organic matter, or other corrosive materials. Other backfill materials and methods are permitted where designed by a registered professional engineer and approved by the enforcing agency.

94.2040.22. NFPA 24-2013 Section 10.10.2.2.5 is amended to read as follows:

10.10.2.2.5. When permitted by the authority Having Jurisdiction and required for safety measures presented by the hazards of open trenches, the pipe and joints shall be permitted to be backfilled, provided the installing contractor takes the responsibility for locating and correcting leakage.

94.2040.23. NFPA 24-2013 Section 12.1 is amended to read:

12.1. General. Above ground pipe and fittings shall comply with the applicable Section 94.2010 of this Article that address pipe, fittings, joining methods, hangers and installation.

94.2040.24. NFPA 24-2013 Section 12.2.5 is added to read:

12.2.5. To minimize or prevent breakage where subject to earthquakes, above ground pipe shall be protected in accordance with the seismic requirements of Section 2010 of this Article.

94.2040.25. NFPA 24-2013 Section 12.2.6 is added to read:

12.2.6. Mains that pass through walls, floors, and ceilings shall be provided with clearances in accordance with Section 2010 of this Article.

Sec. 131. The first unnumbered paragraph and Subsections 3, 4, 5, 6 and 7 of Section 94.2050.0 of the Los Angeles Municipal Code are amended to read as follows:

94.2050.0. NFPA 22 Fire Protection Tanks.

Tanks for water storage for fire protection systems and associated piping shall conform to the requirements of NFPA 22 - 2013 with the following exceptions, modifications and additions:

3. Section 14.2.3 is modified to read:

14.2.3.1. Underground Pipe Material. Piping shall be in accordance with section 94.2040.0 of this chapter.

14.2.3.2. Aboveground Pipe Material. Aboveground pipe material shall be in accordance with sections 94.2010.0 and 94.2030.0 of this Article.

4. Section 14.2.12.4 is added to read:

14.2.12.4. Valve. A readily accessible indicating-type control valve shall be installed in the water filling piping so as to isolate each tank.

5. Section 14.4.5 is modified to read:

14.4.5. Tank Fill. Each tank shall be equipped with an automatic tank fill line that shall be sized to fill the tank in eight hours but shall not be smaller than two inches in diameter.

For high-rise buildings see Section 94.2060.0 of this Article.

6. Sections 14.4.5.1 through 14.4.5.4 are not adopted.

7. Section 14.9.3 is added to read:

14.9.3. Monitor. High and low level alarms shall be closed circuit electric alarms that sound an alarm and turn on an indication light at a permanently staffed location when the water level is not within ten percent of the design volume.

Sec. 132. Section 94.2060.1.2 of the Los Angeles Municipal Code is amended to read as follows:

94.2060.1.2. The capacity of the tank shall be based on the required standpipe demand capacity for the duration as specified in Table 11.2.3.1.2 of NFPA 13 but not less than 30,000 gallons.

Sec. 133. Section 94.2060.1.4 of the Los Angeles Municipal Code is amended to read as follows:

94.2060.1.4. In buildings over 420 feet high, fire sprinklers serving each floor shall be supplied from two standpipe risers. The supply shall be adequate with one connection shut off. Each connection to a riser shall have a shut off valve and a check valve.

Sec. 134. Division 21 of Article 4, Chapter IX of the Los Angeles Municipal Code is added to read as follows:

ARTICLE 4, DIVISION 21

APPENDICES

SEC. 94.2100.0. BASIC PROVISIONS.

Appendix A of the 2013 California Plumbing Code is adopted by reference with the following amendment:

A 3.1. Residual Pressures. Decide what is the desirable minimum residual pressure that shall be maintained at the highest fixture in the supply system. The available residual pressure shall be not less than 15 (psi) (103 kPa). Where fixtures, fixture fittings or both are installed that require residual pressure exceeding 15 psi (103 kPa), that minimum residual pressure shall be provided.

Appendices B, D, G, H, I, and J, of the 2013 California Plumbing Code are adopted by reference.

Sec. 135. The City Clerk shall certify to the passage of this ordinance and have it published in accordance with Council policy, either in a daily newspaper circulated in the City of Los Angeles or by posting for ten days in three public places in the City of Los Angeles: one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall; one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall East; and one copy on the bulletin board located at the Temple Street entrance to the Los Angeles County Hall of Records.

I hereby certify that this ordinance was passed by the Council of the City of Los Angeles, at its meeting of _____.

HOLLY WOLCOTT, Interim City Clerk

By _____ Deputy

Approved _____

Mayor

Approved as to Form and Legality
MICHAEL N. FEUER, City Attorney

By _____
KIM RODGERS WESTHOFF
Deputy City Attorney

Date _____

File No(s). _____

DRAFT