

# **2019 FIRE CODE ADOPTION**

## **CHAPTER 1, SCOPE AND ADMINISTRATION**

### **17.56.030**

#### **[A] 101.1 Title, Amended**

These regulations shall be known as the City of Huntington Beach Fire Code (HBFC), hereinafter referred to as “this code.”

#### Markup Version

#### **[A] 101.1 Title**

These regulations shall be known as the ***City of Huntington Beach*** Fire Code (HBFC) hereinafter referred to as “this code.”

### **17.56.040**

#### **[A] 102.7 Referenced codes and standards.**

The codes and standards referenced in this code shall be those that are listed in Chapter 80 as well as City Specifications as signed by the Fire Chief, and such codes and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

#### Markup Version

#### **[A] 102.7 Referenced codes and standards.**

The codes and standards referenced in this code shall be those that are listed in Chapter 80 **as well as City Specifications as signed by the Fire Chief**, and such codes and standards shall be considered to be part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

### **17.56.050**

**[A] 105.4.2.1 Fire Protection system shop drawings, Amended.** Shop drawings for the fire protection system(s) shall be submitted to indicate compliance with this code and the construction documents, and shall be approved prior to the start of installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9. Shop drawings are required for any fire protection system that is to be installed or modified, regardless of the number of sprinkler heads, alarm devices or nozzles involved, or the dollar value of the work.

#### Markup Version

**[A] 105.4.2.1 Fire Protection system shop drawings, Amended.** Shop drawings for the fire protection system(s) shall be submitted to indicate compliance with this code

and the construction documents, and shall be approved prior to the start of installation. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9. Shop drawings are required for any fire protection system that is to be installed or modified, regardless of the number of sprinkler heads, alarm devices or nozzles involved, or the dollar value of the work.

## **17.56.060**

**105.6.30 Mobile food preparation vehicles, Amended.** A permit is required for mobile food preparation vehicles that are part of a Huntington Beach permitted special or specific event equipped with appliances that produce smoke or grease-laden vapors.

### Markup Version

**105.6.30 Mobile food preparation vehicles, Amended.** A permit is required for mobile food preparation vehicles **that are part of a Huntington Beach permitted special or specific event** equipped with appliances that produce smoke or grease-laden vapors.

## **17.56.070**

**[A] 108.1 Board of appeals established, Amended.** In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there may be created a board of appeals. The board of appeals shall be appointed by the City Council and shall hold office at its pleasure. The fire code official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

### Markup Version

**[A] 108.1 Board of appeals established, Amended.** In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there may be created a board of appeals. The board of appeals shall be appointed by the City Council and shall hold office at its pleasure. The fire code official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

## **17.56.080**

**[A] 110.4 Violation Penalties Amended.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code shall be guilty of a misdemeanor as prescribed in Chapter 1.16 of the Huntington Beach Municipal Code, or may be subject to administrative citations as prescribed in Chapter

1.18 of the Huntington Beach Municipal Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

#### Markup Version

**[A] 110.4 Violation Penalties Amended.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code shall be guilty of a misdemeanor as prescribed in Chapter 1.16 of the Huntington Beach Municipal Code, or may be subject to administrative citations as prescribed in Chapter 1.18 of the Huntington Beach Municipal Code. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

### **CHAPTER 2, DEFINITIONS**

#### **17.56.090**

**CONTAINMENT VESSEL, Amended.** A gas-tight Department of Transportation-transportable recovery vessel designed so that a leaking compressed gas container can be placed within its confines thereby encapsulating the leaking container.

#### Mark-up version:

**CONTAINMENT VESSEL, Amended.** A gas-tight Department of Transportation-transportable recovery vessel designed so that a leaking compressed gas container can be placed within its confines thereby encapsulating the leaking container.

### **CHAPTER 3, GENERAL REQUIREMENTS**

#### **17.56.100**

##### **SECTION 321**

##### **DEVELOPMENT ON OR NEAR LAND CONTAINING OR EMITTING TOXIC, COMBUSTIBLE OR FLAMMABLE LIQUIDS, GASES OR VAPORS, Added**

**321.1 Geological studies, evaluations, reports.** The fire code official may require the submittal for approval of geological studies, evaluations, reports remedial recommendations and/or similar documentation from a state licensed and department-approved individual or firm on any parcel of land to be developed which has, or is adjacent to, or within 1000 feet of a parcel of land that has an active or abandoned oil or gas well operation, petroleum or chemical refining facility, petroleum or chemical storage, or may contain or give off toxic, combustible or flammable liquids, gases or vapors. The submitted documentation will show that the site is compliant with current signed City Specifications 429, Methane District Building Permit Requirements and 431-92, Soil Quality Standards.

## 17.56.110

### CFC SECTION 321 PARADE FLOATS, Added

**321.1 Decorative materials, Added.** Decorative materials on parade floats shall be non-combustible or flame retardant.

**321.2 Fire protection, Added.** Motorized parade floats and towing apparatus shall be provided with a minimum 2A10BC rated portable fire extinguisher readily accessible to the operator.

**321.3 Engine exhaust, Added.** Motorized parade floats shall be provided with an engine exhaust system that is capable of carrying the exhaust product away from any enclosed spaces to the open air.

## CHAPTER 5, FIRE SERVICE FEATURES

## 17.56.120

**503.1.1 Buildings and facilities, Amended.** Approved fire apparatus access roads shall be provided for every building, facility or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and current signed City Specification 401, *Minimum Standards for Fire Apparatus Access*, and shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

### **Exceptions:**

1. The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where:

1.1 Reserved.

1.2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.

1.3. There are not more than two Group R-3 or Group U occupancies.

2. Reserved.

### Mark-up Version:

**503.1.1 Buildings and facilities.** Approved fire apparatus access roads shall be provided for every building, facility or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and current City Specification 401, *Minimum Standards for*

*Fire Apparatus Access* shall extend to within 150 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.

**Exceptions:**

1. The fire code official is authorized to increase the dimension of 150 feet (45 720 mm) where any of the following conditions occur

1.1 Reserved.

1.2 Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and in approved alternatives means of fire protection is provided.

1.3. There are not more than two Group R-3 or Group U occupancies.

2. Reserved.

**17.56.130**

**503.2 Specifications.** Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

Mark-up Version:

**503.2 Specifications.** Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

**17.56.140**

**503.2.1 Dimensions, Amended.** The fire access roads shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

Mark-up Version:

**503.2.1 Dimensions, Amended.** Fire apparatus access roads shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

**17.56.150**

**Section 503.2.3 Surface, Amended.** Fire apparatus access roads shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

Mark-up Version:

**Section 503.2.3 Surface, Amended.** Fire apparatus access roads shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

#### **17.56.160**

**503.2.4 Turning radius, Amended.** The required turning radius of a fire apparatus access road shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

Mark-up Version

**503.2.4 Turning radius Amended.** The required turning radius of a fire apparatus access road shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

#### **17.56.170**

**503.2.5 Dead ends, Amended.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

Mark-Up Version:

**503.2.5 Dead ends, Amended.** Dead-end fire apparatus access roads in excess of 150 feet (45 720 mm) in length shall comply with the requirements stated in current City Specification 401, *Minimum Standards for Fire Apparatus Access*.

#### **17.56.180**

**503.6 Security gates.** The installation of security gates across a fire apparatus access road shall be installed and operated in accordance with current City Specification 403, *Fire Access for Pedestrian or Vehicular Security Gates & Buildings*.

Mark-Up Version:

**503.6 Security gates, Amended.** The installation of security gates across a fire apparatus access road shall be installed and operated in accordance with current City Specification 403, *Fire Access for Pedestrian or Vehicular Security Gates & Buildings*.

#### **17.56.190**

**505.1 Address identification, Amended.** New and existing buildings shall be provided with address identification in accordance with City Specification 428, *Premise Identification*.

Mark-Up Version:

**505.1 Address identification, Amended.** New and existing buildings shall be provided with address identification in accordance with City Specification 428, *Premise Identification*.

## 17.56.200

**506.1 Where required, Amended.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location in accordance with current City Specification 403, *Fire Access for Pedestrian or Vehicular Security Gates & Buildings*.

Mark-up Version:

**506.1 Where required, Amended.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location in accordance with current City Specification 403, *Fire Access for Pedestrian or Vehicular Security Gates & Buildings*.

## 17.56.210

**507.1 Required water supply, Amended.** An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

**Exception:**

Title 25 California Code of Regulations, Chapter 2, Subchapter 1, Article 6 – Fire Protection Standards for Parks – is hereby adopted by reference, and applies to all existing mobile home parks licensed by the State of California Department of Housing and Community Development (HCD), notwithstanding any contrary provisions as set forth in Title 25, Section 1304(a).

Mark-Up Version:

**507.1 Required water supply, Amended.** An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

**Exception:**

Title 25 California Code of Regulations, Chapter 2, Subchapter 1, Article 6 – Fire Protection Standards for Parks – is hereby adopted by reference, and applies to all existing mobile home parks licensed by the State of California Department of Housing and Community Development (HCD), notwithstanding any contrary provisions as set forth in Title 25, Section 1304(a).

## 17.56.220

**507.5 Fire hydrant systems, Amended.** Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.7 and Appendix C, or by an approved method.

Minimum fire hydrant spacing for multi-family residential (triplexes or greater, apartment houses, hotels, convents or monasteries) and all commercial or industrial properties shall be spaced not more than 300 feet along streets or fire apparatus access roadways, so that all fire apparatus-accessible portions of the building are within 150 feet of a hydrant. Minimum fire hydrant spacing for single-family detached and duplex residential dwellings shall be not more than 500 feet along the street or fire apparatus access roadways, so that each dwelling is within 300 feet of a hydrant.

Mark-Up Version:

**507.5 Fire hydrant systems, Amended.** Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6 and Appendix C, or by an approved method. Minimum fire hydrant spacing for multi-family residential (triplexes or greater, apartment houses, hotels, convents or monasteries) and all commercial or industrial properties shall be spaced not more than 300 feet along streets or fire apparatus access roadways, so that all fire apparatus-accessible portions of the building are within 150 feet of a hydrant. Minimum fire hydrant spacing for single-family detached and duplex residential dwellings shall be not more than 500 feet along the street or fire apparatus access roadways, so that each dwelling is within 300 feet of a hydrant.

#### **17.56.230**

**Section 507.5.7 Fire hydrant supply connections, Added.** It shall be prohibited for underground water supply lines with a single connection from a municipal main to supply both fire hydrants and fire suppression systems. Looped supply lines that are supplied from two points of connection shall be allowed for hydrants and fire suppression system supplies.

### **CHAPTER 9, FIRE PROTECTION SYSTEMS**

#### **17.56.240**

**901.6.3 Records, Amended.** Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained. All reports of the test and maintenance results shall be submitted to the Huntington Beach Fire Department electronically in a method and format selected by the fire code official.

Mark-up Version:

**901.6.3 Records, Amended.** Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained. All reports of the test and maintenance results shall be submitted to the Huntington Beach Fire Department electronically in a method and format selected by the fire code official.

#### **17.56.250**

**903.2 Where Required, Amended.** Approved automatic sprinkler systems in new buildings and structures as well as existing buildings and structures, as required by Section 1103.5.5, shall be provided in the locations described in Sections 903.2.1

through 903.2.12. In no case, where the provisions of Section 903 of this code are applicable, and notwithstanding any less restrictive provisions or exceptions, shall a building or structure be constructed or modified to exceed 10,000 square feet in total gross floor area, or 5,000 square feet in gross floor area per fire area, without approved automatic sprinkler systems being provided throughout the building or fire area, respectively.

Mark-Up Version:

**903.2 Where required, Amended.** Approved automatic sprinkler systems in new buildings and structures as well as existing buildings and structures, as required by Section 1103.5.5, shall be provided in the locations described in Sections 903.2.1 through 903.2.12. In no case, where the provisions of Section 903 of this code are applicable, and notwithstanding any less restrictive provisions or exceptions, shall a building or structure be constructed or modified to exceed 10,000 square feet in total gross floor area, or 5,000 square feet in gross floor area per fire area, without approved automatic sprinkler systems being provided throughout the building or fire area, respectively.

**17.56.260**

**903.2.4 Group F, Amended.** An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy where one of the following conditions exists:

1. A Group F fire area exceeds 5,000 square feet.
2. A Group F fire area is located more than three stories above grade plane.
3. Reserve
4. A Group F occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).

Mark-Up Version:

**903.2.4 Group F-1.** An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 12,000 square feet (1115 m<sup>2</sup>).
2. A Group F-1 fire area is located more than three stories above grade plane.
3. Reserve.
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).

## 17.56.270

**903.3.1.1.1 Exempt location, Amended.** In other than Group I-2, I-2.1 and I-3 occupancies, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Fire service access elevator machine rooms and machinery spaces.
4. Machine rooms, machinery spaces, control rooms, and control spaces with occupant evacuation elevators designed in accordance with Section 3008 of the California Building Code.
5. When approved by the fire code official, spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the California Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 712 of the California Building Code, or both.
6. Solar photovoltaic panel structures with no use underneath. Signs may be provided, as determined by the enforcing agency prohibiting any use underneath including storage.
7. 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 gases to escape, as determined by the enforcing agency.

### Mark-Up Version:

**903.3.1.1.1 Exempt locations.** In other than Group I-2, I-2.1 and I-3 occupancies, automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.

2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Fire service access elevator machine rooms and machinery spaces.
4. Machine rooms, machinery spaces, control rooms, and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the California Building Code.
5. When approved by the fire code official, *spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the California Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 712 of the California Building Code, or both.*
6. *Solar photovoltaic panel structures with no use underneath. Signs may be provided, as determined by the enforcing agency prohibiting any use underneath including storage.*
7. *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 gases to escape, as determined by the enforcing agency.*

## **17.56.280**

**903.3.5.3 Hydraulic calculations margin, Added.** Fire protection system hydraulic calculations shall include a 10 percent safety margin between the available water supply and the required system supply.

## **17.56.290**

**903.4 Sprinkler system supervision and alarms, Amended.** All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

### **Exceptions:**

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area systems in accordance with Section 903.3.8.
3. Reserved.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Reserved.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.

7. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.

Mark-Up Version:

**903.4 Sprinkler system supervision and alarms.** All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures and water-flow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

**Exceptions:**

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area systems in accordance with Section 903.3.8.
3. Reserved.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Reserved.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

**17.56.300**

**907.1 General, Amended.** This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures. The requirements of Section 907.2 are also applicable to existing buildings and structures as required by section 907.9.

Mark-Up Version:

**907.1 General, Amended.** This section covers the application, installation, performance and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 are applicable to new buildings and structures. The requirements of Section 907.2 are applicable to existing buildings and structures as required by section 907.9.

## 17.56.310

**914.2.1 Automatic sprinkler system, Amended.** Covered and open mall buildings and buildings connected shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, which shall comply with the following:

1. The automatic sprinkler system shall be complete and operative throughout occupied space in the covered mall building prior to occupancy of any of the tenant spaces. Unoccupied tenant spaces shall be similarly protected unless provided with approved alternate protection.
2. Sprinkler protection for the mall of a covered mall building shall be independent from that provided for tenant spaces or anchor buildings.
3. Sprinkler protection for the tenant spaces of an open mall building shall be independent from that provided for anchor buildings.
4. Sprinkler protection shall be provided beneath exterior circulation balconies located adjacent to an open mall.
5. Where tenant spaces are supplied by the same system, they shall be independently controlled.

**Exception:** Reserved.

### Mark-Up Version:

**914.2.1 Automatic sprinkler system.** Covered and open mall buildings and buildings connected shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, which shall comply with the all of the following:

1. The automatic sprinkler system shall be complete and operative throughout occupied space in the mall building prior to occupancy of any of the tenant spaces. Unoccupied tenant spaces shall be similarly protected unless provided with approved alternative protection.
2. Sprinkler protection for the mall of a covered mall building shall be independent from that provided for tenant spaces or anchor buildings.
3. Sprinkler protection for the tenant spaces of an open mall building shall be independent from that provided for anchor buildings.
4. Sprinkler protection shall be provided beneath exterior circulation balconies located adjacent to an open mall.
5. Where tenant spaces are supplied by the same system, they shall be independently controlled.

**Exception:** Reserved.

## 17.56.320

**914.3.1 Automatic sprinkler system, Amended.** Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 914.3.2. A sprinkler water-flow alarm-initiating device and a control valve with a supervisory signal-initiating device shall be provided at the lateral connection to the riser on each floor.

**Exception:** Reserved.

Mark-Up Version:

**914.3.1 Automatic sprinkler system.** Buildings and structures shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and a secondary water supply where required by Section 914.3.2. *A sprinkler water-flow alarm-initiating device and a control valve with a supervisory signal-initiating device shall be provided at the lateral connection to the riser on each floor.*

**Exception:** ~~5~~Reserved.

## 17.56.330

**914.6.1 Automatic sprinkler system, Amended.** Stages shall be equipped with an automatic fire-extinguishing system in accordance with Section 903.3.1.1. Sprinklers shall be installed under the roof and gridiron and under all catwalks and galleries over the stage. Sprinklers shall be installed in dressing rooms, performer lounges, shops and storerooms accessory to such stages.

**Exceptions:**

1. Reserved.
2. Reserved.
3. Reserved.

Mark-Up Version:

**914.6.1 Automatic sprinkler system.** Stages shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1. Sprinklers shall be installed under the roof and gridiron and under all catwalks and galleries over the stage. Sprinklers shall be installed in dressing rooms, performer lounges, shops and storerooms accessory to such stages.

**Exceptions:**

1. Reserved.
2. Reserved.
3. Reserved.

### 17.56.340

**916.12 Notification Devices, Added.** Gas detection systems shall be equipped with emergency notification devices. Notification devices shall be located in all areas of the building protected by the gas detection system. Notification devices shall comply with the installation and spacing requirements stated in NFPA 72 and the manufacturer's specifications.

## **CHAPTER 11, CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS**

### 17.56.350

**1103.5 Sprinkler systems, Amended.** An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 1103.5.1 through 1103.5.5.

Mark-Up Version:

**1103.5 Sprinkler systems.** An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 1103.5.1 through 1103.5.5

### 17.56.360

**1103.5.5 Tenant improvements, Added.** Section 903 shall apply to existing occupancies/tenant space undergoing tenant improvement as follows:

1. Occupancy/tenant space undergoing tenant improvement where the square footage of the space is being increased.
2. Occupancy/tenant space where there is a change in occupancy classification to an assembly, educational, institutional, hazardous, or residential use.
3. Occupancy/tenant space where the entire roof structure is to be removed during the improvement.
4. Assembly occupancy with an occupant load that exceeds 299 persons.

**Exceptions:**

1. Existing Group R-3 occupancies that will remain below a gross floor area of 5,000 square feet.
2. Existing Group R-2 occupancies where the tenant improvement is in only one unit.

Mark-Up Version: Not applicable – Added Section

### 17.56.370

**1103.7 Fire alarm systems, Amended.** An approved fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.7.10 and provide occupant notification in accordance with Section 907.5

unless other requirements are provided by other sections of this code. Existing high-rise buildings shall comply with Section 1103.7.8 and 1103.7.9.

**Exception:** Occupancies with an existing previously approved fire alarm system.

Mark-Up Version:

**1103.7 Fire alarm systems.** An approved fire alarm system shall be installed in existing buildings and structures in accordance with Sections 1103.7.1 through 1103.7.10 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by other sections of this code. Existing high-rise buildings shall comply with Section 1103.7.8 and 1103.7.9.

## **17.56.380**

**1103.7.10 Tenant improvements, Added.** Section 907 shall apply to existing occupancies/tenant space undergoing tenant improvement as follows:

1. Occupancy/tenant space undergoing tenant improvement where the square footage of the space is being increased.
2. Occupancy/tenant space where there is a change in occupancy classification to an assembly, educational, institutional, hazardous, or residential use.
3. Occupancy/tenant space where the entire roof structure is to be removed during the improvement.
4. Assembly occupancy that increases the maximum occupant load to exceed 299 persons.

**Exception:** The fire code official may waive this requirement based on the scope of the project.

## **CHAPTER 23, MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES**

## **17.56.390**

**2306.2.3 Above-ground tanks located outside, above grade, Amended.** Above-ground tanks shall not be used for the storage of Class I, II, or III liquid motor fuels, except as provided by this section.

1. Above-ground tanks used for outside, above-grade storage of Class I liquids shall be listed and labeled as protected above ground tanks in accordance with UL 2085 and shall be in accordance with Chapter 57. Such tanks shall be located in accordance with Table 2306.2.3.
2. Above-ground tanks used for outside, above-grade storage of Class II or IIIA liquids shall be listed and labeled as protected above-ground tanks in

accordance with UL 2085 and shall be installed in accordance with Chapter 57. Tank locations shall be in accordance with Table 2306.2.3.

**Exception:** Other aboveground tanks that comply with Chapter 57 where approved by the fire code official.

3. Tanks containing fuels shall not exceed 2,200 gallons (8,327 L). Aggregate quantities greater than 2,200 gallons at a single site requires approval by the fire code official.
4. Tanks located at farms, construction projects, or rural areas shall comply with section 5706.2
5. Above-ground tanks used for outside above-grade storage of Class IIIB liquid motor fuel shall be listed and labeled in accordance with UL 142 or listed and labeled as protected above-ground tanks in accordance with UL 2085 and shall be installed in accordance with Chapter 57. Tank locations shall be in accordance with Table 2306.2.3.

Mark-Up Version:

**2306.2.3 Above-ground tanks located outside, above grade, Amended.**

Aboveground tanks shall not be used for the storage of Class I, II or III liquid motor fuels, except as provided by this section.

1. Above-ground tanks used for outside, above-grade storage of Class I liquids shall be listed and labeled as protected above-ground tanks in accordance with UL 2085 and shall be in accordance with Chapter 57. Such tanks shall be located in accordance with Table 2306.2.3.
2. Above-ground tanks used for outside, above-grade storage of Class II or IIIA liquids shall be listed and labeled as protected above-ground tanks in accordance with UL 2085 and shall be installed in accordance with Chapter 57. Tank locations shall be in accordance with Table 2306.2.3.

**Exception:** Other above-ground tanks that comply with Chapter 57 where approved by the fire code official.

3. Tanks containing fuels shall not exceed 2,200 gallons (8,327 L). Aggregate quantities greater than 2,200 gallons at a single site requires approval by the fire code official.
4. Tanks located at farms, construction projects, or rural areas shall comply with Section 5706.2.
5. Above-ground tanks used for outside above-grade storage of Class IIIB liquid motor fuel shall be listed and labeled in accordance with UL 142 or listed and

labeled as protected above-ground tanks in accordance with UL 2085 and shall be installed in accordance with Chapter 57. Tank locations shall be in accordance with Table 2306.2.3.

## **17.56.400**

**2306.2.4.1 Tank capacity limits, Amended.** Tanks storing Class I and Class II liquids at an individual site shall be limited to a maximum individual capacity of 2,200 gallons (8,327 L). Aggregate quantities greater than 2,200 gallons (8,327 L) at a single site requires approval by the fire code official.

Mark-Up Version:

**2306.2.4.1 Tank capacity limits, Amended.** Tanks storing Class I and Class II liquids at an individual site shall be limited to a maximum individual capacity of 2,200 gallons (8,327 L). Aggregate quantities greater than 2,200 gallons (8,327 L) at a single site requires approval by the fire code official.

## **17.56.410**

**2306.2.4.2 Fleet vehicle motor fuel-dispensing facilities, Amended.** Tanks storing Class II and Class IIIA liquids at a fleet vehicle motor fuel-dispensing facility shall be limited to a maximum individual capacity of 2,200 gallons (8,327 L). Aggregate quantities greater than 2,200 gallons (8,327 L) at a single site requires approval by the fire code official.

Mark-Up Version:

2306.2.4.2 Fleet vehicle motor fuel-dispensing facilities, Amended. Tanks storing Class II and Class IIIA liquids at a fleet vehicle motor fuel-dispensing facility shall be limited to a maximum individual capacity of 2,200 gallons (8,327 L). Aggregate quantities greater than 2,200 gallons (8,327 L) at a single site requires approval by the fire code official.

## **17.56.420**

**2306.2.6 Special enclosures, Amended.** Where installation of tanks in accordance with Section 5704.2.11 is impractical, or because of property or building limitations, tanks for liquid motor fuels are allowed to be installed in buildings in special enclosures in accordance with all of the following:

1. The special enclosures shall be liquid tight and vapor tight.
2. The special enclosure shall not contain backfill.
3. Side, top and bottom of the special enclosure shall be reinforced concrete at least 6 inches (152 mm) thick, with openings for inspection through the top only.

4. Tanks connections shall be piped or closed such that neither vapors not liquid can escape into the enclosed space between the special enclosure and any tanks inside the special enclosure.
5. Means shall be provided whereby portable equipment can be employed to discharge to the outside any vapors which might accumulate inside the special enclosure should a leakage occur.
6. Tanks containing Class I, II, or IIIA liquids inside a special enclosure shall not exceed 2,200 gallons (8,327 L) in individual capacity. Aggregate quantities greater than 2,200 gallons (8,327 L) at a single site requires approval by the fire code official.
7. Each tank within special enclosures shall be surrounded by a clear space of not less than 3 feet (910 mm) to allow for maintenance and inspection.

Mark-Up Version:

**2306.2.6 Special enclosures, Amended.** Where installation of tanks in accordance with Section 5704.2.11 is impractical, or because of property or building limitations, tanks for liquid motor fuels are allowed to be installed in buildings in special enclosures in accordance with all of the following:

1. The special enclosure shall be liquid tight and vapor tight.
2. The special enclosure shall not contain backfill.
3. Sides, top and bottom of the special enclosure shall be of reinforced concrete at least 6 inches (152 mm) thick, with openings for inspection through the top only.
4. Tank connections shall be piped or closed such that neither vapors nor liquid can escape into the enclosed space between the special enclosure and any tanks inside the special enclosure.
5. Means shall be provided whereby portable equipment can be employed to discharge to the outside any vapors which might accumulate inside the special enclosure should leakage occur.
6. Tanks containing Class I, II or IIIA liquids inside a special enclosure shall not exceed 2,200 gallons (8,327 L) in individual capacity. Aggregate quantities greater than 2,200 gallons (8,327 L) at a single site requires approval by the fire code official.
7. Each tank within special enclosures shall be surrounded by a clear space of not less than 3 feet (910 mm) to allow for maintenance and inspection.

**CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION**

**17.56.430**

**3310.1 Required access, Amended.** Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of temporary or permanent fire department connections.

Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. Construction sites shall have a minimum of 6-foot perimeter security fencing with gates installed for fire apparatus access. Gate widths shall be a minimum of 24 feet for fire apparatus roadways and 6 feet for walk-in entry. Secured vehicle gates or entries shall utilize approved Knox padlock or entries shall utilize an approved padlock or chain (maximum link or lock shackle size of 1/4") when required by a fire code official. Temporary fire lane signs shall be provided and maintained to allow emergency access during construction. Hydrants, fire department connections, and fire lanes shall be posted "Fire Lane – No Parking" when required by the fire code official.

Mark-Up Version:

**3310.1 Required access, Amended.** Approved vehicle access for firefighting shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 feet (30 480 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. Construction sites shall have a minimum of 6-foot perimeter security fencing with gates installed for fire apparatus access. Gate widths shall be a minimum of 24 feet for fire apparatus roadways and 6 feet for walk-in entry. Secured vehicle gates or entries shall utilize approved Knox padlock or entries shall utilize an approved padlock or chain (maximum link or lock shackle size of 1/4") when required by a fire code official. Temporary fire lane signs shall be provided and maintained to allow emergency access during construction. Hydrants, fire department connections, and fire lanes shall be posted "Fire Lane – No Parking" when required by the fire code official.

**17.56.440**

**3312.1 When required, Amended.** An approved water supply for fire protection, either temporary or permanent, as approved by both the Fire and Public Works Departments, shall be made available as soon as combustible material arrives on the site.

Mark-Up Version:

**3312.1 When required, Amended.** An approved water supply for fire protection, either temporary or permanent, as approved by both the Fire and Public Works Departments, shall be made available as soon as combustible material arrives on the site.

**17.56.450**

**3313.1 Where required, Amended.** In buildings required to have standpipes by Section 905.3.1, not less than one standpipe shall be provided for use during construction. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as

construction progresses to within one floor of the highest point of construction having secured decking or flooring.

Mark-Up Version:

**3313.1 Where required, Amended.** In buildings required to have standpipes by Section 905.3.1, not less than one standpipe shall be provided for use during construction. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairs. Such standpipes shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.

**17.56.460**

**3314.1.1 Function During Construction, Added.** For buildings higher than a single story above grade, and under construction, an approved automatic sprinkler system shall be installed and shall be fully functional up to one floor below the highest point of construction having secured decking or flooring.

**Exception:** Buildings entirely of Type 1 or Type 2 construction.

**17.56.470**

**3318 Owner's responsibility, Added.** Necessary precautions and engineering controls shall be utilized to minimize the potential for false alarm activations caused by construction activity. False alarms caused by construction activity shall be treated as a system malfunction and may result in charges in accordance with the approved fee schedule.

**CHAPTER 50, HAZARDOUS MATERIALS – GENERAL PROVISIONS**

**17.56.480**

**5003.3.1.4 Responsibility for cleanup.** The person, firm or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. When deemed necessary by the fire code official, cleanup may be initiated by the fire department or by an authorized individual or firm. Costs associated with such cleanup shall be borne by the owner, operator or other person responsible for the unauthorized discharge. Clean up shall comply with current signed City Specification 431-92, Soil Quality Standard.

Mark-Up Version:

**5003.3.1.4 Responsibility for cleanup, Amended.** The person, firm or corporation responsible for an unauthorized discharge shall institute and complete all actions necessary to remedy the effects of such unauthorized discharge, whether sudden or gradual, at no cost to the jurisdiction. When deemed necessary by the fire code official,

cleanup may be initiated by the fire department or by an authorized individual or firm. Costs associated with such cleanup shall be borne by the owner, operator or other person responsible for the unauthorized discharge. Clean up shall comply with current signed City Specification 431-92, Soil Quality Standard.

## **CHAPTER 57, FLAMMABLE AND COMBUSTIBLE LIQUIDS**

### **17.56.490**

**5704.2.9.6.1 Locations where above-ground tanks are prohibited, Amended.** The limits referred to herein prohibiting the storage of Class I and Class II liquids in outside, above-ground tanks are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance.

#### **Exceptions:**

1. Bulk plants may exist in I-G (General Industrial) zoned districts only.
2. Class III liquids classified as a crude oil may only be stored on properties with an O (oil operations, no drilling) or O1 (drilling allowed, subject to conditional use) suffix.
3. Class II liquids may be stored temporarily on construction sites with the approval of the fire code official.
4. Storage of Class I or Class II liquids in aboveground tanks is prohibited within the City of Huntington Beach except at the locations classified as Zone I-G (General Industrial) where permitted by a site plan use permit on property designated as potentially suitable for the uses permitted under these zone's classifications by the Huntington Beach Zoning and subdivision Ordinance as the same may be amended from time to time.

#### **Mark-Up Version:**

**5704.2.9.6.1 Locations where above-ground tanks are prohibited, Amended.** The limits referred to herein prohibiting the storage of Class I and Class II liquids in outside, aboveground tanks are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance.

#### **Exceptions:**

1. Bulk plants may exist in I-G (General Industrial) zoned districts only.
2. Class III liquids classified as a crude oil may only be stored on properties with an O (oil operations, no drilling) or O1 (drilling allowed, subject to conditional use) suffix.

3. Class II liquids may be stored temporarily on construction sites with the approval of the fire code official.
4. Storage of Class I or Class II liquids in aboveground tanks is prohibited within the City of Huntington Beach except at the locations classified as Zone I-G (General Industrial) where permitted by a site plan use permit on property designated as potentially suitable for the uses permitted under these zone's classifications by the Huntington Beach Zoning and subdivision Ordinance as the same may be amended from time to time.

## **17.56.500**

**5704.2.11.1 Location, Amended.** Flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with all of the following:

1. Tanks shall be located with respect to existing foundations and supports such that the loads carried by the latter cannot be transmitted to the tank.
2. The distance from any part of a tank storing liquids to the nearest wall of a basement, pit, cellar, or lot line shall not be less than 3 feet (914 mm).
3. A minimum distance of 1 foot (305 mm), shell to shell, shall be maintained between underground tanks.
4. The installation of underground combustible/flammable liquid tanks is hereby prohibited in all residential districts. The fire code official may authorize installation of underground combustible/flammable liquid tanks in agricultural and manufacturing districts.

### Mark-Up Version:

**5704.2.11.1 Location, Amended.** Flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with all of the following:

1. Tanks shall be located with respect to existing foundations and supports such that the loads carried by the latter cannot be transmitted to the tank.
2. The distance from any part of a tank storing liquids to the nearest wall of a basement, pit, cellar or lot line shall not be less than 3 feet (914 mm).
3. A minimum distance of 1 foot (305 mm), shell to shell, shall be maintained between underground tanks.
4. The installation of underground combustible/flammable liquid tanks is hereby prohibited in all residential districts. The fire code official may authorize

installation of underground combustible/flammable liquid tanks in agricultural and manufacturing districts.

## **17.56.510**

**5704.2.13.1.4 Tanks abandoned in place, Amended.** Tanks shall not be abandoned in place.

Mark-Up Version:

**5704.2.13.1.4 Tanks abandoned in place, Amended.** Tanks shall not be abandoned in place.

## **17.56.520**

**5706.2.4.4 Locations where above-ground tanks are prohibited, Amended.** The limits referred to herein prohibiting the storage of Class I and II liquids in outside, aboveground tanks are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance.

### **Exceptions:**

1. Bulk plants may exist in I-G (general industrial) zoned districts only.
2. Class III liquids classified as crude oil may only be stored on properties with an O (oil operations, no drilling) or O1 (drilling allowed, subject to conditional use) suffix.
3. Class II liquids may be stored temporarily on construction sites with the approval of the fire code official.
4. The storage of Class I and Class II liquids in aboveground tanks is prohibited within the City of Huntington Beach except at locations classified as Zone I-G (general industrial) where permitted by a site plan use permit on property designated as Huntington Beach Zoning and Subdivision Ordinance as the same may be amended from time to time.

Mark-Up Version:

**5706.2.4.4 Locations where above-ground tanks are prohibited, Amended.** The limits referred to herein prohibiting the storage of Class I and II liquids in outside, aboveground tanks are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance.

### **Exceptions:**

1. Bulk plants may exist in I-G (general industrial) zoned districts only.
2. Class III liquids classified as crude oil may only be stored on properties with an O (oil operations, no drilling) or O1 (drilling allowed, subject to conditional use) suffix.
3. Class II liquids may be stored temporarily on construction sites with the approval of the fire code official.
4. The storage of Class I and Class II liquids in aboveground tanks is prohibited within the City of Huntington Beach except at locations classified as Zone I-G (general industrial) where permitted by a site plan use permit on property designated as Huntington Beach Zoning and Subdivision Ordinance as the same may be amended from time to time.

### **17.56.530**

**5706.3 Well drilling, operating, and abandonment. Amended.** Wells for oil production or injection, and wells for natural gas shall be drilled, operated or abandoned in accordance the Huntington Beach Oil Code (Huntington Beach Municipal Code Title 15). Where there is a conflict between the California Fire Code and the Huntington Beach Oil Code, the most restrictive shall govern.

Current CFC:

**5706.3 Well drilling and operating, Amended.** Wells for oil production or injection, and wells for natural gas shall be drilled and operated in accordance with Section 5706.3.1.1 through 5706.3.8 and the Huntington Beach Oil Code (Huntington Beach Municipal Code Title 15). Where there is a conflict between the California Fire Code and the Huntington Beach Oil Code, the most restrictive shall govern.

## **CHAPTER 58, FLAMMABLE GASES AND FLAMMABLE CRYOGENIC FLUIDS**

### **17.56.540**

**5801.1.1 Methane Soil Gas, Added.** All sources of methane soil gas, including petrogenic and biogenic, are subject to methane soil gas testing, passive or active mitigation, and methane detection and alarm systems as prescribed in City Specification 429, *Methane District Building Permit Requirements*.

### **17.56.550**

**5806.2 Limitations, Amended.** The limits referred to herein prohibiting the storage of flammable cryogenic fluids in stationary containers outside buildings are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance.

Mark-Up Version:

**5806.2 Limitations Amended.** ~~flammable cryogenic fluids in stationar containers outside buildings is prohibited~~ The limits referred to herein prohibiting the storage of flammable cryogenic fluids in stationary containers outside buildings are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance.

## **CHAPTER 61, LIQUIFIED PETROLEUM GASES**

### **17.56.560**

**6104.2 Limitations, Amended.** The limits referred to herein prohibiting the storage of liquefied petroleum gases for the protection of heavily populated or congested areas are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance.

Mark-Up Version:

**6104.2 Maximum capacity within established limits, Amended.** The limits referred to herein prohibiting the storage of liquefied petroleum gases for the protection of heavily populated or congested areas are hereby established for all commercial land use districts as defined in the Huntington Beach Zoning and Subdivision Ordinance. ~~Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L) (see Section 3 of the Sample Legislation for Adoption of the California Fire Code on page v).~~

~~**Exception:** In particular installations, this capacity limit shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-gas containers, degree of fire protection to be provided and capabilities of the local fire department.~~

## **CHAPTER 80, REFERENCED STANDARDS**

### **AMENDMENTS TO NFPA 13-16**

### **17.56.570**

**6.7.2, Amended:** Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public or private hydrant. If the FDC serves a standpipe system, it shall be no more than 100 feet from a hydrant. The size of piping and the number of inlets shall be approved by the Fire code official. If approved by the H.B. Public Works Dept., it may be installed on the backflow assembly. Fire department inlet connections

shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

Mark-Up Version:

**6.7.2, Amended** ~~Fire department connections shall be equipped with approved plugs or caps, properly secured and arranged for easy removal by fire departments.~~ Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public or private hydrant. If the FDC serves a standpipe system, it shall be no more than 100 feet from a hydrant. The size of piping and the number of inlets shall be approved by the Fire code official. If approved by the H.B. Public Works Dept., it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red. When the fire sprinkler density design requires 500 gpm (including inside hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

**8.17.1.1.1 Residential Water-flow Alarms, Added.** Local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies not requiring a fire alarm system by the California Fire Code shall be provided with at least one approved interior alarm device in each unit, or interconnection to the unit smoke alarm system. Sound levels in all sleeping areas shall be a minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection (GFI), serving normally operated appliances in the residence.

**23.1.3 (43), Amended:**

Size and location of hydrants, showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated. Static and residual hydrants that were used in the flow tests shall be shown. Water supply certification shall be not more than six months prior to the plan submittal to the authority having jurisdiction.

Mark-Up Version:

**23.1.3 (43), Amended** Size and location of hydrants showing size and number of outlets and if outlets are to be equipped with independent gate valves. Whether hose houses and equipment are to be provided, and by whom, shall be indicated.

Static and residual hydrants that were used in flow tests shall be shown. Water supply certification shall be not more than six months prior to the plan submittal to the authority having jurisdiction.

## **AMENDMENTS TO NFPA 13D-16**

### **17.56.580**

#### **4.1.5, Added: Stock of Spare Sprinklers.**

**4.1.5.1, Added:** A supply of at least two sprinklers for each type shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

**4.1.5.2, Added:** The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

**4.1.5.3, Added:** The sprinklers shall be kept in a cabinet located where the temperature to which they are subjected will at no time exceed 100 °F (38°C).

**4.1.5.4, Added:** A special sprinkler wrench shall be provided and kept in the cabinet to be used in the removal and installation of sprinklers. One sprinkler wrench shall be provided for each type of sprinkler installed.

**7.1.2, Amended.** The sprinkler system piping shall not have a separate control valve installed unless supervised by one of the following methods:

- (1) Central station, proprietary or remote station alarm service.
- (2) Reserved.
- (3) Reserved.

#### **Mark-Up Version:**

**7.1.2, Amended** The sprinkler system piping shall not have separate control valves installed unless supervised by one of the following methods:

- (1) Central station, proprietary or remote station alarm service
- (2) ~~Local alarm service that causes the sounding of an audible signal at a constantly attended location~~ Reserved.
- (3) ~~Valves that are locked open~~ Reserved.

**7.3 Pressure Gauges, Amended.** At least one water pressure gauge shall be installed on the riser assembly.

#### **Mark-Up Version:**

**7.3 Pressure Gauges, Amended.** At least one water pressure gauge shall be installed on the riser assembly.

**7.3.1, Reserved.**

Mark-Up Version:

~~7.3.1 Where a dry system is installed, a pressure gauge shall be installed to indicate system air pressure. Reserved.~~

**7.6 Alarms, Amended.** Exterior water flow alarm indicating devices shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

**Exceptions:**

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified by the CBC or CRC are used to sound an interior alarm upon water flow switch activation.

Mark-Up Version:

~~7.6\* Alarms, Amended. Local waterflow alarms shall be provided on all sprinkler systems in homes not equipped with smoke alarms or smoke detectors in accordance with NFPA 72. Exterior water flow alarm indicating devices shall be listed for outside service and audible from the street from which the house is addressed. Exterior audible devices shall be placed on the front or side of the structure and the location subject to final approval by the fire code official. Additional interior alarm devices shall be required to provide audibility throughout the structure. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.~~

**Exceptions:**

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.

2. When smoke detectors specified by the CBC or CRC are used to sound an interior alarm upon water flow switch activation.

## **AMENDMENTS TO NFPA 13R-16**

### **17.56.590**

**6.16.1, Amended.** A local waterflow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Chapter 9 of the California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm, residential smoke detection or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

### **Mark-Up Version:**

**6.16.1, Amended.** A local waterflow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Chapter 9 of the California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm, residential smoke detection or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

There shall also be a minimum of one exterior alarm indicating device, listed for outside service and audible from the access roadway that serves that building.

## **AMENDMENTS TO NFPA 14-13**

## 17.56.600

**6.4.5.4.1, Amended.** The fire department connection shall have *four* 2 ½ inch, internal threaded (NHS) inlets. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 100 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

### Mark-Up Version:

**6.4.5.4.1, Amended** ~~The location of the fire department connection shall be permitted to exceed 100 ft (30.5 m) subject to the approval of the authority having jurisdiction.~~ The fire department connection shall have *four* 2 ½ inch, internal threaded (NHS) inlets. The inlets shall be provided with approved caps to protect the system from entry of debris. The location of the FDC shall be approved and be no more than 100 feet from a public hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. Fire department inlet connections shall be painted OSHA safety red.

## AMENDMENTS TO NFPA 24-16

## 17.56.610

**5.9.1.2, Amended.** Fire department connections shall be of an approved type and contain a minimum of two 2 ½ inch inlets. The location shall be approved and be no more than 150 feet from a public or private fire hydrant when serving a fire sprinkler system. When serving a standpipe system, it can be no more than 100 feet from a hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

### Mark-Up Version:

**5.9.1.2, Amended.** ~~Fire department connections shall be equipped with approved plugs or caps that are secured and arranged for easy removal by fire departments.~~ Fire department connections shall be of an approved type and contain a minimum of two 2 ½ inch inlets. The location shall be approved and be no more than 150 feet from a public or private fire hydrant when serving a fire sprinkler system. When serving a standpipe system, it can be no more than 100 feet from a hydrant. If acceptable to the water authority, it may be installed on the backflow assembly. The supply pipe shall be painted OSHA safety red.

**5.9.1.2.1, Added.** When the sprinkler density design is 500 gpm (including the interior hose stream demand) or greater, or a standpipe system is included, four 2 ½" inlets shall be provided.

**6.2.1.1, Added.** The closest upstream indicating control valve to the riser shall be painted OSHA red.

**6.3.3, Added.** All post indicator valves controlling fire suppression water supplies shall be painted OSHA red.

**10.1.1.3.2, Added.** All ferrous pipe shall be coated and wrapped. Joints shall be coated and wrapped after assembly. All fittings shall be protected with a loose 8-mil polyethylene tube. The ends of the tube shall extend past the joint by a minimum of 12 inches and be sealed with 2 inch wide tape approved for underground use. Galvanizing does not meet the requirements of this section.

**Exception:** 316 Stainless Steel pipe and fittings.

**10.4.1.1, Amended.** All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to poly-tube, and after installation.

Mark-Up Version:

**10.4.1.1 Coatings.** All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion retarding material **prior to poly-tube, and** after installation.

**10.4.1.4, Added.** All bolts used in pipe-joint assembly shall be 316 stainless steel.

**10.4.3.1, Amended.** Private fire service mains supplying fire protection systems within the building shall be permitted to extend no more than 18 inches, as measured from the outside of the building to the center of the vertical pipe, under the building to the riser location. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

**10.4.3.1.1, Amended.** Pipe Joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

**10.4.3.2, Amended.** Where approved, private fire service mains supplying systems within the building shall be permitted to extend more than 18 inches under the building when all the requirements of 10.4.3.2.1 through 10.4.3.2.4 are met.

Mark-Up Version:

**10.4.3.1, Amended.** Private fire service mains supplying fire protection systems within the building shall be permitted to extend no more than **~~10 ft (3.0 m), as measured from the outside of the building, under the building to the riser location~~ 18 inches, as measured from the outside of the building to the center of the vertical pipe, under the building to the riser location.** The pipe under the building or building foundation shall be 316 stainless steel and shall not contain mechanical joints.

**10.4.3.1.1, Amended** Pipe joints shall not be located directly under foundation fittings.

**10.4.3.1.2, Amended** Piping shall be installed a minimum of 12 in. (300 mm) below the bottom of building foundations or footers.

#### **AMENDMENTS TO NFPA 72-16**

### **17.56.620**

**14.2.2.2.3, Amended.** If a deficiency is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative and fire code official shall be informed of the impairment in writing within 24 hours.

Mark-Up Version:

**14.2.2.2.3, Amended.** If a deficiency is not corrected at the conclusion of system inspection, testing, or maintenance, the system owner or the owner's designated representative **and fire code official** shall be informed of the impairment in writing within 24 hours.

#### **APPENDIX B, FIRE-FLOW REQUIREMENTS FOR BUILDINGS**

### **17.56.630**

**B105.1 One- and two-family dwellings, Amended.** The minimum fire-flow and flow duration requirements for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.1 (1) and B105.1 (2).

**Exception:** When the building is equipped with an approved automatic sprinkler system, the fire flow requirements of Table B105.1 and B105.1 (2) shall not be less than 1,000 gallons per minute (3785.4 L/min) for 1 hour.

Mark-Up Version:

**B105.1 One- and two-family dwellings, Amended.** The minimum fire-flow and flow duration requirements for one- and two-family dwellings, Group R-3 and R-4 buildings and townhouses shall be as specified in Tables B105.1 (1) and B105.1 (2). .

**Exception:** .When the building is equipped with an approved automatic sprinkler system, the fire flow requirements of Table B105.1 and B105.1 (2) shall not be less than 1,000 gallons per minute (3785.4 L/min) for 1 hour