

### AGENDA REPORT

SAN CLEMENTE CITY COUNCIL MEETING

Meeting Date: November 5, 2013

Agenda Item Approvals:

City Manager

Dept. Head

Attorney **Finance** 



Orange County Fire Authority Department:

Community Development / Building Division

Prepared By:

Dennis Grubb, Assistant Fire Marshal

Mike Jorgensen, Building Official

Subject:

FIRST READING - ORDINANCE TO ADOPT FIRE CODE REGULATIONS AND LOCAL

**AMENDMENTS** 

Fiscal Impact: None.

Summary:

Orange County Fire Authority (OCFA) and City staff recommend that the Council introduce for first reading an ordinance amending Chapter 8.16 of the San Clemente Municipal Code adopting various fire code regulations and amendments and adopt the resolution setting forth findings for amendments reasonably necessary due to

local conditions.

\_ackground:

In accordance with State law, the 2013 Edition of the California Fire Code has been adopted by the State Building Standards Commission and published in the California Code of Regulations, Title 24. The new California Fire Code is mandated for statewide enforcement on January 1, 2014. The City may amend the California Fire Code to address local geologic, climatic or topographic conditions. The proposed ordinance adopts the Fire Code prescribed by state law, adopts amendments to those codes based on local conditions and adopts administrative provisions for the enforcement of the Fire Code. The proposed resolution adopts findings that local conditions make the changes to the California Fire Code reasonably necessary for building occupancies in the City. The proposed ordinance and resolution of findings for local amendments comply with State law for adoption of codes and local amendments.

Discussion:

While the California Building Standards Commission adopts building and fire code standards to be used statewide, City Council action to adopt the codes at a local level is also part of the code adoption process. Adoption by the City allows for the inclusion of administrative provisions and limited amendments to the state codes. State law permits local jurisdictions to make modifications to the state codes that are reasonably necessary because of local conditions provided the city makes express findings that the changes are needed because of climatic, geologic, or topographic conditions. The proposed ordinance contains the adoption of the codes, administrative provisions for the enforcement of the codes, and amendments to the codes based on local conditions. The resolution makes findings regarding local geologic, climatic, and topographic conditions that make the amendments to the state codes reasonably necessary for building construction in the City.

As in previous code adoptions, OCFA has submitted proposed City amendments to the California Fire Code. A summary of amendments proposed by OCFA to the Fire Code is provided in Attachment #1 of this report.

Provisions for administering the Fire Code are included in the ordinance. The administrative provisions of California Fire Code Chapter 1 are adopted as the basis of the administrative code section and are amended to incorporate existing administrative provisions as well as administrative procedures recommended by the Fire Code Official.

Existing amendments to the California Fire Code related to requirements for fire department access roads, vegetation fuel modification, fire sprinkler systems, high-rise buildings, hazardous materials, and fireworks are maintained. Requirements for fire sprinklers and fire alarms have been coordinated with the amendments proposed to the California Building Code. A number of OCFA amendments included in previous code adoptions have been removed as a result of these provisions now being incorporated into the California Fire Code by the State Fire Marshal.

All of the new and most of the revised amendments are proposed to clarify the code and identify areas of potential conflict/overlap with other state fire and life safety requirements.

In addition, administrative provisions are proposed for the administration of the Fire Code by the Orange County Fire Authority.

New amendments proposed by the OCFA include:

- Restrictions on the release of sky lanterns or similar devices.
- Codifies that designs of fire sprinkler systems be based on not more than 90% of water supply capacity.
- Requirements that fire alarm systems be inspected when changing monitoring companies.
- Requirements establishing safeguards against auto-ignition of green waste being stored or processed.

### Recommended

Action:

STAFF RECOMMENDS THAT the City Council

- Introduce Ordinance No. \_\_\_\_\_ entitled, AN ORDINANCE OF THE CITY COUNCIL
  OF SAN CLEMENTE AMENDING CHAPTER 8.16 OF THE SAN CLEMENTE
  MUNICIPAL CODE AND ADOPTING FIRE CODE REGULATIONS FOR THE CITY OF
  SAN CLEMENTE.
- 2. Adopt Resolution No. \_\_\_\_\_\_ entitled, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, SETTING FORTH FINDINGS WITH RESPECT TO LOCAL CONDITIONS

98.2

WITHIN THE CITY OF SAN CLEMENTE WHICH MAKE CERTAIN MODIFICATIONS AND CHANGES TO THE CALIFORNIA FIRE CODE NECESSARY FOR VARIOUS OCCUPANCIES.

Attachments:	#1 – Summary of Amendments Matrix – 2013 California Fire Code #2 – Ordinance No #3 – Resolution No
Notification:	None

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## Attachment - 1

Attachment "1"

98-4

2013 Calinalia Fire Code
CITY / OCFA Local Amendments
Summary Sheet
November 5, 2013
Page 1 of 4

Summary	Administrative – Title or regulations	Administrative - Violation Penalties	Administrative - Infractions	Administrative - Misdemeanor	Administrative - Failure to Comply	Definitions added / amended:	Approach-Departure Path	Emergency Helicopter Landing Facility	Flow-Line	Hazardous Fire Area	High-Rise Building	Safety Area	Sky Lantern	Takeoff and Landing Area	Reference OCFA Vegetation Management Guidelines		Spark arrestors for all chimneys		Outdoor fires	Open burning, recreational fires	Outdoor fireplaces, fire pits, fire rings at Group R occupancies		Mitigation for development near land with emitting gases	Fuel modification requirements for new construction		Clearance of brush or vegetation growth from roadways
Amendment History	Existing	Existing	Existing	Existing	Existing		Existing	Existing	Existing	Existing	Existing	Existing	New	Existing	Existing / Modified	for Clarity	Existing / Modified	for Clarity	Existing / Modified	Existing / Modified	Existing / Modified	for Clarity	Existing	Existing / Modified	for Clarity	Existing / Modified
Section	101.1	109.4	109.4.2	109.4.3	111.4	202									304.1.2		305.5		305.6	307	307.6		319	320		321
Chapter/ Item	1A	1B	10	1D	1E	2A									3A		3B		3C	3D	3E		3F	3G		3H

2013 California Fire Code
CITY / OCFA Local Amendments
Summary Sheet
November 5, 2013
Page 2 of 4

	Unusual circumstances affecting vegetation management	Use of equipment & spark arrestors	Restricted entry in hazardous fire area	Trespassing on posted property	Restrictions on release of "sky lanterns" or similar devices	Adoption of only certain sections related to emergency planning	Fire department access road width dimensions	Fire department access road width dimensions – High fire zone areas	Address numbers on both new and existing building	Public Safety Radio System Coverage - Coordination of fire code with S.C.M.C. 8.80	Public Safety Radio System Coverage – Deletes sections to fire code to coordinate with S.C.M.C. 8.80	Scope expanded to include Indoor Storage of Electric carts/cars when being charged with stationary battery system	Indoor charging of electric carts / cars	Sprinkler protection requirements in buildings	Sprinkler protection in Residential Occupancies	Hydraulically calculated sprinkler systems	Sprinkler system supervision and alarms	Location of standpipe system hose connection	Fire alarm systems - modifies high-rise height from 75 feet to 55 feet - where required	Clarification of Duct Smoke Detectors
for Clarity	Existing / Modified for Clarity	Existing / Modified for Clarity	Existing	Existing	New	Existing	Existing	Existing / Modified for Clarity	Existing	Existing / Modified for Clarity	Existing / Modified for Clarity	Existing	Existing	Existing	Existing	New	Existing	Existing	Existing	Existing
	322	323	324	325	326	Chapter 4	503.2.1	503.2.1.1	505.1	510.1	510.2 / 510.3 / 510.4 / 510.5 / 510.6	608.1	608.10	903.2	903.2.8	903.3.5.3	903.4	905.4(7)	907.2.13	907.3.1
	3I	3J	3K	3L	3M	4	5A	5B	2C	5D	5E	6A	eB	9A	9B	9C	9D	9E	9F	9G

2013 Calitamia Fire Code
CITY / OCFA Local Amendments
Summary Sheet
November 5, 2013
Page 3 of 4

Existing Emergency voice/alarm communication system	Existing	New Monitoring fire alarm systems – requires inspection when changing monitoring companies	Existing Adoption of only certain sections related to existing buildings	Existing	2 Existing Permit requirements for the Lumber Yards and Woodworking facilities	Existing Approval by the Fire Code Official for of storage site of materials		Existing Fire protection requirement for the Storage and Processing of wood chips, etc	Existing	.11 New Temperature control – establishes safeguards against auto-ignition of green waste	New	New Temperature control of new material when delivered to site	5.3 Existing Reference to OCFA Vegetation Management Guideline	8 Existing / Modified Fuel Modification requirements for new construction for Clarity		le Existing Deletion of Footnote K of Table 5003.1.1(1) that exempts up to 200 Lbs of solid and		.1.1 Existing Prohibits storage of Extremely Hazardous materials in residential zones	Existing OCFA requirements of Identification Signs for Hazardous Materials	4.1 Existing OCFA requirements of Identification Signs for Cryogenic Fluid	Existing Retail fireworks requirements	Existing Seizure of fireworks and Fire Code Official Authority to handle the violation	2 Existing Relocated Restrictions on explosives and blasting regulations in hazardous fire areas	
907.5.2.2	907.6.3.2	907.6.5	Chapter 11	2008	2801.2	2808.2	2808.3	2808.7	2808.9	2808.11	2808.11.1	2808.11.2	4906.3	4908	5001.5.2	Table	5003.1.1(1)	5003.1.1.1	5003.5	5503.4.1	5601.2	5601.3	5602	. 000
H6	16	93	11	20A	28A	28B	28C	28D	28E	28F	28G	28H	49A	49B	50A	50B		50C	50D	55A	56A	56B	29C	

2013 California Fire Code
CITY / OCFA Local Amendments
Summary Sheet
November 5, 2013
Page 4 of 4

Requires fireworks displays to be fired electronically	OCFA requirements of Label or Placard for storage of Class I, II, or IIIA Liquid Storage Tanks	Deletion of certain exceptions for storage/use of Highly Toxic and Toxic Materials	Amendments to Referenced Standard NFPA 13 - Fire Sprinkler Systems	Amendments to Referenced Standard NFPA 13R - MultiFamily Fire Sprinkler System	Amendments to Referenced Standard NFPA 13D - SingleFamily Fire Sprinkler System	Amendments to Referenced Standard NFPA 14 - Fire Standpipe Systems	Amendments to Referenced Standard NFPA 24 - Fire Service Mains	
Existing	Existing	Existing	Existing	Existing	Existing	Existing	Existing / Modified	for Clarity
5608.2	5704.2.3.2	6004.2.2.7	NFPA 13	NFPA 13R	NFPA 13D	NFPA 14	NFPA 24	
56E	57A	60A	80A	80B	80C	80D	80E	

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# Attachment - 2

ONDINANCE NO.	ORDINANCE I	NO.
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AN ORDINANCE OF THE CITY COUNCIL OF SAN CLEMENTE AMENDING CHAPTER 8.16 OF THE SAN CLEMENTE MUNICIPAL CODE AND ADOPTING FIRE CODE REGULATIONS FOR THE CITY OF SAN CLEMENTE

THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE DOES HEREBY ORDAIN AS FOLLOWS:

<u>Section 1.</u> Chapter 8.16 of the San Clemente Municipal Code is hereby amended to read in its entirety as follows:

### Chapter 8.16 FIRE CODE

- 8.16.010 Fire Code Adopted.
- 8.16.020 Enforcement and Inspections.
- 8.16.030 Division II of Chapter 1 amended Administration.
- 8.16.040 Chapter 2 amended Definitions.
- 8.16.050 Chapter 3 amended General Requirements.
- 8.16.060 Chapter 4 amended Emergency Planning and Preparedness.
- 8.16.070 Chapter 5 amended Fire Service Features.
- 8.16.080 Chapter 6 amended Building Services and Systems.
- 8.16.090 Chapter 9 amended Fire Protection Systems.
- 8.16.100 Chapter 11 amended Construction Requirements for Existing Buildings.
- 8.16.110 Chapter 20 amended Aviation Facilities.
- 8.16.120 Chapter 28 amended Lumber Yards and Woodworking Facilities.
- 8.16.130 Chapter 49 amended Requirements for Wildland-Urban Interface Fire Areas
- 8.16.140 Chapter 50 amended Hazardous Materials General Provisions.
- 8.16.150 Chapter 55 amended Cryogenic Fluids.
- 8.16.160 Chapter 56 amended Explosives and Fireworks.
- 8.16.170 Chapter 57 amended Flammable and Combustible Liquids.
- 8.16.180 Chapter 60 amended Highly Toxic and Toxic Materials.
- 8.16.190 Chapter 80 amended Referenced Standards (NFPA 13, NFPA 13R, NFPA 13D, NFPA 14, NFPA 24)

98-10

### 8.16.010 Fire Code Adopted

The 2013 California Fire Code, based on the International Fire Code, 2012 Edition, with errata, published by International Code Council (ICC), and the whole thereof, including Appendices A, B, BB, C and CC is hereby adopted by the City of San Clemente for the purpose of prescribing regulations governing conditions hazardous to the life and property from fire or explosion, save and except such portions as are hereinafter added, deleted, modified or amended. A copy of this code is on file in the City's Building Division office for public inspection and is adopted with the same force and effect as through set out herein in full.

### 8.16.020 Enforcement and Inspections

The California Fire Code and the International Fire Code with amendments shall be enforced by the Orange County Fire Authority, which shall be operated under the Fire Chief of the Orange County Fire Authority. The Fire Chief of the Orange County Fire Authority may detail such members of the fire authority as inspectors as shall be necessary from time to time.

### 8.16.030 Division II of Chapter 1 amended — Administration

Division II of Chapter 1– Administration is hereby amended as follows:

- A. Subsection 101.1 is hereby amended to read in its entirety as follows:
  - **101.1 Title.** These regulations shall be known as the Fire Code of the City of San Clemente, hereinafter referred to as "this code".
- B. Subsection 109.4 is hereby amended to read in its entirety as follows:
  - 109.4 Violation penalties. 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

9B-11

provisions of this code, shall be guilty of either a misdemeanor, infraction or both as prescribed in Section 109.4.2 and 109.4.3 Penalties shall be as prescribed in local ordinance Each day that a violation continues after due notice has been served shall be deemed a separate offense.

- C. A new Subsection 109.4.2 is hereby added to Section 109 to read in its entirety as follows:
  - **109.4.2 Infraction.** Except as provided in Section 109.4.3, persons operating or maintaining any occupancy, premises or vehicle subject to this code that shall permit any fire or life safety hazard to exist on premises under their control shall be guilty of an infraction.
- D. A new Subsection 109.4.3 is hereby added to Section 109 to read in its entirety as follows:
  - **109.4.3 Misdemeanor.** Persons who fail to take immediate action to abate a fire or life safety hazard when ordered or notified to do so by the chief or a duly authorized representative, or who violate the following sections of this code, shall be guilty of a misdemeanor:

104.11.2 Obstructing operations

104.11.3 Systems and Devices

107.5 Overcrowding

109.3.2 Compliance with Orders and Notices

111.4 Failure to comply

305.4 Deliberate or negligent burning

308.1.2 Throwing or placing sources of ignition

310.7 Burning Objects

3104.7 Open or exposed flames

- E. Subsection 111.4 is hereby amended to read in its entirety as follows:
  - 111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than specified in the city of San Clemente Municipal Code and/or by Fee Resolution.

98-12

### 8.16.040 Chapter 2 amended -- Definitions

Chapter 2 – Definitions, is hereby amended as follows:

A. Section 202 is hereby amended by adding "Approach-Departure Path," "Emergency Helicopter Landing Facility (EHLF)," "Flow-line," "Hazardous Fire Area," "Safety Area," "Sky Lantern", and "Takeoff and Landing Area" and revising "High-Rise Building" as follows:

**APPROACH-DEPARTURE PATH.** The flight path of the helicopter as it approaches or departs from the landing pad.

**EMERGENCY HELICOPTER LANDING FACILITY (EHLF).** A landing area on the roof of a high rise building that is not intended to function as a heliport or helistop but is capable of accommodating fire, police, or medical helicopters engaged in emergency operations.

**FLOW-LINE.** The lowest continuous elevation on a curb defined by the path traced by a particle in a moving body of water at the bottom of the rolled curb.

HAZARDOUS FIRE AREA. Includes all areas identified within Section 4906.2 and other areas as determined by the Fire Code Official as presenting a fire hazard due to the presence of combustible vegetation, or the proximity of the property to an area that contains combustible vegetation.

**HIGH-RISE BUILDING.** In other than Group I-2 occupancies, "high-rise buildings" as used in this Code:

**Existing high-rise structure.** A high-rise structure, the construction of which is commenced or completed prior to July 1, 1974.

High-rise structure. Every building of any type of construction or occupancy having floors used for human occupancy located more than 55 feet above the lowest floor level having building access, except buildings used as

hospitals as defined in Health and Safety Code Section 1250.

New high-rise building. A high-rise structure, the construction of which is commenced on or after July 1, 1974. For the purpose of this section, construction shall be deemed to have commenced when plans and specifications are more than 50 percent complete and have been presented to the local jurisdiction prior to July 1, 1974. Unless all provisions of this section have been met, the construction of such buildings shall commence on or before January 1, 1976.

**New high-rise structure.** means a high-rise structure, the construction of which commenced on or after July 1, 1974.

**SAFETY AREA.** A defined area surrounding the landing pad that is free of obstructions.

**SKY LANTERN.** An airborne lantern typically made of paper, Mylar, or other lightweight material with a wood, plastic, or metal frame containing a candle, fuel cell, or other heat source that provides buoyancy.

**TAKEOFF AND LANDING AREA.** The combination of the landing pad centered within the surrounding safety area.

### 8.16.050 Chapter 3 amended -- General Requirements

Chapter 3 – General Requirements is hereby amended as follows:

A. Subsection 304.1.2 is hereby revised as follows:

**304.1.2 Vegetation.** Weeds, grass, vines or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirement in urban-wildland interface areas shall be in accordance with Chapter 49 and OCFA vegetation management guidelines. (balance of section to remain unchanged)

GB-14

- B. A new Subsection 305.5 is hereby added to Section 305 to read in its entirety as follows:
  - 305.5 Chimney spark arrestors. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrestor. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrestor. The spark arrestor shall meet the requirements of Section 2113.9.2 of the California Building Code.
- C. A new Subsection 305.6 is hereby added to Section 305 to read in its entirety as follows:
  - **305.6 Outdoor fires.** Outdoor fires shall be in accordance with Sections 305, 307, and 308 and with other applicable sections of this code.
    - **305.6.1 Where prohibited.** Outdoor fires shall not be built, ignited or maintained in fuel modification areas, Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) or Special Fire Protection Areas (SFPA) or other locations where conditions could cause the spread of fire to the WRA, SFPA or FHSZ, except by permit from the fire code official.

**Exceptions:** A permit is not required for the following:

- Fires in approved outdoor or portable fireplaces, fire pits, fire rings and similar devices at Group R occupancies that are installed and used in accordance with this code.
- 2. Outdoor fires at inhabited premises or official organized campsites or parks when located in a permanent or portable barbeque or grill, incinerator, or outdoor fireplace located at least 30 feet from combustible vegetation.
- 3. Installations or uses approved by the fire code official.

98-15

**305.6.1.1 Fuel Modification Areas.** Outdoor fires using wood or other solid fuel shall not be built, ignited or maintained in a fuel modification area.

**305.6.1.2 Supervision.** Where a permit is issued or when allowed under the exceptions to Section 305.6.1, such fires shall be supervised by a person 18 years of age or older.

**305.6.2 Hazardous conditions.** Outdoor fires are not allowed when predicted sustained winds exceed 8 MPH during periods when relative humidity is less than 25%, or a red flag condition has been declared or public announcement is made, when an official sign was caused to be posted by the fire code official, or when such fires present a hazard as determined by the fire code official.

**305.6.3 Disposal of rubbish.** Rubbish, trash or combustible waste material shall be burned only within an approved incinerator and in accordance with Section 307.2.1.

D. Section 307 is hereby amended to read as follows:

# SECTION 307 OPEN BURNING, RECREATIONAL FIRES, FIRE PITS, FIRE RINGS, AND OUTDOOR FIREPLACES

E. A new Subsection 307.6 is hereby added to Section 307 to read in its entirety as follows:

307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices used at Group R shall comply with this section.

**Exception:** Barbeques, grills, and other portable devices intended for cooking.

**307.6.1 Gas-fueled devices.** Outdoor fireplaces, fire pits and similar devices fueled by natural gas or liquefied-petroleum gas are allowed when approved by the Building Department and the

9B-14

device is designed to only burn a gas flame and not wood or other solid fuel. At R-3 occupancies, combustible construction shall not be located within three feet of an atmospheric column that extends vertically from the perimeter of the device. At other R occupancies, the minimum distance shall be ten feet. Where a permanent Building Department approved hood and vent is installed, combustible construction may encroach upon this column between the bottom of the hood and the vent opening. Where chimneys or vents are installed, they shall have a spark arrester in accordance with Section 305.5.

307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum Fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code and Section 305.5. Fires in a fireplace shall be contained within a firebox with an attached chimney. The opening in the face of the firebox shall have an installed and maintained method of arresting sparks. The burning of wood or other solid fuel in a device is not allowed within 15 feet of combustible structures, unless within a permanent or portable fireplace. Conditions which could cause a fire to spread within 25 feet of a structure or to vegetation shall be eliminated prior to ignition. Fires in devices burning wood or solid fuel shall be managed per Section 307.5.

307.6.2.1 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone. Wood and other solid fuel burning fires in devices other than permanent fireplaces are not allowed within Wildfire Risk Areas (WRA) and adopted Fire Hazard Severity Zones (FHSZ) and Special Fire Protection Areas (SFPA) or in locations where conditions could cause the spread of fire to the WRA or FHSZ, unless determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

9B.17

F. A new Section 319 is hereby added to Chapter 3 to read in its entirety as follows:

# SECTION 319 DEVELOPMENT ON OR NEAR LAND CONTAINING OR EMITTING TOXIC, COMBUSTIBLE OR FLAMMABLE LIQUIDS, GASES OR VAPORS

- 319.1 General. 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 1,000 feet (304.8 m) of a parcel of land that has an active, inactive, 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.
- G. A new Section 320 is hereby added to Chapter 3 to read in its entirety as follows:

# SECTION 320 FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION

- **320.1 General**. All new buildings to be built or installed in areas with or adjacent to land having hazardous combustible vegetation shall comply with the requirements in the edition of OCFA Vegetation Management Guidelines currently in use at the time of plan submittal.
- H. A new Section 321 is hereby added to Chapter 3 to read in its entirety as follows:

# SECTION 321 CLEARANCE OF BRUSH OR VEGETATION GROWTH FROM ROADWAYS

**321.1 General.** The fire code official is authorized to cause areas within 10 feet (3048 mm) on each side of portions of highways and private streets which are improved, designed or ordinarily used for vehicular traffic, to be cleared of flammable vegetation and other

9B-18

combustible growth. Measurement shall be from the flow-line or the end of the improved edge of the roadway surfaces.

**Exception:** Single specimens of trees, ornamental shrubbery or cultivated ground cover such as green grass, ivy, succulents or similar plants used as ground covers, provided that they do not form a means of readily transmitting fire.

I. A new Section 322 is hereby added to Chapter 3 to read in its entirety as follows:

### SECTION 322 UNUSUAL CIRCUMSTANCES

- **322.1 General.** The fire code official may suspend enforcement of the vegetation management requirements and require reasonable alternative measures designed to advance the purpose of this code if determined that in any specific case that any of the following conditions exist:
  - 1. Difficult terrain.
  - 2. Danger of erosion.
  - 3. Presence of plants included in any state and federal resources agencies, California Native Plant Society and county-approved list of wildlife, plants, rare, endangered and/or threatened species.
  - 4. Stands or groves of trees or heritage trees.
  - 5. Other unusual circumstances that make strict compliance with the clearance of vegetation provisions undesirable or impractical.
- J. A new Section 323 is hereby added to Chapter 3 to read in its entirety as follows:

### SECTION 323 USE OF EQUIPMENT

**323.1 General.** Except as otherwise provided in this section, no person shall use, operate, or cause to be operated, in, upon or adjoining any hazardous fire area any internal combustion engine which uses hydrocarbon fuels, unless the engine is equipped with a spark arrester as defined in Section 323.2 maintained in effective working order, or the engine is

constructed, equipped and maintained for the prevention of fire.

### **Exception:**

- Engines used to provide motor power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code of the State of California.
- Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is in good mechanical condition

### **323.2 Spark Arrestors.** Spark arrestors shall comply with the following:

- 1. A spark arrester is a device constructed of nonflammable material specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch (0.58 mm) in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.
- Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 323 shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.
- K. A new Section 324 is hereby added to Chapter 3 to read in its entirety as follows:

### SECTION 324 RESTRICTED ENTRY

**324.1 General.** The fire code official shall determine and publicly announce when hazardous fire areas shall be closed to entry and when such areas shall again be opened to entry. Entry on and occupation of hazardous fire areas, except public roadways, inhabited areas or

9B3D

established trails and camp sites which have not been closed during such time when the hazardous fire area is closed to entry, is prohibited.

### **Exception:**

- 1. Residents and owners of private property within hazardous fire areas and their invitees and guests going to or being upon their lands.
- Entry, in the course of duty, by peace or police officers, and other duly authorized public officers, members of a fire department and members of the United States Forest Service.
- L. A new Section 325 is hereby added to Chapter 3 to read in its entirety as follows:

### SECTION 325 TRESPASSING ON POSTED PROPERTY

- 325.1 General. When the fire code official determines that a specific area within a hazardous fire area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility to the public, such areas shall be closed until changed conditions warrant termination of closure. Such\_areas shall be posted as hereinafter provided.
- **325.2 Signs**. Approved signs prohibiting entry by unauthorized persons and referring to applicable fire code chapters shall be placed on every closed area.
- **325.3 Trespassing**. Entering and remaining within areas closed and posted is prohibited.

**Exception:** Owners and occupiers of private or public property within closed and posted areas, their guests or invitees, and local, state and federal public officers and their authorized agents acting in the course of duty.

M. A new Section 326 is hereby added to Chapter 3 to read in its entirety as follows:

### SECTION 326 SKY LANTERNS OR SIMILAR DEVICES.

**326.1 General.** The ignition and/or launching of a Sky Lantern or similar device is prohibited.

**Exception:** Upon approval of the fire code official, sky lanterns may be used as necessary for religious or cultural ceremonies providing that adequate safeguards have been taken as approved by the fire code official. Sky Lanterns must be tethered in a safe manner to prevent them from leaving the area and must be constantly attended until extinguished.

### 8.16.060 Chapter 4 amended -- Emergency Planning and Preparedness

Chapter 4 – Emergency Planning and Preparedness is hereby amended by adopting only the Sections 401, 401.3.4, 401.9, 402, 403, 404.6 through 404.7.6, 407, 408.3.1 through 408.3.2, and 408.12 through 408.12.3. Other sections of Chapter 4 are hereby deleted without replacement.

### 8.16.070 Chapter 5 amended -- Fire Service Features

Chapter 5 – Fire Service Features is hereby amended as follows:

- A. Subsection 503.2.1 is hereby amended to read in its entirety as follows:
  - **503.2.1 Dimensions.** Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm). Street widths are to be measured from top face of curb to top face of curb, on streets with curb and gutter, and from flow-line to flow-line on streets with rolled curbs.
- B. A new Subsection 503.2.1.1 is hereby added to Section 503 to read in its entirety as follows:

**503.2.1.1 Hazardous Fire Areas.** In Hazardous Fire Areas the minimum fire apparatus road width shall be 28 feet (8530 mm). The width shall be maintained to an approved point outside of the Hazardous Fire Area.

**Exception:** When the road serves no more than three dwelling units and the road does not exceed 150 feet in length, the road width may be 24 feet (7300 mm). This length may be increased to 400 feet where serving no more than three dwelling units and all structures accessed from the roadway are protected by automatic fire sprinklers.

- C. Subsection 505.1 is hereby amended to read in its entirety as follows:
  - 505.1 Address identification. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) for R-3 occupancies, for all other occupancies the numbers shall be a minimum of 6 inches high with a minimum stroke width of 1 inch. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.
- D. Subsection 510.1 is hereby amended to read in its entirety as follows:
  - 510.1 Emergency responder radio coverage in new buildings. All new buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems. The Emergency

98:33

responder radio coverage system shall comply with one of the following:

- 1. An emergency radio system installed in accordance with the local authority having jurisdiction's ordinance (S.C.M.C. Chapter 8.80)
- 2. An emergency radio coverage system installed in accordance with Orange County Fire Authority's Emergency Responder Digital Radio Guideline.

#### **Exceptions:**

- 1. Where it is determined by the fire code official that the radio coverage system is not needed.
- In facilities where emergency responder radio coverage is required and such systems, components or equipment could have a negative impact on normal operations of the facility, the fire code official shall have the authority to accept an automatically activated emergency responder radio coverage system.
- E. Subsections 510.2; 510.3; 510.4; 510.5; 510.6 are hereby deleted without replacement.

### 8.16.080 Chapter 6 amended -- Building Services and Systems

Chapter 6 - Building Services and Systems is hereby amended as follows:

- A. Subsection 608.1 of Section 608 is hereby amended to read in its entirety as follows:
  - 608.1 Scope. Stationary storage battery systems having an electrolyte capacity of more than 50 gallons (189 L) for flooded lead acid, nickel cadmium (Ni-Cd) and valve-regulated lead acid (VRLA), or 1,000 pounds (454 kg) for lithium-ion and lithium metal polymer, used for facility standby power, emergency power or uninterruptible power supplies shall comply with this section and Table 608.1. Indoor charging systems for electric carts/cars with more than 50 gallons (189 L) aggregate quantity shall comply with Section 608.10.

98:24

- B. A new Subsection 608.10 is hereby added to Section 608 to read in its entirety as follows:
  - 608.10 Indoor charging of electric carts/cars. Indoor charging of electric carts/cars where the combined volume of all electric/cars battery electrolyte exceeds 50 gallons shall comply with following:
    - 1. Spill control and neutralization shall be provided and comply with Section 608.5.
    - 2. Room ventilation shall be provided and comply with Section 608.6.1
    - 3. Signage shall be provided and comply with Section 608.7.1
    - 4. Smoke detection shall be provided and comply with Section 907.2

### 8.16.090 Chapter 9 amended -- Fire Protection Systems

Chapter 9 – Fire Protection Systems is hereby amended as follows:

- A. Subsection 903.2 is hereby amended to read in its entirety as follows:
  - 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in this section and in Section 903.2 of the California Building Code as amended by the City of San Clemente as follows:
  - New buildings: In addition to the requirements of section 903.2.1 through 903.2.19, approved automatic sprinkler systems in new buildings and structures shall be provided as follows (Exception: Group R Detached one- two-family dwellings and townhouses as required by section 903.2.8):
    - i) Throughout all Groups A, I, E, and H Occupancies
    - ii) Throughout all Group B, F, M, and S Occupancies exceeding 1,000 square feet
    - iii) Throughout all Group U-1 Occupancies exceeding 6,000 square feet

For the purposes of this section, fire walls shall not define separate buildings.

9B25

- 2. **Alteration**: When the floor area of the Alteration within any two-year period exceeds 75% of area of the existing structure and the alteration includes structural modifications other than seismic upgrade.
- 3. **Addition**: Sprinkler protection shall be provided throughout the entire building when:
  - Existing unsprinklered building less than 5,000 ft<sup>2</sup>: where 20% or more is added and the gross floor areas exceeds 5,000 square feet.
  - 2. Existing unsprinklered building equal or greater than 5,000 ft<sup>2</sup>: where more than 1,000 ft<sup>2</sup> is added.
  - 3. Fire sprinklers shall be provided in additions to an existing building that has fire sprinklers installed.
- B. Subsection 903.2.8 is hereby amended to read in its entirety as follows:
  - 903.2.8 Group R. An automatic sprinkler system installed in accordance with Subsection 903.3 of Section 903 of this code and Subsection 903.3 of Section 903 of the California Building Code as amended by the City of San Clemente shall be provided throughout all buildings with a Group R fire area as follows:
    - 1. All new Group R occupancies, including the attached garages
    - 2. All existing Group R occupancies and U-1 garages when the total floor area is increase by 50% of the existing area over a 2-year period
    - 3. All existing Group R occupancies and U-1 garages when the total area is increased by 750 square feet or more over a 2-year period
    - 4. All existing Group R occupancies and U-1 garages when an additional story is added to the structure regardless of the area involved
    - 5. An automatic sprinkler system shall be installed throughout any existing Group R Occupancy building when the floor area of the Alteration or Combination of an Addition and Alteration, within any two year period, is 50% or more of area of the existing structure and where the scope of the work exposes building framing and facilitates

sprinkler installation and is such that the Building/Fire Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

6. Any addition to existing building that has fire sprinklers installed.

### **Exceptions:**

- Existing Group R-3 occupancies converted to Group R-3.1 occupancies not housing bedridden clients, not housing nonambulatory clients above the first floor and not housing clients above the second floor.
- 2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with Section 425.8.3.3.
- 3. Pursuant to Health and Safety Code Section 13113 occupancies housing ambulatory children only, none of whom are mentally ill or mentally retarded, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and buildings or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
- 4. Pursuant to Health and Safety Code Section 13143.6 occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

When not used in accordance with Section 504.2 or 506.3 an automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in Group R-2.1 occupancies.

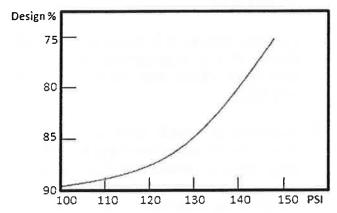
An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-2.1 or R-4 occupancies.

C. A new Subsection 903.3.5.3 is hereby added to Section 903 to read in its entirety as follows:

903.3.5.3 Hydraulically calculated systems. The design of hydraulically calculated fire sprinkler systems shall not exceed 90% of the water supply capacity

**Exception:** When static pressure exceeds 100 psi, and required by the Fire Code Official, the fire sprinkler system shall not exceed water supply capacity specified by Table 903.3.5.3

TABLE 903.3.5.3
Hydraulically Calculated Systems



- D. Subsection 903.4 is hereby amended to read in its entirety as follows:
  - 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 serving fewer than 20 sprinklers.
- 3. Jockey pump control valves that are sealed or locked in the open position.

- 4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
- 5. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.
- E. Subsection 905.4 is hereby amended by adding item 7 as follows:
  - 7. The centerline of the 2.5 inches (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) and no more than 24 inches (610 mm) above the finished floor.
- F. Subsection 907.2.13 is hereby amended to read in its entirety as follows:
  - 907.2.13 High-rise buildings and Group I-2 occupancies having floors located more than 55 feet above the lowest level fire department vehicle High-rise buildings and Group access. occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access shall be provided with an automatic smoke detection in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2

### Exceptions:

- Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.
- Open parking garages in accordance with Section 406.5 of the California Building Code.
- 3. Buildings with an occupancy in Group A-5 in accordance with Section 303.6 of the California Building Code.
- Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.

98.59

- 5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the emergency voice/alarm communication system
- G. Subsection 907.3.1 is hereby amended to read in its entirety as follows:

907.3.1 Duct smoke detectors. Smoke detectors installed in ducts shall be listed for the air velocity, temperature and humidity present in the duct. Duct smoke detectors shall be connected to the building's fire alarm control unit when a fire alarm system is installed. Activation of a duct smoke detector shall initiate a visible and audible supervisory signal at a constantly attended location and shall perform the intended fire safety function in accordance with this code and the California Mechanical Code. Duct smoke detectors shall not be used as a substitute for required open area detection.

**Exception:** In occupancies not required to be equipped with a fire alarm system, actuation of a smoke detector shall activate a visible and an audible signal in an approved location. Smoke detector trouble conditions shall activate a visible or audible signal in an approved location and shall be identified as air duct detector trouble.

- H. Subsection 907.5.2.2 is hereby amended to read in its entirety as follows.
  - 907.5.2.2 Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler waterflow device or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions for a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404. In high-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, the system shall operate on a minimum of the alarming floor, the floor above and the

98-30

floor below. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

- 1. Elevator groups.
- 2. Exit stairways.
- 3. Each floor.
- 4. Areas of refuge as defined in Chapter 2.
- 5. Dwelling units in apartment houses.
- 6. Hotel guest rooms or suites.

**Exception:** In Group I-2 and R-2.1occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

- I. Subsection 907.6.3.2 is hereby amended to read in its entirety as follows:
  - 907.6.3.2 High-rise buildings. High-rise buildings and Group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access, a separate zone by floor shall be provided for all of the following types of alarm-initiating devices where provided:
    - 1. Smoke detectors.
    - 2. Sprinkler water-flow devices.
    - 3. Manual fire alarm boxes
    - 4. Other approved types of automatic detection devices or suppression systems.
- J. Subsection 907.6.5 is hereby amended to read as follows:
  - 907.6.5 Monitoring. Fire alarm systems required by this chapter or by the California Building Code shall be monitored by an approved supervising station in accordance with NFPA 72, this section, and per Orange County Fire Authority Guideline "New and Existing Fire Alarm & Signaling Systems." (balance of subsection to remain unchanged)

### 8.16.100 Chapter 11 amended – Construction Requirements for Existing Buildings

Chapter 11 – Construction Requirements for Existing Buildings is hereby amended by adopting only Sections 1103.7, 1103.7.3, 1103.7.3.1, 1103.7.8 through 1103.7.8.2, 1103.7.9 through 1103.7.9.10, 1103.8 through 1103.8.5.3, and 1106. Other sections of Chapter 11 are hereby deleted without replacement.

### 8.16.110 Chapter 20 amended – Aviation Facilities

Chapter 20 – Aviation Facilities is hereby amended as follows:

A. A new Section 2008 is hereby added to Chapter 20 to read in its entirety as follows:

# SECTION 2008 EMERGENCY HELICOPTER LANDING FACILITY (EHLF)

**2008.1** General. Every building of any type of construction or occupancy having floors used for human occupancy located more than 75 ft above the lowest level of fire department vehicle access shall have a rooftop emergency helicopter landing facility (EHLF) in a location approved by the fire code official for use by fire, police, and emergency medical helicopters only.

2008.1.1 Rooftop Landing Pad. The landing pad shall be 50 ft. x 50 ft. or a 50 ft. diameter circle that is pitched or sloped to provide drainage away from access points and passenger holding areas at a slope of 0.5 percent to 2 percent. The landing pad surface shall be constructed of approved non-combustible, nonporous materials. It shall be capable of supporting a helicopter with a maximum gross weight of 15,000 lbs. For structural design requirements, see California Building Code.

2008.1.2 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated from each other by at least 90 degrees. No objects shall penetrate above the approach-departure paths.

93.33

The approach-departure path begins at the edge of the landing pad, with the same width or diameter as the landing pad and rises outward and upward at a ratio of eight feet horizontal distance for every one foot of vertical height.

**2008.1.3 Safety Area.** The safety area is a horizontal plane level with the landing pad surface and shall extend 25 ft in all directions from the edge of the landing pad. No objects shall penetrate above the plane of the safety area.

2008.1.4 Safety Net. If the rooftop landing pad is elevated more than 30 in. (2'-6") above the adjoining surfaces, a 6 ft in wide horizontal safety net capable of supporting 25 lbs/sf shall be provided around the perimeter of the landing pad. The inner edge of the safety net attached to the landing pad shall be slightly dropped (greater than 5 in. but less than 18 in.) below the pad elevation. The safety net shall slope upward but the outer safety net edge shall not be above the elevation of the landing pad.

**2008.1.5 Take-off and Landing Area.** The takeoff and landing area shall be free of obstructions and 100 ft x 100 ft. or 100 ft. diameter.

**2008.1.6 Wind Indicating Device**. An approved wind indicating device shall be provided but shall not extend into the safety area or the approachdeparture paths.

**2008.1.7 Special Markings.** The emergency helicopter landing facility shall be marked as indicated in Figure 2008.1.7.

2008.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with Section 1009.7.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.



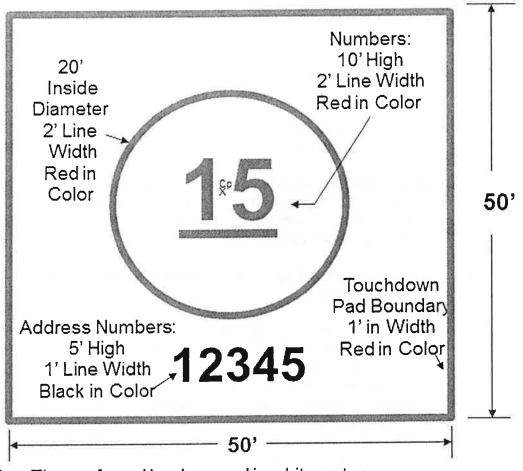
**2008.1.9 Standpipe systems.** The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5-inch outlet on a Class I or III standpipe.

2008.1.10 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and located near the stairway or ramp to the landing pad. The fire extinguisher cabinets shall not penetrate the approach-departure paths, or the safety area. Installation, inspection, and maintenance of extinguishers shall be in accordance with the CFC, Section 906.

**2008.1.11 EHLF.** Fueling, maintenance, repairs, or storage of helicopters is prohibited.

96.34

Figure 2008.1.7 Helicopter Landing Pad Markings



- 1. The preferred background is white or tan.
- 2. The circled center number indicates the allowable weight that the facility is capable of supporting in thousands of pounds.
- 3. The numbers shall be orientated towards the preferred flight (typically facing the prevailing wind

### 8.16.120 Chapter 28 amended -- Lumber Yards and Woodworking Facilities

Chapter 28 – Lumber Yards and Woodworking Facilities is hereby amended as follows:

A. Subsection 2801.2 is hereby amended to read in its entirety as follows:

**2801.2 Permit.** Permits shall be required as set forth in Section 105.6. For Miscellaneous Combustible Storage Permit, see Section 105.6.29.

98.35

- B. Subsection 2808.2 is hereby amended to read in its entirety as follows:
  - **2808.2 Storage site.** Storage sites shall be level and on solid ground or other all-weather surface. Sites shall be thoroughly cleaned and approval from the fire code official obtained before transferring products to the site.
- C. The first sentence of Subsection 2808.3 is hereby amended as follows:
  - **2808.3 Size of piles.** Piles shall not exceed 15 feet (4572 mm) in height, 50 feet (15 240 mm) in width and 100 feet (30 480 mm) in length. (Balance of the section to remain unchanged)
- D. Subsection 2808.7 is hereby amended to read in its entirety as follows:
  - 2808.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be equipped with an approved automatic sprinkler system. Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.
- E. Subsection 2808.9 is hereby amended to read in its entirety as follows:
  - 2808.9 Material-handling equipment. All material handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester. Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.
- F. A new subsection 2808.11 is hereby added to read in its entirety as follows:
  - **2808.11 Temperature control.** The temperature shall be monitored and maintained as specified in Sections 2808.11.1 and 2808.11.2.

- G. A new subsection 2808.11.1 is hereby added to read in its entirety as follows:
  - **2808.11.1 Pile temperature control.** Piles shall be rotated when the internal temperature readings are in excess of 165 degrees Fahrenheit.
- H. A new subsection 2808.11.2 is hereby added to read in its entirety as follows:
  - 2808.11.2 New material temperature control. New loads delivered to the facility shall be inspected and tested at the facility entry prior to taking delivery. Material with temperature exceeding 165 degrees Fahrenheit shall not be accepted on the site. New loads shall be monitored to verify that the temperature remains stable.

### 8.16.130 Chapter 49 amended -- Requirements For Wildland-Urban Interface Fire Areas

Chapter 49 -- Requirements For Wildland-Urban Interface Fire Areas is hereby amended as follows:

- A. Subsection 4906.3 is hereby amended by adding item no. 5 to the end of section as follows:
  - 5. OCFA Vegetation Management Guideline.
- B. A new Section 4908 is hereby added to read in its entirety as follows:

# SECTION 4908 FUEL MODIFICATION REQUIREMENTS FOR NEW CONSTRUCTION

- **4908.1 Fuel Modification Requirements for New Construction.** All new buildings to be built or installed in hazardous fire areas shall comply with the following:
- Preliminary fuel modification plans shall be submitted to and approved by the fire code official concurrent with the submittal for approval of any tentative map.

- 2. Final fuel modification plans shall be submitted to and approved by the fire code official prior to the issuance of a grading permit.
  - 2.1 The fuel modification plan shall include provisions for the maintenance of the fuel modification for perpetuity.
- 3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of the Orange County Fire Authority Vegetation Management Guidelines.
- 4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code official.
- 5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

### 8.16.140 Chapter 50 amended -- Hazardous Materials -- General Provisions

Chapter 50 -- Hazardous Materials -- General Provisions is hereby amended as follows:

- A. The first paragraph of Subsection 5001.5.2 is hereby amended to read in its entirety as following:
  - 5001.5.2 Hazardous Materials Inventory Statement (HMIS). Where required by the fire code official, an application for a permit shall include Orange County Fire Authority's Chemical Classification Packet, which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of chemicals on the premises. The Chemical Classification Packet shall include the following information:
    - 1. Product Name
    - 2. Component
    - 3. Chemical Abstract Service (CAS) number
    - 4. Location where stored or used.
    - 5. Container size
    - 6. Hazard classification

9B:38

- 7. Amount in storage
- 8. Amount in use-closed systems
- 9. Amount in use-open systems. (Balance of the section to remain unchanged)
- B. Table 5003.1.1(1) is hereby amended by deleting Footnote k. without replacement.
- C. A new Subsection 5003.1.1.1 is hereby added to Section 5003 to read in its entirety as follows:
  - **5003.1.1.1 Extremely Hazardous Substances.** No person shall use or store any amount of extremely hazardous substances (EHS) in excess of the disclosable amounts (see Health and Safety Code Section 25500 et al) in a residential zoned or any residentially developed property.
- D. Subsection 5003.5 is hereby amended to read in its entirety as follows:
  - 5003.5 Hazard identification signs. Unless otherwise exempted by the fire code official, visible hazard identification signs as specified in the Orange County Fire Authority Signage Guidelines for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit and at specific entrances and locations designated by the fire code official. (Balance of the section to remain unchanged)

### 8.16.150 Chapter 55 amended -- Cryogenic Fluids

Chapter 55 -- Cryogenic Fluids is hereby amended as follows:

- A. Subsection 5503.4.1 is hereby amended to read in its entirety as follows:
  - **5503.4.1 Identification signs.** Visible hazard identification signs in accordance with the Orange County Fire Authority Signage Guidelines shall be provided at entrances to buildings or areas in which cryogenic fluids are stored, handled or used.

98.39

### 8.16.160 Chapter 56 amended -- Explosives and Fireworks

Chapter 56 Explosives and Fireworks is hereby amended as follows:

- A. A new Subsection 5601.2 is hereby added to Section 5601 to read in its entirety as follows:
  - **5601.2 Retail Fireworks.** The storage, use, sale, possession, and handling of fireworks 1.4G (commonly referred to as Safe & Sane) and fireworks 1.3G is prohibited.

**Exception:** Fireworks 1.4G and fireworks 1.3G may be part of an electrically fired public display when permitted and conducted by a licensed pyrotechnic operator.

- B. A new Subsection 5601.3 is hereby added to Section 5601 to read in its entirety as follows:
  - **5601.3 Seizure of Fireworks.** The fire code official shall have the authority to seize, take, remove all fireworks stored, sold, offered for sale, used or handled in violation of the provisions of Title 19 CCR, Chapter 6. Any seizure or removal pursuant to this section shall be in compliance with all applicable statutory, constitutional, and decisional law.
- C. A new subsection 5602 is hereby added to read in its entirety as follows:
  - **5602 Explosives and blasting.** Explosives shall not be possessed, kept, stored, sold, offered for sale, given away, used, discharged, transported or disposed of within wildland-urban interface areas, or hazardous fire areas except by permit from the fire code official.
- D. Subsection 5608.1 is hereby amended to read in its entirety as follows:
  - **5608.1 General.** Outdoor fireworks displays, use of pyrotechnics before a proximate audience and pyrotechnic special effects in theatrical and group entertainment productions shall comply with California Code of Regulations, Title 19, Division 1, Chapter 6

9B.40

Fireworks, the Orange County Fire Authority Guidelines for Public Fireworks Displays, and with the conditions of the permit as approved by the fire code official.

E. A new Subsection 5608.2 is hereby added to Section 5608 to read in its entirety as follows:

**5608.2 Firing.** All fireworks displays shall be electrically fired.

### 8.16.170 Chapter 57 amended -- Flammable and Combustible Liquids

Chapter 57 -- Flammable and Combustible Liquids is hereby amended as follows:

A. Subsection 5704.2.3.2 is hereby amended to read in its entirety as follows:

**5704.2.3.2** Label or placard. Tanks more than 100 gallons (379 L) in capacity, which are permanently installed or mounted and used for the storage of Class I, II or III liquids, shall bear a label and placard identifying the material therein. Placards shall be in accordance with the Orange County Fire Authority Signage Guidelines.

### **Exceptions:**

- Tanks of 300-gallon (1136 L) capacity or less located on private property and used for heating and cooking fuels in single family dwellings.
- 2. Tanks located underground.

### 8.16.180 Chapter 60 amended -- Highly Toxic and Toxic Materials

Chapter 60 -- Highly Toxic and Toxic Materials is hereby amended as follows:

A. The Exceptions in Subsection 6004.2.2.7 are hereby amended to read in its entirety as follows:

984

#### **Exception:**

- 1. Toxic gases storage/use. Treatment systems are not required for toxic gases supplied by cylinders or portable tanks not exceeding 1,700 pounds (772 kg) water capacity when the following are provided:
  - 1.1 A listed or approved gas detection system with a sensing interval not exceeding 5 minutes.
  - 1.2. For storage, valve outlets are equipped with gas-tight outlet plugs or caps.
  - 1.3 For use, a listed and approved automaticclosing fail-safe valve located immediately adjacent to cylinder valves. The fail-safe valve shall close when gas is detected at the permissible exposure limit (PEL) by a gas detection system monitoring the exhaust system at the point of discharge from the gas cabinet, exhausted enclosure, ventilated enclosure or gas room. The gas detection system shall comply with Section 6004.2.2.10.

### 8.16.190 Chapter 80 amended -- Referenced Standards

The Referenced Standards in Chapter 80 are hereby amended as follows:

### A. NFPA 13, 2013 Edition, Installation of Sprinkler Systems is hereby amended as follows:

1. Section 6.8.3 is hereby revised to read in its entirety as follows:

6.8.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 ½" inlets. The location shall be approved and be no more than 150 feet from a public hydrant. The FDC may be located within 150 feet of a private fire hydrant when approved by the fire code official. The size of piping and the number of inlets shall be approved by the fire code official. If acceptable to the water authority, it may be installed on the

98.42

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.

- 2. Section 8.3.3.1 is hereby revised to read in its entirety as follows:
  - **8.3.3.1.** When fire sprinkler systems are installed in shell buildings of undetermined use (Spec Buildings) other than warehouses (S occupancies), fire sprinklers of the quick-response type shall be used. Use is considered undetermined if a specific tenant/occupant is not identified at the time the fire sprinkler plan is submitted. Sprinklers in light hazard occupancies shall be one of the following:
  - a) Quick-response type as defined in 3.6.4.7.
  - b) Residential sprinklers in accordance with the requirements of 8.4.5.
  - c) Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standardresponse sprinklers.
  - d) Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems.
- 3. Section 8.17.1.1.1 is hereby added as follows:
  - 8.17.1.1.1 Residential Waterflow Alarms. A local water-flow alarm shall be provided on all sprinkler systems and shall be connected to the building fire alarm or water-flow monitoring where provided. Group R system, occupancies not requiring a fire alarm system by the California Fire Code shall be provided with a minimum of one approved interior alarm device in each unit. Interior alarm devices shall be required to provide 55 dBA or 15 dBA ambient. whichever is throughout all living spaces within each unit.

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, whichever is greater. 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) serving normally operated appliances in the residence.

- 4. Section 11.1.1.2 is hereby added as follows:
  - 11.1.1.2 When fire sprinkler systems are required in buildings of undetermined use other warehouses, they shall be designed and installed to have a fire sprinkler density of not less than that required for an Ordinary Hazard Group 2 use, with no reduction(s) in density or design area. Warehouse fire sprinkler systems shall be designed to Figure 16.2.1.3.2 (d) curve "G". Use is considered undetermined if а specific tenant/occupant is not identified at the time the sprinkler plan is submitted. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the occupant to upgrade the system to the required density for the new occupancy.
- 5. Section 11.2.3.1.1.1 is hereby added as follows:
  - **11.2.3.1.1.1** The available water supply for fire sprinkler system design shall be determined by one of the following methods, as approved by the Fire Code Official:
  - Subtract the project site elevation from the low water level for the appropriate pressure zone and multiply the result by 0.433:
  - 2) Use a maximum of 40 psi, if available;
  - 3) Utilize the Orange County Fire Authority water-flow test form/directions to document a flow test conducted by the local water agency or an approved third party licensed in the State of California

- 6. Section 23.2.1.1 is hereby revised to read in its entirety as follows:
  - 23.2.1.1 Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.
- B. NFPA 13R 2013 Edition Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:
  - 1. Section 6.16.1 is hereby revised to read in its entirety as follows:
    - **6.16.1** A local water-flow alarms shall be provided on all sprinkler systems and shall be connected to the building fire alarm or waterflow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in 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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA ambient. whichever above is greater. throughout all living spaces within each dwelling unit. 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, whichever is greater. 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 normally operated protection) servina 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.

C. NFPA 13D 2013 Edition Installation of Sprinkler Systems in One and Two-Family Dwellings and

#### Manufactured Homes is hereby amended as follows:

- 1. Section 7.1.2 is hereby revised to read in its entirety as follows:
  - **7.1.2** The system piping shall not have a separate control valve unless supervised by a central station, proprietary or remote station alarm service.
- 2. Section 7.6 is hereby deleted in its entirety and replaced as follows:
  - 7.6 Alarms. Exterior alarm indicating device 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 is subject to final approval by the Additional interior alarm fire code official. devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces. 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, whichever is greater. 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.
- When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.
- 3. Section 12.3.6 is hereby added as follows:

### 12.3.6 Stock of Spare Sprinklers.

4. Section 12.3.6.1 is hereby added as follows:

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**12.3.6.1** 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.

5. Section 12.3.6.2 is hereby added as follows:

**12.3.6.2** The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property.

6. Section 12.3.6.3 is hereby added as follows:

**12.3.6.3** 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).

7. Section 12.3.6.4 is hereby added as follows:

**12.3.6.4** 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.

- D. NFPA 14, 2013 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:
  - 1. Section 7.3.1.1 is hereby is deleted in its entirety and replaced as follows:

**7.3.1.1** Class I and III Standpipe hose connections shall be unobstructed and shall be located not less than 18 inches or more than 24 inches above the finished floor. Class II Standpipe hose connections shall be unobstructed and shall be located not less than 3 feet or more than 5 feet above the finished floor.

- E. NFPA 24, 2013 Edition, Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:
  - 1. Section 6.2.1.1 is hereby added as follows:

- **6.2.1.1** The closest upstream indicating valve to the riser shall be painted OSHA red.
- 2. Section 6.2.11 (5) is hereby deleted without replacement and (6) and (7) renumbered as follows:
  - (5) Control Valves installed in a fire-rated room accessible from the exterior.
  - (6) Control valves in a fire-rated stair enclosure accessible from the exterior as permitted by the authority having jurisdiction.
- 3. Section 6.3.3 is hereby added as follows:

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

- 4. Section 10.1.6.3 is hereby added as follows:
  - 10.1.6.3 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: 304 or 316 Stainless Steel pipe and fittings

- 5. Section 10.3.6.2 is hereby revised to read in its entirety as follows:
  - **10.3.6.2** All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material, prior to polytube, and after installation.

Exception: Bolted joint accessories made from 304 or 316 stainless steel.

6. Section 10.3.6.3 is hereby added as follows:

**10.3.6.3** All bolts used in pipe-joint assembly shall be 316 stainless steel.

- 7. Section 10.6.3.1 is hereby revised to read in its entirety as follows:
  - 10.6.3.1 Where fire service mains enter the building adjacent to the foundation, the pipe may run under a building to a maximum of 24 inches, as measured from the interior face of the exterior wall to the center of the vertical pipe. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints or it shall comply with 10.6.2.
- 8. Section 10.6.4 is hereby revised to read in its entirety as follows:
  - **10.6.4** Pipe joints shall not be located under foundation footings. The pipe under the building or building foundation shall be 304 or 316 stainless steel and shall not contain mechanical joints.

<u>Section 2.</u> The amendments to the California Fire Code listed herein have been adopted pursuant to Public Resources Code Section 4117 and Health and Safety Code Section 18941.5 and have been justified by the local conditions prevalent in the City of San Clemente as more particularly described in City Council Resolution No. \_\_\_\_\_, incorporated herein by this reference as if set forth in full.

<u>Section 3</u>. If any portion of this Ordinance, or the application of any such provision to any person or circumstance, shall be held invalid, the remainder of this Ordinance to the extent it can be given effect, of the application of such provision to persons or circumstances other than those as to which it is held invalid, shall not be affected thereby, and to this extent the provisions of this Ordinance are severable.

<u>Section 4.</u> The City Clerk shall certify to the passage of this Ordinance and cause the same to be published as required by law and the same shall take effect as provided by law.

APPROVED AND ADOPTED this	day of	, 2013.
ATTEST		
CITY CLERK of the City of San Clemente, California		of the City of emente, California

STATE OF CALIFORNIA ) COUNTY OF ORANGE ) ss. CITY OF SAN CLEMENTE )
I, JOANNE BAADE, City Clerk of the City of San Clemente, California, hereby certify that Ordinance No having been regularly introduced at the meeting of, was again introduced, the reading in full thereof unanimously waived and duly passed and adopted at a regular meeting of the City Council held on the day of, and said ordinance was adopted by the following vote:
AYES:
NOES:
ABSENT:
N WITNESS WHERE OF, I have hereunto set my hand and affixed the official seal of he City of San Clemente, California, this day of,
CITY CLERK of the City of San Clemente, California
APPROVED AS TO FORM:
City Attorney

## Attachment - 3

RESOLUTION NO.
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A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN CLEMENTE, CALIFORNIA, SETTING FORTH FINDINGS WITH RESPECT TO LOCAL CONDITIONS WITHIN THE CITY OF SAN CLEMENTE WHICH MAKE CERTAIN MODIFICATIONS AND CHANGES TO THE CALIFORNIA FIRE CODE NECESSARY FOR VARIOUS OCCUPANCIES.

WHEREAS, Public Resources Code Section 4117 independently authorizes cities to enact local fire protection ordinances, including fire sprinkler requirements, which "may be more restrictive than state statutes in order to meet local fire hazard conditions."

WHEREAS, Health and Safety Code Section 18941.5 provides that cities retain the police power under the California Constitution to enact more stringent building standards, including fire sprinkler requirements, which cities find reasonably necessary due to local conditions.

WHEREAS, Health and Safety Code Section 17958.5 authorizes cities to make changes in the California Building Standards Code, including changes to the fire sprinkler requirements, which cities find reasonably necessary due to local conditions.

WHEREAS, the Building Official and Fire Marshal have recommended that changes and modifications be made to the 2013 California Fire Code, and have advised that certain of said changes and modifications to the California Fire Code, 2013 Edition are reasonably necessary due to local conditions within the City of San Clemente, and have further advised that the remainder of the said changes and modifications are of an administrative or procedural nature, or concern themselves with subjects not covered by the Codes, or are reasonably necessary to safeguard life and property within the City of San Clemente.

**NOW, THEREFORE, BE IT RESOLVED** by the City Council for the City of San Clemente as follows:

**SECTION 1.** Changes and modifications to the 2013 Edition of the California Fire Code are recommended by the Building Official and Fire Marshal are hereby found to be reasonably necessary due to the following local conditions.

#### General Findings

- I. Climatic Conditions
  - A. The jurisdiction of San Clemente is located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds,

which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the City. Obstacles generated by a strong wind, such as fallen trees, street lights and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type fire fighting apparatus above this height would place rescue personnel at increased risk of injury.

- B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the local fire authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the City.
- C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall future water allocation is not fully dependable. This necessitates the need for additional on-site fire protection features. It would also leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.
- D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

### II. Topographical conditions

A. Natural slopes of 15 percent or greater generally occur throughout the City. Elevation change caused by the hills creates the geological foundation on which communities within the City are built and will

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continue to built. With much of the populated flatlands already built upon, future growth will occur steeper slopes and greater constraints in terrain.

- B. Traffic and circulation congestion is an artificially created, obstructive topographical condition, which is common throughout the City.
- C. These topographical conditions combine to create a situation, which places fire department response time to fire occurrences at risk, and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

#### III. Geological Conditions

- A. The City is a densely populated area that has buildings constructed over and/or near a vast and complex network of faults that are believed to be capable of producing future earthquakes similar or greater in size that the 1994 Northridge and the 1971 Sylmar earthquakes. Earthquake faults run along the northeast and southwest boundaries of Orange County. The Newport-Inglewood Fault, located within Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude) which took 120 lives and damaged buildings in an area from Laguna Beach to Marina Del Rey to Whittier. In December 1989, another earthquake occurred in the jurisdiction of Irvine at an unknown fault line. Regional planning for reoccurrence of earthquakes is recommended by the state of California, Department of Conservation.
- B. Previous earthquakes have been accompanied by disruption of traffic flow and fires. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors of buildings. The October 17, 1989, Santa Cruz earthquake resulted in one major fire in the Marina District (San Francisco). When combined with the 34 other fires locally and over 500 responses, the department was taxed to its fullest capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. This situation creates the need for both additional fire protection and automatic on-site fire protection for building occupants. Department of Conservation noted in their 1988 report (Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, page 59), "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."

- C. Road circulation features located throughout the City also make amendments reasonably necessary. Located through the City are major roadways, highways and flood control channels that create barriers and slow response times. Hills, slopes, street and storm drain design accompanies with occasional heavy rainfall, causes roadway flooding and landslides and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended emergency response times that exceed the 5 minute goal.
- D. Soils throughout the City possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- E. Portions so of Orange County contain active or former oil production fields. These areas contain a variety of naturally occurring gasses, liquids and vapors. These compounds present toxicity or flammability hazards to building occupants. Evaluation of these hazards and the risks they pose to development is necessary implement appropriate mitigation.

Due to the topographical conditions of sprawling development separated by waterways and narrow and congested streets and the expected infrastructure damage inherent in seismic zone described above, it is prudent to rely on automatic fire sprinkler systems to mitigate extended fire department response time and keep fires manageable with reduced fire flow (water) requirements for a given structures. Additional fire protection is also justified to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.

#### Specific Findings

- A. Section 202 is amended to revise various definitions due to general finding numbers IA, 1B, 1C, ID, IIA, IIB. IIC, and IIIC, in Section 1, above and to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.
- B. Subsection 304.1.2 is amended to require Orange County Fire Authority vegetation management guideline to assist in managing vegetation around developed areas due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC in Section 1, above.
- C. Subsection 305.5 is amended to require that all chimneys attached to any appliance or fireplace that burns solid fuel be equipped with an approved spark arrestor due to general finding number IA, IB, IC, ID in Section 1, above.

- D. Subsections 305.6 and 307.6 are added to Chapter 3 to regulate outdoor fires due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC in Section 1, above.
- E. Section 319 is added to Chapter 3 to allow the fire code official to 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 due to general finding numbers IIIE in Section 1, above.
- F. Sections 320 through 326 have been added to address fuel modification requirements and special situations in hazardous fire areas due to general finding numbers IA, IB, IC, ID, IIA, IIB, and IIC in Section 1, above.
- G. Subsections 503.2.1, 503.2.1.1, and 505.1, relating to fire services access roads for firefighting equipment and personnel and visible building addresses, are amended due to general finding numbers IIA, IIB and IIC in Section 1, above.
- H. Subsections 510.1 and 510.2 related to Public Safety Radio System coverage, are amended due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.
- I. Subsections 608.1 and 608.10 are amended to clarify the requirements for Stationary storage battery systems having an electrolyte capacity of more than 50 gallons and indoor charging of electric carts/cars due to general finding numbers IIIA and IIIB in Section 1, above.
- J. Subsections 903.2, 903.2.8, and 903.4 are amended to require automatic fire sprinkler systems in certain occupancies and Subsection 903.3.5.3 is added to coordinate with Building Code provisions due to general finding numbers IIA, IIB, IIC, and IIIC in Section 1, above.
- K. Subsections 905.4(7), 907.2.13, 907.3.1, 907.5.2.2, 907.6.3.2, and 907.6.5, relating to automatic fire sprinkler systems and fire detection systems in certain occupancies are amended to coordinate with Fire Code provisions due to general finding numbers IIA, IIB, IIC, IIIA and IIIB in Section 1, above.
- L. Section 2008 is added to Chapter 20 to provide standards for the emergency helicopter landing facility due to general finding numbers IIA, IIB, IIC, IIIA and IIIB in Section 1, above and are justified to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.
- M. Subsections 2801.2, 2808.2, 2808.3, 2808.7, 2808.9 are amended and Sebsections 2808.11, 2808.11.1, and 2808.11.2 are added due to general finding in Section1, above and are justified to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.

- N. Subsections 4906.3, and 4908 are amended to address special fire hazards associated with Wildland Urban Interface Fire Areas in the City due to general finding numbers IA, IC, ID, IIA, IIB, IIC in Section 1, above.
- O. Subsections 5001.5.2, Table 5003.1.1(1), 5003.1.1.1, 5003.5, 5503.4.1, 5601.2, 5601.3, 5602, 5608.1, 5608.2, 5704.2.3.2, 6004.2.2.7 are amended to address conditions related to hazardous materials and fireworks due to general finding numbers IA, IB, IC, ID, IIA, IIB, IIC, IIIA, IIIB, and IIIC, above, and to match the current resources of firefighting equipment and personnel within the Orange County Fire Authority.
- P. NFPA Standards (NFPA 13, NFPA 13D, NFPA 13R, NFPA 14, and NFPA 24) referenced in Chapter 80 relating to automatic fire sprinkler systems and fire detection systems in certain occupancies are amended to coordinate with Fire Code provisions due to general finding numbers IIA, IIB, IIC, IIIA, IIIB, and IIIC in Section 1, above.

<u>SECTION 2.</u> Additional amendments are found to be either administrative or procedural in nature and therefore are not required under applicable law to be supported by findings.

**SECTION 3.** A copy of this Resolution together with Ordinance No. \_\_\_\_\_\_ shall be filed with the California Building Standards Commission and the State Fire Marshal by the City Clerk of the City of San Clemente.

PASSED AND ADOPTED	O this, day of,,
ATTEST:	
City Clerk of the City of San Clemente, California	Mayor of the City of San Clemente, California
STATE OF CALIFORNIA ) COUNTY OF ORANGE ) CITY OF SAN CLEMENTE )	§
that Resolution No w	of the City of San Clemente, California, do hereby certify was adopted at a regular meeting of the City Council of the continuous day of
AYES:	
NOES:	
ABSENT:	
IN WITNESS WHEREOF, I have the City of San Clemente, of the control of the contro	re hereunto set my hand and affixed the official seal of California, this day of,
	CITY CLERK of the City of San Clemente, California
Approved as to form:	
City Attorney	