

BUILDING STANDARDS COMMISSION

2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959



March 28, 2014

Maria D. Huizar
Clerk of the Council
City of Santa Ana
20 Civic Center Plaza
Santa Ana, CA 92702

RE: Ordinance #NS 2851

Dear Ms. Huizar:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on March 20, 2014.

Our review finds the submittal to contain one ordinance modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modification is accepted for filing and is enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,


Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

MAYOR

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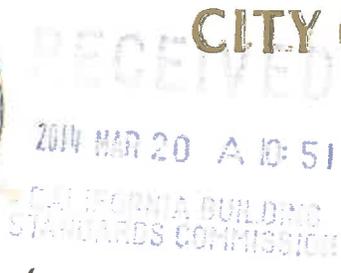
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CITY OF SANTA ANA

VIA CERTIFIED AND FIRST CLASS MAIL

March 18, 2014

California Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833-2936

Re: California Health and Safety Code section 17958.7 Code Revisions Filing

To whom it may concern,

Pursuant to the requirements of *California Health and Safety Code* section 17958.7, the City of Santa Ana hereby encloses a certified copy of Ordinance No. NS-2851 of the City Council of the City of Santa Ana amending Chapters 8 and 14 of the Santa Ana Municipal Code to adopt and amend thereto the most recently enacted California Building Code, California Residential Code, California Green Building Standards Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Fire Code, California Existing Building Code, and International Property Maintenance Code. In addition, the City of Santa Ana hereby encloses a certified copy of Resolution No. 2013-052 with findings to support these revisions and amendments.

Please do not hesitate to contact the undersigned with any questions or comments regarding the adoption of this ordinance.

Very truly yours,

Maria D. Huizar
MARIA D. HUIZAR,
CLERK OF THE COUNCIL

Enclosure

cc: Ryan Hodge, Assistant City Attorney
Gerald Caraig, Building Department

CITY ATTORNEY
Sonia R. Carvalho

CITY MANAGER
David Cavazos

CLERK OF THE COUNCIL
Maria D. Huizar

RESOLUTION NO. 2013-052

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SANTA ANA CALIFORNIA, SETTING FORTH FINDINGS WITH RESPECT TO LOCAL CONDITIONS WITHIN THE CITY OF SANTA ANA WHICH JUSTIFY CERTAIN MODIFICATIONS AND CHANGES TO THE CALIFORNIA BUILDING CODE, CALIFORNIA RESIDENTIAL CODE, CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA FIRE CODE, CALIFORNIA EXISTING BUILDING CODE, AND INTERNATIONAL PROPERTY MAINTENANCE CODE AS AMENDED BY THE STATE OF CALIFORNIA

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SANTA ANA AS FOLLOWS:

Section 1. The City Council hereby finds, determines, and declares as follows:

A. Health and Safety Code Section 17958 provides that the City of Santa Ana shall adopt Ordinances and regulations imposing the same or modified or changed requirements as are contained in the regulations adopted by the State pursuant to Health and Safety Code Section 17922.

B. The State of California is mandated by Health and Safety Code Section 17922 to impose the same requirements as are contained in the most recent edition of the California Building Code, California Existing Building Code, the California Plumbing Code, the California Mechanical Code, and the California Electrical Code (hereinafter referred to collectively as "Codes").

C. Health and Safety Code Section 17958.5(a) permits the City to make modifications or changes to the Codes, which are reasonably necessary because of local climatic, geographic or topographic conditions.

D. Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes to the Codes, shall make an express finding that such changes or modifications are reasonably necessary because of local climatic, geographic or topographic conditions.

Section 2: The Planning and Building Agency and the Orange County Fire Authority have recommended that changes and modifications be made to the Codes and have advised that certain said changes and modifications to the California Building Code, 2013 Edition, the California Plumbing Code, 2013 Edition, the California Mechanical Code, 2013 Edition,

the California Electrical Code, 2013 Edition, the California Existing Building Code, 2013 Edition, and the California Fire Code, 2013 Edition, are reasonably necessary due to local conditions in the City of Santa Ana.

Section 3. Amendments to the 2013 Edition of the California Building Code, the 2013 Edition of the California Residential Code, and the 2013 Edition of the California Fire Code as recommended by the Planning and Building Agency and the Orange County Fire Authority are hereby found to be reasonably necessary based upon the following findings:

I. Climatic Conditions

- A. The jurisdiction of Santa Ana 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 County. 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 Orange County fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.
- 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 and 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 foothills of Orange County. The elevation change cause by the hills creates the geological foundation on which communities with Orange County is built and will continue to build. 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 Orange County.

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

The Orange County region is a densely populated area that has buildings constructed over and 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.

A. 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. State 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."

- B. Road circulation features located throughout the County also make amendments reasonably necessary. Located through the County 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.
- C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- D. Portions so of the 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.

Section 4. The following specific amendments to the sections of the 2013 Edition of the California Building Code as recommended by the Planning and Building Agency and the Orange County Fire Authority are reasonably necessary based upon the corresponding findings in Section 3 of this resolution as listed below:

BUILDING CODE SECTION	TITLE (Clarification)	FINDINGS I,II,III
202	General definitions (High-rise, EHLF)	Admin
403.1	High-rise buildings Applicability	II & III-A
412.7.6 thru 412.7.6.13	Emergency Helicopter Landing Facility	II & III-A
710A.3.2	Detached accessory structures	I & II
710A.4	Accessory structure material	I & II
903.2	Where required (Sprinklers)	II & III-B
903.2.8	Group R (Sprinklers)	II-B & III-B
903.3.5.3	Hydraulically calculated systems	I & II
903.4	Sprinkler system supervision and alarms (of valves)	III-A
905.4	Location of Class I standpipe hose connections	III-A
907.2.13	High-rise buildings (Alarm Systems)	Admin
907.3.1	Duct smoke detectors	III-A
907.5.2.2	Emergency voice/alarm communication system	II & III-A
Chapter 35	Reference Standards	
	2010 NFPA 13 (Sprinkler Systems)	Admin, II & III
	2010 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2010 NFPA 13-D (Single Family Sprinkler Systems)	II & III
	2007 NFPA 14 (Standpipe Systems)	II & III
	2010 NFPA 24 (Underground Water Supply Systems)	II & III

Section 5. The following specific amendments to the sections of the 2013 Edition of the California Residential Code as recommended by the Planning and Building Agency and the Orange County Fire Authority are reasonably necessary based upon the corresponding findings in Section 3 of this resolution as listed below:

RESIDENTIAL CODE SECTION	TITLE (Clarification)	FINDINGS I,II,III
R202	Hazardous Fire Area	Admin
R301.9	Development on or near land containing or emitting toxic, combustible or flammable liquids, gases or vapors	III
R301.10	Fuel modification requirements for new	I & II

	construction	
R309.6	Fire sprinkler attached garages, carports with habitable space above	III
R313.1	Townhouse automatic fire sprinkler systems	III
R313.2	One- and two-family dwellings automatic fire sprinkler system	III
R313.3.6.2.2	Calculation procedures	III
R319	Site Address	II
R327.1.6	Fuel modification requirements for new construction	I & II
R1001.13	Spark arrestors	I & II
Chapter 35	Reference Standards	
	2010 NFPA 13 (Sprinkler Systems)	Admin, II & III
	2010 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2010 NFPA 13-D (Single Family Sprinkler Systems)	II & III

Section 6. The following specific amendments to the sections of the 2013 Edition of the California Fire Code as recommended by the Planning and Building Agency and the Orange County Fire Authority are reasonably necessary based upon the corresponding findings in Section 3 of this resolution as listed below:

FIRE CODE SECTION	TITLE (Clarification)	FINDINGS I,II,III
109.3	Violation penalties	Admin
109.3.2	Infraction	Admin
109.3.3	Misdemeanor	Admin
202	General definitions (Flow-Line, Hazardous Fire Area, EHLF)	Admin
305.5	Chimney spark arrestors	I & II
305.6	Outdoor fires	I & II
305.6.1	Where prohibited	I & II
305.6.1.1	Fuel Modification Area	I & II
305.6.1.2	Supervision	I & II

305.6.2	Hazardous conditions	I & II
305.6.3	Disposal of rubbish	I & II
307.6	Outdoor Fireplaces, Fire Pits, Fire Rings, and Outdoor Fireplaces	I & II
307.6.1	Gas-fueled devices	I & II
307.6.2	Devices using wood or fuels other than natural gas or LPG	I & II
307.6.2.1	Where prohibited	I & II
319	Development on or near land containing or emitting toxic, combustible or flammable liquids, gases or vapors	III
320	Fuel modification requirements for new construction	N/A
321	Clearance of brush or vegetation growth from roadways	N/A
322	Unusual circumstances	N/A
323	Use of equipment	N/A
323.1	Spark arrestors	N/A
324	Restricted entry (In hazardous area)	N/A
325	Trespassing on posted property	N/A
326	Sky Lanterns or similar devices	I & II
503.2.1	Dimensions (Fire Lanes)	N/A
Clarity to VHFSZ		
505.1	Address identification	N/A
510.1;	Emergency responder radio coverage in new buildings	Admin
510.2	Emergency responder radio coverage in existing buildings	Admin
510.3	Permit Required	Admin
510.4	Technical requirements	Admin

510.5	Installation requirements	Admin
510.6	Maintenance	Admin
608.1	Scope (Battery Systems)	Admin
608.10	Indoor charging of electric carts/cars	III-A
903.2	Where required (Sprinklers)	II & III-B
903.2.8	Group R (Sprinklers)	II-B & III-B
903.3.5.3	Hydraulically calculated systems	I & II
903.4	Sprinkler system supervision and alarms (of valves)	III-A
905.4	Location of Class I standpipe hose connections	III-A
907.2.13	High-rise buildings (Alarm Systems)	Admin
907.3.1	Duct smoke detectors	III-A
907.5.2.2	Emergency voice/alarm communication system	II & III-A
2008.1. thru 2008.1.11	Emergency Helicopter Landing Facility	II & III-A
2801.2	Permit (Miscellaneous combustible storage)	Admin
2808.2	Storage site	N/A
2808.3	Size of piles	N/A
2808.7	Pile fire protection	N/A
2808.9	Material-handling equipment	N/A
2808.11	Temperature control	N/A
2808.11.2	New material temperature control	N/A
4906.3	Vegetation	N/A
4908	Fuel modification requirements for new construction	N/A
4909	Explosions and blasting	N/A
5001.5.2	Hazardous materials inventory statement (HMIS)	Admin

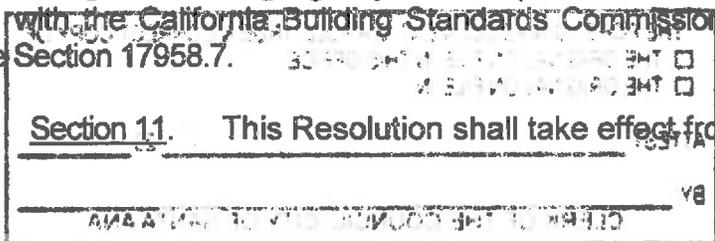
5003.1.1(1)	Maximum allowable quantity per control area	III & III
5003.1.1.1	Extremely hazardous substances	III
5003.5	Hazard identification signs	Admin
5503.4.1	Identification signs (Cryogenic Fluid)	Admin
5610	Firing (Fireworks)	Admin
5611	Seizure of fireworks	Admin
5612	Displays (Fireworks)	
5613	Retail fireworks	
5704.2.3.2	Label or placard (Flammable/Combustible liquid)	Admin
6004.2.2.7	Treatment systems (Highly toxic & toxic material)	II & III
Chapter 50	Reference Standards	
	2010 NFPA 13 (Sprinkler Systems)	Admin, II & III
	2010 NFPA 13-R (Multi-Family Sprinkler Systems)	II & III
	2010 NFPA 13-D (Single Family Sprinkler Systems)	II & III
	2007 NFPA 14 (Standpipe Systems)	II & III
	2010 NFPA 24 (Underground Water Supply Systems)	II & III
	2010 NFPA 72 (Fire Alarm Systems)	Admin & II

Section 8. The aforementioned amendments have been incorporated in detail in Ordinance NS-2851.

Section 9. Additional amendments have been made to the relevant California Building Code, Electrical Code, Mechanical Code, Plumbing Code, Existing Building Code, Residential Code, Green Building Standards Code, Fire Code, and International Property Maintenance Code. On the recommendation of the Planning and Building Agency and the Fire Authority, such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in the aforementioned Codes. The changes made include provisions making each of said Codes compatible with other Codes enforced by the City.

Section 10. The City Council of the City of Santa Ana hereby approves and authorizes the Planning and Building Agency to file copies of Resolution 2013-052 and Ordinance NS-2851 with the California Building Standards Commission as required by Health and Safety Code Section 17958.7.

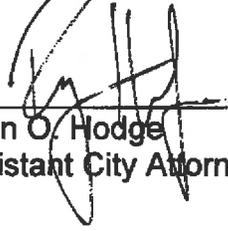
Section 11. This Resolution shall take effect from and after its adoption.



ADOPTED this 4th day of November, 2013.


Miguel Pulido
Mayor

APPROVED AS TO FORM:
Sonia R. Carvalho
City Attorney

By: 
Ryan O. Hodge
Assistant City Attorney

AYES: Councilmembers: Amezcuca, Benavides, Martinez, Pulido, Reyna, Sarmiento, Tinajero (7)

NOES: Councilmembers: None (0)

ABSTAIN: Councilmembers: None (0)

NOT PRESENT: Councilmembers: None (0)

CERTIFICATE OF ATTESTATION AND ORIGINALITY

I, MARIA D. HUIZAR, Clerk of the Council, do hereby attest to and certify the attached Resolution No. 2013-052 to be the original resolution adopted by the City Council of the City of Santa Ana on November 4, 2013.

Date: 11/6/2013


Clerk of the Council
City of Santa Ana

<p>THE FOREGOING DOCUMENT IS A FULL, TRUE & CORRECT COPY OF</p> <p><input checked="" type="checkbox"/> THE ORIGINAL ON FILE IN THIS OFFICE.</p> <p><input type="checkbox"/> THE ORIGINAL ON FILE IN</p> <p>ATTEST: <u>March 17</u> 20 <u>14</u></p> <p>BY: <u>Maria Huizar</u></p> <p>CLERK OF THE COUNCIL, CITY OF SANTA ANA</p>

ORDINANCE NO. NS-2851

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF SANTA ANA AMENDING CHAPTERS 8 AND 14 OF THE SANTA ANA MUNICIPAL CODE TO ADOPT AND AMEND THERETO THE MOST RECENTLY ENACTED CALIFORNIA BUILDING CODE, CALIFORNIA RESIDENTIAL CODE, CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA ELECTRICAL CODE, CALIFORNIA MECHANICAL CODE, CALIFORNIA PLUMBING CODE, CALIFORNIA FIRE CODE, CALIFORNIA EXISTING BUILDING CODE, AND INTERNATIONAL PROPERTY MAINTENANCE CODE

THE CITY COUNCIL OF THE CITY OF SANTA ANA DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1: That section 8-43 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-43. Adoption by reference.

There is adopted by the city that certain code known as the California Building Code, 2013 Edition, based on the 2012 International Building Code as published by the International Code Council, (hereinafter referred to in this article as the "Building Code," "building code," or "California Building Code"), consisting of "Volume 1", "Volume 2" and the 2013 California Existing Building Code (together with subsequent supplements or amendments to any volume, each of which shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The building code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the building code set forth in this chapter that specifically amends the Building Code. Any previously enacted, unrepealed provision of the Santa Ana Municipal Code that amended a pre-2013 edition of the "Building Code" shall also be construed as amending the applicable provision of the 2013 or later edition of the building code. The building code, as thus amended, together with all other provisions of this article, shall be known as the city building code.

Appendices which are adopted pursuant to this section are as follows:

Appendix I, Patio Covers

Appendix J, Grading

SECTION 2: That section 8-90 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-90. Board of appeals (Volume 1, Chapter 1, Division II, Section 113).

Section 113 of Volume 1, Chapter 1, Division II, of the building code is deleted.

SECTION 3: That section 8-94 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-94. Permits required (Volume 1, Chapter 1, Division II, Section 105).

Section 105.1 of Chapter 1, Volume 1, Division II of the building code is amended to read as follows:

105.1 Permits required. No building or structure regulated by this code shall be erected, constructed, enlarged, altered, repaired, moved, improved, or its occupancy changed, removed, converted, demolished or maintained unless a separate permit for each building or structure has first been obtained from the building official.

Sections 105.1.1 and 105.1.2 of Volume 1, Chapter 1, Division II of the building code are deleted.

Item 6 of Section 105.2 is amended to read: Sidewalks, driveways and decks not more than 30 inches (762 mm) above adjacent grade, and not over any basement or story below and are not part of an accessible route.

SECTION 4: That section 8-95 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-95. Certificate of occupancy (Chapter 1, Division II, Section 111).

Chapter 1, Division II, Section 111.1 of the building code is amended to read as follows:

Chapter 1, Division II, Section 111.1--Certificate of Occupancy

- (1) Use and occupancy. No building or structure shall be used or occupied, and no change in the existing occupancy classification of a building or structure or portion thereof shall be made, until the building official has issued a certificate of occupancy therefor as provided herein. Issuance of a certificate of occupancy shall not be construed as an

approval of a violation of the provisions of this code or other ordinances of the jurisdiction.

Exception: Certificates of occupancy are not required for work exempt from permits under Section 105.2

- (2) No alteration to an existing building which changes the floor area of the building or which changes the means of egress from the building shall be made until the building official has issued a certificate of occupancy therefor as provided herein.
- (3) No change of occupant within a building or portion thereof shall be made until the building official has issued a certificate of occupancy therefor as provided herein.

EXCEPTION: Group R, Divisions 2 and 3, and Group U Occupancies.

- (4) No building or structure shall be connected with utility services, nor shall a building or structure whose electrical service has been disconnected be reconnected with electrical service until an inspection has been made and the building official has determined that the building does not constitute an unsafe building.

SECTION 5: That section 8-96 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-96. Time Limitation of Application (Volume 1, Chapter 1, Division II, Section 105.3.2).

Section 105.3.2 is amended to read as a follows:

Sec. 105.3.2. Time limitation of application. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless the permit has been issued; except that the Building Official may extend the time for action by the applicant for a period not exceeding one hundred and eighty (180) days upon request by the applicant showing that circumstances beyond the control of the applicant have prevented action from being taken. No application shall be extended more than once. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay a new plan review fee.

SECTION 6: That section 8-97 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-97. High Rise Buildings (Section 202, Section 403).

- (a) Section 202 Definitions are added and/or revised 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 building that is not intended to function as a heliport or helistop but is capable of accommodating fire or medical helicopters engaged in emergency operations.

High-rise structure. Every building of any type of construction or occupancy having floors used for human occupancy located more than 55 above the lowest floor level having building access (see Section 403), except buildings used as hospitals as defined in the Health and Safety Code Section 1250.

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

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

- (b) Section 403 is amended to read as a follows:

Sec. 403. 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.

- (c) Section 403.1 is amended to read as a follows:

403.1 Applicability. New high-rise buildings and group I-2 having occupied floors located more than 55 feet above the lowest level of fire department vehicle access and new group I-2 occupancies having occupied floors located more than 55 feet above the lowest level of fire department vehicle access shall comply with Sections 403.2 through 403.6.

- (d) Section 403.1.1 is amended to read as a follows:

1. "High-rise building" means every building of any type of construction or occupancy having floor used for human occupancy located above 55 feet above the lowest floor level having building access, except buildings used as hospitals as defined by the Health and Safety Code Section 1250.

SECTION 7: That section 8-98 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-98. Reserved.

SECTION 8: That section 8-99 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-99. Reserved.

SECTION 9: That section 8-100 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-100. Reserved.

SECTION 10: That section 8-101 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-101. Aircraft-Related Occupancies (Section 412).

Section 412.7 of the California Building Code is hereby amended by adding Sections 412.7.6 through 412.7.6.13 as follows:

412.7.6. Emergency Helicopter Landing Facility. Emergency Helicopter Landing Facility (EHLF) shall be constructed as specified in Section 412.7.6.1 through 412.7.6.13.

412.7.6.1 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 the 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.

412.7.6.2 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.

412.7.6.3 Approach-Departure Path. The emergency helicopter landing facility shall have two approach-departure paths separated in plan from each other by at least 90 degrees. No objects shall

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

412.7.6.4 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.

412.7.6.5 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/psf 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.

412.7.6.6 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.

412.7.6.7 Wind Indicating Device. An approved wind indicating device shall be provided but shall not extend into the safety area or the approach-departure paths.

412.7.6.8 Special Markings. The emergency helicopter landing facility shall be marked as indicated in Figure 412.7.6.8.

412.7.6.9 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 CFC 1009.4.2 for riser height and tread depth. Handrails shall be provided, but shall not extend above the platform surface.

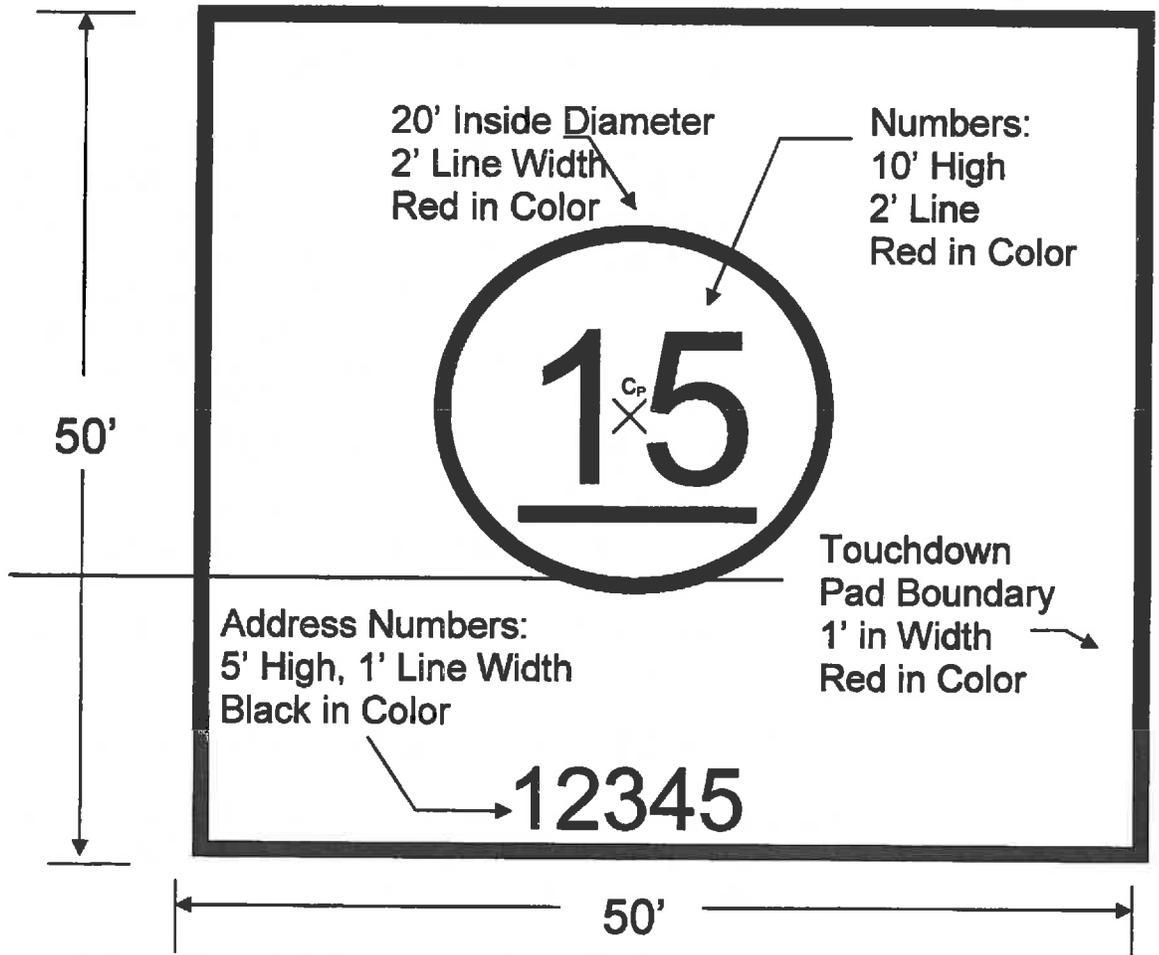
412.7.6.10 Standpipe systems. The standpipe system shall be extended to the roof level on which the EHLF is located. All portions of the EHLF area shall be within 150 feet of a 2.5-inch outlet on a Class I or III standpipe.

412.7.6.11 Fire extinguishers. A minimum of one portable fire extinguisher having a minimum 80-B:C rating shall be provided and

located near the stairways 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.

412.7.6.13 EHLF. Fueling, maintenance, repairs, or storage of helicopters shall not be permitted.

Figure 412.7.6.8 Helicopter Landing Pad Markings



1. The preferred background is white or tan.
2. The circled, red numbers indicate the allowable weight that the facility is capable of supporting in thousands of pounds.
3. The numbers shall be oriented towards the preferred flight (typically facing the prevailing wind).

SECTION 11: That section 8-102 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-102. Fire Protection Systems.

(a) **Section 903.2 Where required** is hereby revised to read as follows:

903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided when one of the following conditions exists:

1. **New buildings:** Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.12, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet (465 m²) as defined in the CBC, regardless of fire areas or allowable area, or more than two stories in height.
2. **Existing Buildings:** Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and when one of the following conditions exists:
 - a. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet (465 m²) as defined in Section 202; or
 - b. When an addition exceeds 2000 square feet (186 m²) and the resulting building area exceeds 5000 square feet (465 m²) as defined in Section 202.
 - c. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Group R-3 occupancies. Group R-3 occupancies shall comply with Section 903.2.8.

(b) **Section 903.2.8 Group R** is hereby revised as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 902.1 shall be provided throughout all buildings with a Group R fire area as follows:

1. **New Buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

(c) **Section 903.4 Sprinkler system supervision and alarms** is hereby revised to read as follows:

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.

(d) **Section 905.4 Location of Class I standpipe hose connections** is hereby revised to read as follows:

905.4 Location of Class I standpipe hose connections. is hereby revised to read as follows:

7. The centerline of the 2.5 inches (63.5 mm) outlet shall be no less than 18 inches(457.2 mm) above and no more than 24 inches above the finished floor.

(e) **Section 907.2.13 High-rise buildings** is hereby revised to read 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 access. 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 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:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.
2. Open parking garages in accordance with Section 406.3 of the California Building Code.
3. Buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the California Building Code.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.
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

(f) **Section 907.3.1 Duct smoke detectors** is hereby amended to read 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.

(g) **Section 907.5.2.2 Emergency voice/alarm communication system** is revised to read as follows.

907.5.2.2 Emergency voice/alarm communication system. Emergency voice/alarm communication system 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 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 Section 1002.1.
5. Dwelling Units in apartment houses.
6. Hotel guest rooms or suites.

Exception: In Group I-1 and R-2.1 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

(h) **Section 907.6.3.2 High-rise buildings** is revised to read 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.

(i) **Section 907.6.5 Monitoring** is revised to read as follows

907.6.5 Monitoring. Fire alarm systems required by this chapter or by the California Fire 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".

SECTION 12: That section 8-103 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-103. Reserved.

SECTION 13: That section 8-104 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-104. Reserved.

SECTION 14: That section 8-105 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-105. Reserved.

SECTION 15: That section 8-106 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-106. Reserved.

SECTION 16: That section 8-112 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-112. Reserved.

SECTION 17: That section 8-113 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-113. Reserved.

SECTION 18: That section 8-153 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-153. Standards for the Installation of Sprinkler Systems.

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

(a) Section 6.8.3 is hereby revised 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 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.

(b) Section 8.3.3.1 is hereby revised 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:

1. Quick-response type as defined in 3.6.4.7
2. Residential sprinklers in accordance with the requirements of 8.4.5
3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
4. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems

(c) 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 system, where provided. Group R 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. Sound levels in all sleeping areas shall be minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

(d) 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 than 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 a 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.

(e) 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:

- 1) 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.

(f) Section 23.2.1.1 is hereby revised as follows:

Section 23.2.1.1 Where a waterflow test is used for the purposes of system design, the test shall be conducted no more than 12 6 months prior to working plan submittal unless otherwise approved by the authority having jurisdiction.

SECTION 19: That section 8-154 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-154. Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height.

NFPA 13R 2013 Edition, Installation of Sprinkler System in Residential Occupancies up to and Including Four Stories in Height is hereby amended as follows:

Section 6.16.1 is hereby revised 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 water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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

SECTION 20: That section 8-155 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-155. Standard for the Installation of Sprinkler Systems in One and Two Family Dwellings and Manufactured Homes.

NFPA 13D 2013 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

(a) **Section 4.1.3** is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

(b) **Section 4.1.3.1** is hereby added as follows:

4.1.3.1. 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.

(c) **Section 4.1.5.2** is hereby added as follows:

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

(d) Section 4.1.3.3 is hereby added as follows:

4.1.3.3 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).

(e) Section 4.1.3.4 is hereby added as follows:

4.1.3.4 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.

(f) Section 7.1.2 is hereby revised 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.

(g) 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 fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater. 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.

Exception:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

SECTION 21: That section 8-156 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-156. Installation of Standpipe and Hose Systems.

NFPA 14, 2013 Edition, Installation of Standpipe and Hose Systems is hereby amended as follows:

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.

SECTION 22: That section 8-157 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-157. Standard for the Installation of Private Fire Service Mains and Their Appurtenances.

NFPA 24, 2013 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances is hereby amended as follows:

(a) **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.

(b) **Section 6.2.11 (5)** is hereby deleted without replacement and (6) and (7) renumbered:

(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.

(c) **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.

(d) **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

(e) **Section 10.3.6.2** is hereby revised 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 poly-tube, and after installation.

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

(f) 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.

(g) Section 10.6.3.1 is hereby deleted and replaced 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.

(h) Section 10.6.4 is hereby revised 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.

SECTION 23: That section 8-290 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-290. Adoption by reference.

There is adopted by the city that certain code known as the California Plumbing Code, 2013 Edition, including the following appendices thereto: A, B, D, I and K, (hereinafter referred to in this article as the "Plumbing Code"), together with subsequent supplements or amendments, which shall become effective, adopted and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified. The plumbing code is adopted and incorporated by reference as fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the plumbing code set forth in this chapter of this Code that specifically amend the plumbing code. Any previously enacted, unrepealed provision of this Code that amended a pre-2013 edition of the "Plumbing Code" shall also be construed as amending the applicable provision of the 2013 or later edition of the plumbing code. The plumbing code as amended, together with all other provisions of this article, shall be known as the city plumbing code.

SECTION 24: That section 8-342 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-342. Suspended piping support (California Plumbing Code, Table 313.1).

Table 313.1 of the plumbing code is amended by adding footnote 2 to the requirements for horizontal piping of all materials specified in Table 313.1 of the California Plumbing Code.

SECTION 25: That section 8-401 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-401. Building supply pipe (California Plumbing Code Section 610.8 using Table 610.4).

Section 610.8 of the Plumbing Code is amended to read as follows:

610.8 Size of meter and building supply pipe using Table 610.4. The size of the meter and the building supply pipe shall be determined as follows:

1. Determine the available pressure at the water meter or other source of supply.
2. Add or subtract depending on positive or negative elevation change, ½ psi for each foot of difference in elevation between such source of supply and the highest water supply outlet in the building or on the premises.
3. Use the "pressure range" group within which this pressure will fall using Table 610.4.
4. Select the "length" column that is equal to or longer than the required length.
5. Follow down the column to a fixture unit value equal to or greater than the total number of fixture units required by the installation.
6. Having located the proper fixture unit value for the required length, sizes of meter and building supply pipe as found in the two left-hand columns shall be applied.

No building supply pipe shall be less than three-quarters (3/4) inch (20 mm) in diameter.

Each single family residential structure shall be served with a main water supply pipe of not less than one (1) inch I.D.

Two (2) hose bibs served by three-quarter (3/4) I.D. pipe or larger shall be provided; one serving the front yard and one serving the rear yard.

SECTION 26: That section 8-402 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-402. Building supply pipe (California Plumbing Code, Table 610.4).

Table 610.4 of the plumbing code is amended by changing the note 2 to read as follows:

Building Supply, three-quarter (3/4) inch (20 mm) nominal size minimum, - 1" minimum diameter for each single-family residential structure.

SECTION 27: That section 8-405 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-405. Grade, support, and protection of building sewers (Section 718.1).

Section 718.1 of the California Plumbing Code is amended by adding the following paragraph thereto.

Building sewer piping systems designed for grades of less than one (1) percent shall be designed by a registered civil engineer. The engineer shall be responsible for supervising the installation and shall certify in writing that the sewer installation is in compliance with the City-approved plan, relative to line and grade.

SECTION 28: That section 8-556 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-556. Adoption by reference.

There is adopted by the city that certain code known as the California Mechanical Code, 2013 edition (hereinafter referred to in this article as the "California Mechanical Code" "Mechanical Code" or "mechanical code"), together with subsequent supplements, amendments, or editions, which shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified. The mechanical code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the mechanical code set forth in this chapter of this Code that specifically amend the mechanical code. Any previously enacted, unrepealed provision of this Code that amended a pre-2013 edition of the "Mechanical Code" shall also be construed as amending the applicable provision of the 2013 or later edition of the mechanical code. The mechanical code as amended, together with all other provisions of this article, shall be known as the city mechanical code.

SECTION 29: The City Council of the City of Santa Ana hereby finds, determines and declares that adoption of section 8-570 amending California Mechanical Code Section 602.1 is necessary because of corrosion related to the high seasonal humidity in this coastal area which prevents moisture collecting in flexible ducting of evaporative

cooling systems from draining and evaporating, contributing to the deterioration of the ductwork thereby endangering person's health and the environment.

SECTION 30: That section 8-570 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-570. Ducts--Material (Section 602.1).

Section 602.1 of the mechanical code is amended to read as follows:

602.1 General. Supply air, return air, and outside air for heating, cooling, or evaporative cooling systems shall be conducted through duct systems constructed of metal in accordance with SMACNA HVAC Duct Construction Standards - Metal and Flexible. Rectangular ducts two (2) inches w.g. shall comply with the SMACNA HVAC Duct Construction Standards - Metal and Flexible. Ducts, plenums, and fittings shall be permitted to be constructed of concrete, clay, or ceramics when installed in the ground or in a concrete slab, provided the joints are tightly sealed.

In other than Group A, E, H, I, L, and R occupancies, high-rise buildings, and other applications listed in Section 1.11.0 regulated by the Office of the State Fire Marshal, corridors shall not be used to convey air to or from rooms if the corridor is required be of fire-resistive construction in accordance with the Building Code. In Group A, E, H, I, L, and R occupancies, high-rise buildings, and other applications listed in Section 1.11.0 regulated by the Office of the State Fire Marshal, corridors shall not be used to convey air to or from rooms except where permitted in accordance with Section 1018.5 of the California Building Code.

Exception: [OSHPD 1, 2, 3 & 4] (See Section 407.4.1.3).

Not permitted for [OSHPD 1, 2, 3 & 4] Concealed building spaces or independent construction within buildings shall be permitted to be used as ducts or plenums.

When gypsum products are exposed in ducts or plenums, the air temperature shall be restricted to a range from 50°F (10°C) to 125°F (52°C), and moisture content shall be controlled so that the material is not adversely affected. For the purpose of this section, gypsum products shall not be exposed in ducts serving as supply from evaporative coolers, and in other air-handling systems regulated by this chapter when the temperature of the gypsum product will be below the dew point temperature.

See Chapter 8 for limitations on combustion products venting systems extending into or through ducts or plenums.

See Chapter 5 for limitations on environmental air systems exhaust ducts extending into or through ducts or plenums.

Exhaust ducts under positive pressure and venting systems shall not extend into or pass through ducts or plenums. For appliance vents and chimneys, see Chapter 8.

EXCEPTION: Supply air duct, on the discharge side of an evaporative cooler, shall be conducted through rigid metal ducts constructed as set forth in SMACNA HVAC Duct Construction Standards - Metal and Flexible, and unless prohibited by structural conditions shall be graded in the direction of the supply outlet. Factory-made air ducts complying with U.L. Standard No. 181 shall be limited to installation in a vertical position only.

Note: Vertical shall be defined as not more than forty-five (45) degrees from the vertical.

SECTION 31: That section 8-667 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-667. Adoption by reference.

There is adopted by the city that certain code known as the California Electrical Code 2013 Edition and the administrative provisions set forth herein, (hereinafter referred to in this article as the "Electrical Code") together with subsequent supplements, amendments, or editions, which shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless specifically adopted prior to that date, of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The electrical code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the electrical code set forth in this chapter of this code that specifically amend the electrical code. Any previously enacted, unrepealed provision of this Code that amended a pre-2013 edition of the "Electrical Code" shall also be construed as amending the applicable provision of the 2013 or later edition of the electrical code. The electrical code as amended, together with all other provisions of this article, shall be known as the city electrical code.

SECTION 32: The City Council of the City of Santa Ana hereby finds, determines and declares that adoption of section 8-942 amending California Electrical Code Section 334.12 is necessary because earthquakes are a common occurrence in the local area; that, unlike wire installed in conduit or raceways, non-metallic sheathed cable does not provide the degree of protection that is needed in the event of an earthquake; that

exposed non-metallic sheathed cable is particularly hazardous; and that this amendment is necessary to assure that adequate protection is provided in the workplace and in other places of public gathering.

SECTION 33: That section 8-942 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-942. Uses not permitted (Section 334.12).

Section 334.12 of the California Electrical Code is amended to read as follows:

Sec. 334.12. Uses Not Permitted.

(A) Types NM, NMC and NMS. Types NM, NMC and NMS cables shall not be permitted as follows:

1. In any multifamily dwelling or other structure not specifically permitted in 334.10(1), (2), and (3).
2. Exposed in dropped or suspended ceilings in other than one- and two-family and multifamily dwellings
3. As service-entrance cable
4. In any nonresidential building or structure
5. In theatres and similar locations except where permitted in 518.4(B)
6. In motion picture studios
7. In storage battery rooms
8. In hoist ways or on elevators or escalators
9. Embedded in poured cement, concrete, or aggregate.
10. In hazardous (classified) locations, except where specifically permitted by other articles in this Code.

(B) Types NM and NMS. Types NM and NMS cables shall not be installed in the following:

1. Where exposed to corrosive fumes or vapors
2. Where embedded in masonry, concrete, adobe, fill, or plaster

3. In a shallow chase in masonry, concrete, or adobe and covered with plaster, adobe, or similar finish
4. In wet or damp locations

SECTION 34: That section 8-2000 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2000. Adoption by reference.

There is adopted by the city that certain code known as the 2012 International Property Maintenance Code (hereinafter referred to as the "Property Maintenance Code"), together with subsequent supplements, amendments, or editions, which shall become effective, adopted, and incorporated by reference into this Code on each new official publication date of the International Property Maintenance Code, of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The said Code is adopted and incorporated as fully as if set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the property maintenance code set forth in this chapter of this Code that specifically amends the property maintenance code. Any previously enacted, unrepealed provision of this Code that amended a pre-2012 edition of the "Property Maintenance Code" shall also be construed as amending the applicable provision of the 2012 or later edition of the property maintenance code. The property maintenance code, as thus amended, together with all other provisions of this article, shall be known as the city property maintenance code.

(a) Section 302.8 of the Property Maintenance Code is amended to read as follows:

302.8 Motor vehicles. Except as provided for in other regulations, no inoperative or unlicensed motor vehicle shall be parked, kept or stored on any premises, unless within an enclosed structure, and no vehicle shall at any time be in a state of major disassembly, disrepair, or in the process of being stripped or dismantled. Painting of vehicles is prohibited unless conducted inside an approved spray booth. Occupancy of any motor vehicle for the purpose of living, sleeping, eating or cooking shall only occur within an approved trailer park.

Exception: A vehicle of any type is permitted to undergo major overhaul, including body work, provided that such work is performed inside a structure or similarly enclosed area designed and approved for such purposes. When auto repairs or maintenance occur on a property used for residential occupancy, only vehicles registered to the premises may undergo such repairs or maintenance.

(b) Section 304.3 of the Property Maintenance Code is amended to read as follows:

[F] 304.3 *Premises identification.* Buildings shall have approved address numbers placed in a position to be plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Numbers shall be a minimum of 4 inches (102 mm).

(c) Section 304.14 of the Property Maintenance Code is amended to read as follows:

304.14 *Insect screens.* Every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of not less than 16 mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

(d) Section 305.1.1 of the Property Maintenance Code is amended to read as follows:

305.1.1 *Unsafe conditions.* The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the California Building Code:

1. The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength;
2. The anchorage of the floor or roof to walls or columns, and of walls and columns to foundations is not capable of resisting all nominal loads or loads effects;
3. Structures or components thereof that have reached their limit state;
4. Structural members are incapable of supporting nominal loads and load effects;
5. Stairs, landings, balconies and all similar walking surfaces, including guards and handrails, are not structurally sound, not

properly anchored or are anchored with connections not capable of supporting all nominal loads and resisting all load effects;

6. Foundation systems that are not firmly supported by footings are not plumb and free from open cracks and breaks, are not properly anchored or are not capable of supporting all nominal loads and resisting all load effects.

Exceptions:

1. When substantiated otherwise by an approved method.

2. Demolition of unsafe conditions shall be permitted when approved by the code official.

(e) Section 505.1 of the Property Maintenance Code is amended to read as follows:

505.1 General. Every sink, lavatory, bathtub or shower, drinking fountain, water closet or other plumbing fixture shall be properly connected to either a public water system or to an approved private water system. All kitchen sinks, lavatories, laundry facilities, bathtubs and showers shall be supplied with hot or tempered and cold running water in accordance with the California Plumbing Code.

(f) Section 602 of the International Property Maintenance Code is amended to read as follows:

602.1 Facilities required. Heating facilities shall be provided in structures as required by this section.

602.2 Residential occupancies. Dwellings shall be provided with heating facilities capable of maintaining a room temperature of 68°F (20°C) in all habitable rooms, bathrooms and toilet rooms based on the winter outdoor design temperature for the locality indicated in Appendix D of the California Plumbing Code. Cooking appliances shall not be used to provide space heating to meet the requirements of this section.

Exception: In areas where the average monthly temperature is above 30°F (-1°C), a minimum temperature of 65°F (18°C) shall be maintained.

602.3 Heat supply. Every owner and operator of any building who rents, leases or lets one or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply

heat to maintain a temperature of not less than 68 °F (20°C) in all habitable rooms, bathrooms, and toilet rooms.

Exceptions:

1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the California Plumbing Code.

2. In areas where the average monthly temperature is above 30°F (-1°C) a minimum temperature of 65°F (18°C) shall be maintained.

602.4 Occupiable work spaces. Indoor occupiable work spaces shall be supplied with heat to maintain a temperature of not less than 65 °F (18°C) during the period the spaces are occupied.

(g) Section 604.1 of the Property Maintenance Code is amended to read as follows:

604.1 Facilities required. Every occupied building shall be provided with an electrical system in compliance with the requirements of this section and Section 605 of this Code.

Service. The size and usage of appliances and equipment shall serve as a basis for determining the need for additional facilities in accordance with the California Electrical Code. Dwelling units shall be served by a three-wire, 120/240 volt, single-phase electrical service having a rating of not less than 60 amperes.

SECTION 35: That section 8-2800 is added to Chapter 8 of the Santa Ana Municipal code to read in full as follows:

Sec. 8-2800. Adoption by reference.

There is adopted by the city that certain code known as the California Residential Code, 2013 Edition, based on the 2012 International Residential Code as published by the International Code Council, (hereinafter referred to in this article as the "Residential Code" or "California Residential Code"), (together with subsequent supplements or amendments shall become effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the Clerk of the Council of the city pursuant to Health and

Safety Code Section 18942(d)(1) and are made available for public inspection. The Residential code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city, except for the changes to the Residential code set forth in this chapter that specifically amends the Residential Code. The Residential code, as thus amended, together with all other provisions of this article, shall be known as the city Residential code.

Appendices which are adopted pursuant to this section, are as follows:

Appendix H, Patio Covers

Appendix J, Existing Buildings and Structures

SECTION 36: That section 8-2810 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2810. Climatic and Geographic Design Criteria (Table R301.2(1)).

Table R301.2(1) is revised to read:

TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP °	ICE BARRIER UNDERLAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topographic effects ^e		Weathering ^f	Frost line Depth ^b	Termites ^c					
Zero	85	No	D ₂ or E	Negligible	12-24"	Very Heavy	43	No	See Exhibit B	0	60

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The weathering column shall be filled in with the weathering index (i.e., "negligible," "moderate" or "severe") for concrete as determined from the Weathering Probability Map [Figure R301.2(3)]. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.

b. The frost line depth may require deeper footings than indicated in Figure R403.1(1). The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.

c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.

d. The jurisdiction shall fill in this part of the table with the wind speed from the basic wind speed map [Figure R301.2(A)]. Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

e. Temperatures shall be permitted to reflect local climates or local weather experience as determined by the building official.

f. The jurisdiction shall fill in this part of the table with the seismic design category determined from Section R301.2.2.1.

g. The jurisdiction shall fill in this part of the table with (a) the date of the jurisdiction's entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas), (b) the date(s) of the Flood Insurance Study and (c) the panel numbers and dates of all currently effective FIRMs and FBFMs or other flood hazard map adopted by the authority having jurisdiction, as amended.

h. In accordance with Sections R905.2.7.1, R905.4.3.1, R905.5.3.1, R905.6.3.1, R905.7.3.1 and R905.8.3.1, where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall fill in this part of the table with "NO."

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) from Figure R403.3(2) or from the 100-year (99%) value on the National Climatic Data Center data table "Air Freezing Index- USA Method (Base 32°)" at www.ncdc.noaa.gov/fpsf.html.

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table "Air Freezing Index-USA Method (Base 32°F)" at www.ncdc.noaa.gov/fpsf.html.

k. In accordance with Section R301.2.1.5, where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with "YES." Otherwise, the jurisdiction shall indicate "NO" in this part of the table.

SECTION 37: That section 8-2811 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2811. Masonry stem walls (Section R403.1.3).

Section R403.1.3 is amended to read as follows:

In Seismic Design Categories D0, D1 and D2 masonry stem walls without solid grout and vertical reinforcing are not permitted.

Exception: In detached one- and two-family dwellings which are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings supporting columns or pedestals are permitted.

SECTION 38: That section 8-2812 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2812. Definitions (Section 202).

Section 202 Definitions is hereby revised by adding "Hazardous Fire Area" as follows:

HAZARDOUS FIRE AREA. Includes all areas identified within California Fire Code 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.

SECTION 39: That section 8-2813 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2813. Building Planning (Chapter 3).

(a) Section R309.6 Fire sprinkler attached garages, and carports with habitable space above is hereby amended by modifying the exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing carports and/or garages that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

(b) Section R313.1 Townhouse automatic fire sprinkler systems is hereby amended by modifying the exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic fire sprinkler system installed unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

(c) Section R313.2 One- and two-family dwellings automatic fire sprinkler systems is hereby amended by modifying the exception as follows:

Exception: An automatic residential fire sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with an automatic sprinkler system unless a sprinkler system is required in accordance with California Fire Code Section 903.2.8.

(d) Section R313.3.6.2.2 Calculation procedure is hereby revised as follows:

Section R313.3.6.2.2 Calculation procedure. Determination of the required size for water distribution piping shall be in accordance with the following procedure and California Fire Code Section 903.3.5.3.

(e) Section R319 Site Address is hereby revised as follows:

R319 Site Address. 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). 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.

SECTION 40: That section 8-2814 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2814. Chimneys and Fireplaces (Chapter 10).

Section R1001.13 Chimney spark arresters is hereby added as follows:

R1001.13 Chimney spark arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

SECTION 41: That section 8-2815 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2815. Referenced Standards (Chapter 44).

(a) NFPA 13, 2013 Edition, Installation of Sprinkler Systems is hereby amended as follows:

(1) Section 6.8.3 is hereby amended 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 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 amended 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:

1. Quick-response type as defined in 3.6.4.7
2. Residential sprinklers in accordance with the requirements of 8.4.5
3. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
4. 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 system, where provided. Group R 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. Sound levels in all sleeping areas shall be minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) 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 than 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 a 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:

- 1) 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 as follows:

Section 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 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 water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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

(c) NFPA 13D 2013 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

(1) Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

(2) Section 4.1.3.1 is hereby added as follows:

4.1.3.1. 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.

(3) Section 4.1.5.2 is hereby added as follows:

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

(4) Section 4.1.3.3 is hereby added as follows:

4.1.3.3 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).

(5) Section 4.1.3.4 is hereby added as follows:

4.1.3.4 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.

(6) Section 7.1.2 is hereby revised as follows:

7.1.2 The system piping shall not have a separate control valve unless supervised by a central station, or remote station alarm service

(7) 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 fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater. 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.

Exception:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

SECTION 42: That section 8-2816 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 8-2816. Vehicular Gates (Appendix O).

SECTION AO103.3 Vehicular gates or other barriers across required fire apparatus access roads is added as follows:

AO103.3 Vehicular gates or other barriers across required fire apparatus access roads. The installation of gates or other barriers across a required fire apparatus access road shall comply with the requirements set forth in the 2013 California Fire Code Section 503.6.

SECTION 43: That section 8-2900 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

ARTICLE XV. GREEN BUILDING STANDARDS CODE

Sec. 8-2900. Adoption by reference.

There is adopted by the city that certain code known as the California Green Building Standards Code, 2013 Edition, as published by the International Code Council, (hereinafter referred to in this article as the "California Green Building Standards Code"), (effective, adopted, and incorporated by reference into this Code on the date specified by the state building standards commission, unless otherwise specified), of which not less than one (1) copy of said Code has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The Green Building Standards code is adopted and incorporated by reference as though fully set forth at length herein as provided for in section 419 of the Charter of the city. The California Green Building Standards code, as thus amended, together with all other provisions of this article, shall be known as the city Green Building Standards code.

SECTION 44: That section 14-1 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-1. Adoption by reference.

There is adopted by the city that certain code known as the California Fire Code 2013 Edition, based on the 2012 International Fire Code as published by the International Code Council, (hereinafter referred to in this article as the "California Fire Code" or "fire code") and the whole thereof including the Appendices therein, errata issued during and after the publishing date, save and except such portions as are hereinafter deleted or amended, of which code not less than one (1) copy has been and is now on file in the office of the clerk of the council of the city pursuant to Health and Safety Code Section 18942(d)(1) and are made available for public inspection. The said code is adopted and incorporated as fully as if set forth at length herein and, subject to all amendments set forth in this article, shall be in effect within the city from the effective date of this article. Any provision of this article amending the above mentioned codes shall be construed as amending the 2012 and 2013 editions thereof including such provisions enacted prior to this adoption of the said 2012 and 2013 editions and not thereafter repealed. The said International Fire Code, 2012 edition and the California Fire Code 2013 edition, as thus amended, together with all other provisions of this article, shall be known as the "Fire Code of the City of Santa Ana."

SECTION 45: That section 14-3.1 is added to Chapter 8 of the Santa Ana Municipal code to read in full as follows:

(a) Section 109.4 Violation penalties is hereby revised as follows: **Infraction, Misdemeanor**, 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 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.

(b) Sections 109.4.2 Infraction is hereby added 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.*

(c) Sections 109.4.3 Misdemeanor is hereby added 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

SECTION 46: That section 14-17 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-17. Appointment (Section 103.2).

Section 103.2 is hereby deleted without replacement.

SECTION 47: That section 14-21 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-21. Definitions (Section 202).

Sections 202 General Definitions is hereby revised by adding "Approach-Departure Path," "Emergency Helicopter Landing Facility (EHLF)," "Flow-line," "Hazardous Fire Area," "Safety Area," and "Takeoff and Landing Area" and revising "High-Rise Building" as follows:

202 General Definitions

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 ~~75~~ 55 feet above the lowest floor level having building access (~~see Section 403~~), 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.

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

SECTION 48: That section 14-22 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-22. General Requirements (Chapter 3).

(a) Section 304.1.2 (7) Vegetation is hereby amended as follows:

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 OCFAs vegetation management guidelines.

(b) Section 305.5 Chimney spark arresters is hereby added as follows:

305.5 Chimney spark arresters. All chimneys attached to any appliance or fireplace that burns solid fuel shall be equipped with an approved spark arrester. Chimneys serving outdoor appliances or fireplaces shall be equipped with a spark arrester. The spark arrester shall meet the requirements of Section 2113.9.2 of the California Building Code.

(c) Section 305.6 Outdoor fires is hereby added 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.

Exception: A permit is not required for the following:

1. 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.

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 OPEN BURNING, RECREATIONAL FIRES, FIRE PITS, FIRE RINGS, AND OUTDOOR FIREPLACES is hereby amended 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 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 gas. 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.

(e) Section 319 Development on or Near Land Containing or Emitting Toxic

Combustible or Flammable Liquids, Gases or Vapors, is hereby added as follows:

319 Development On Or Near Land Containing Or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors. 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.

(f) Section 320 Fuel Modification Requirements for New Construction is hereby added as follows:

320 Fuel Modification Requirements for New Construction. 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.

(g) Section 321 Clearance of brush or vegetation growth from roadways is hereby added as follows:

321 Clearance of brush or vegetation growth from roadways. 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 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.

(h) Section 322 Unusual Circumstances is hereby added as follows:

322 Unusual circumstances. 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.

(i) Section 323 Use of Equipment is hereby added as follows:

323 Use of equipment. 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 323.1 maintained in effective working order, or the engine is constructed, equipped and maintained for the prevention of fire.

Exception:

1. 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.
2. 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

(j) Section 323.1 Spark Arresters is hereby added as follows:

323.1 Spark arresters. Spark arresters 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.
2. Spark arresters affixed to the exhaust system of engines or vehicles subject to Section 322 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) Section 324 Restricted Entry is hereby added as follows:

324 Restricted entry. 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 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.
2. 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) Section 325 Trespassing on posted property is hereby added as follows:

325 Trespassing on posted property. 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.

1. Signs. Approved signs prohibiting entry by unauthorized persons and referring to applicable fire code chapters shall be placed on every closed area.
2. 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) Section 326 Sky Lanterns or similar devices is hereby added as follows:

326 Sky Lanterns or similar devices. Possession or use of a sky lantern or similar device employing a candle, flame or other potential ignition source shall be 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.

SECTION 49: That section 14-23 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-23. Emergency Planning and Preparedness (Chapter 4).

Chapter 4: Emergency Planning and Preparedness. Adopt only the Sections listed below:

1. 401
2. 401.3.4
3. 401.9
4. 402
5. 403
6. 404.6 – 404.7.6
7. 407
8. 408.3.1 – 408.3.2
9. 408.12 – 408.12.3

SECTION 50: That section 14-24 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-24. Fire Service Features (Chapter 5).

(a) SECTION 503.2.1 Dimensions is revised 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) SECTION 503.2.1.1 Hazardous Fire Area is added 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) Section 505.1 Address Identification is revised 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) Section 510.1 Emergency responder radio coverage is revised 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 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.
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.
2. 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) Sections 510.2; 510.3; 510.4; 510.5; 510.6 are hereby deleted without replacement.

SECTION 51: That section 14-25 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 14-25. Reserved.

SECTION 52: That section 14-26 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 14-26. Reserved.

SECTION 53: That section 14-27 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 14-27. Reserved.

SECTION 54: That section 14-28 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 14-28. Reserved.

SECTION 55: That section 14-29 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-29. Building Services and Systems (Chapter 6).

(a) Section 608.1 Scope is hereby amended 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.

(b) Section 608.10 Indoor charging of electric carts/cars is hereby added as follows:

608.10 Indoor charging of electric carts/cars. Indoor charging of electric carts/cars where the combined volume of all 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

SECTION 56: That section 14-30 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-30. Fire Protection Systems (Chapter 9).

(a) Section 903.2 Where required is hereby amended as follows:

903.2 Where required. Approved automatic sprinkler systems in buildings and structures shall be provided when one of the following conditions exists:

1. **New buildings:** Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.19, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet (465 m²) as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.
2. **Existing Buildings:** Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:
 - a. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet (465 m²) as defined in Section 202; or
 - b. When an addition exceeds 2000 square feet (186 m²) and the resulting building area exceeds 5000 square feet (465 m²) as defined in Section 202; or
 - c. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Group R-3 occupancies shall comply with Section 903.2.8.

(b) Section 903.2.8 Group R is hereby revised as follows:

903.2.8 Group R. An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all buildings with a Group R fire area as follows:

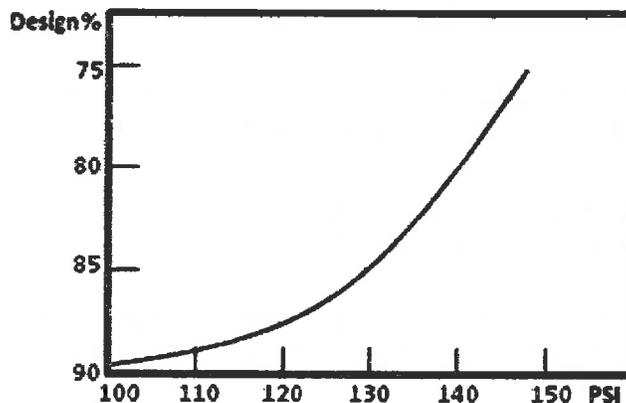
1. **New Buildings:** An automatic sprinkler system shall be installed throughout all new buildings.

(c) Section 903.3.5.3 Hydraulically calculated systems is hereby added 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) Section 903.4 Sprinkler system supervision and alarms is hereby revised by deleting item 3 and 5, and renumbering the Exceptions as follows:

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) Section 905.4 Location of Class I standpipe hose connections is hereby amended by adding item 7 as follows:

7. The centerline of the 2.5 inch (63.5 mm) outlet shall be no less than 18 inches (457.2 mm) and no more than 24 inches above the finished floor.

(f) Section 907.2.13 High-rise buildings is hereby revised as follows:

907.2.13 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. 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 shall be provided with an automatic smoke detection system 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 907.6.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Section 907.2.22 and Section 412 of the California Building Code.
2. 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 303.1 of the California Building Code.
4. Low-hazard special occupancies in accordance with Section 503.1.1 of the California Building Code.
5. In Group I-2 and R-2.1 occupancies, the alarm shall sound at a constantly attended location and occupant notification shall be broadcast by the emergency voice/alarm communication system

(g) Section 907.3.1 Duct smoke detectors is hereby amended 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) Section 907.5.2.2 Emergency voice/alarm communication systems is revised 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 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-1 and R-2.1 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

(i) Section 907.6.3.2 High-rise buildings is revised as follows.

907.6.3.2 High-rise buildings. High-rise buildings and Group I-2 occupancies having occupied floors located more than ~~75~~ 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) Section 907.6.5 Monitoring is revised 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."

SECTION 57: That section 14-31 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 14-28. Reserved.

SECTION 58: That section 14-32 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-32. Construction Requirements for Existing Buildings (Chapter 11).

Chapter 11 Construction Requirements for Existing Buildings. Adopt only those Sections and Subsections listed below:

1103.7
1103.7.3
1103.7.3.1
1103.7.8 – 1103.7.8.2
1103.7.9 – 1103.7.9.10
1103.8 – 1103.8.5.3
1106

SECTION 59: That section 14-33 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-33. Aviation Facilities (Chapter 20).

Section 2008 Emergency Helicopter Landing Facility (EHLF) and its subsections are hereby added 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. 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 approach-departure paths.

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

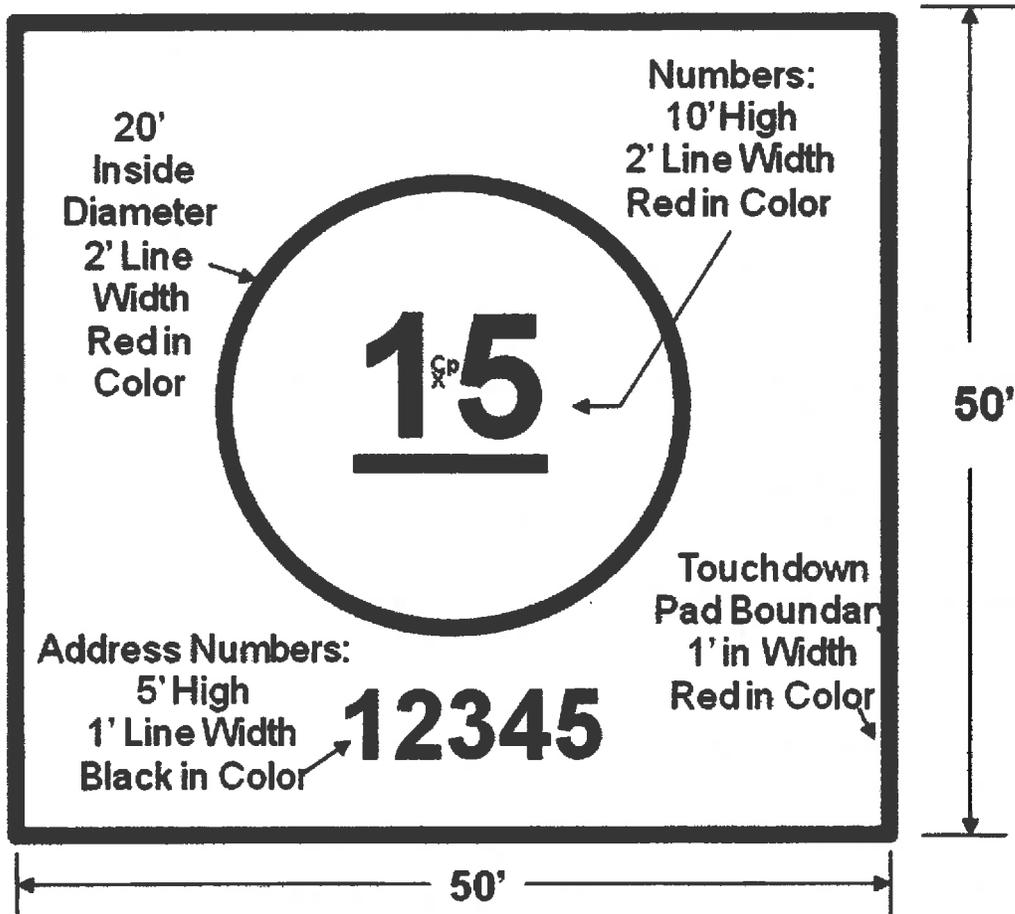
2008.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with CFC 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.

Figure 2008.1.2 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)

SECTION 60: That section 14-34 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-34. Lumber Yards and Woodworking Facilities (Chapter 28).

(a) Section 2801.2 Permit is hereby amended by adding the following statement to the last sentence:

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

(b) Section 2808.2 Storage site is hereby amended 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) Section 2808.3 Size of piles 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.

(d) Section 2808.7 Pile fire protection is hereby amended by adding the following statement to the last sentence:

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) Section 2808.9 Material-handling equipment, is hereby amended by adding the following sentence at the beginning of the section:

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) Section 2808.11 Temperature control, is hereby added 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) Section 2808.11.1 Pile temperature control, is hereby added 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) Section 2808.11.2 New material temperature control, is hereby added 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.

SECTION 61: That section 14-35 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-35. Requirements for Wildland-Urban Interface Fire Areas (Chapter 49).

(a) Section 4906.3 Vegetation is hereby revised by adding Section "(5)" as follows:

(5) OCFA Vegetation Management Guidelines.

(b) Section 4908 Fuel Modification Requirements for New Construction is hereby added as follows:

4908 Fuel Modification Requirements for New Construction. All new buildings to be built or installed in hazardous fire areas shall comply with the following:

1. 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.

SECTION 62: That section 14-36 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-36. Hazardous Materials – General Provisions (Chapter 50).

(a) Section 5001.5.2 Hazardous Materials Inventory Statement (HMIS), is hereby amended by modifying the starting paragraph as follows:

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
7. Amount in storage
8. Amount in use-closed systems
9. Amount in use-open systems.

(b) Table 5003.1.1(1) Maximum Allowable Quantity per Control Area of Hazardous Materials Posing a Physical Hazard is hereby amended by deleting Footnote K without replacement as follows:

~~(k) A maximum quantity of 200 pounds of solid or 20 gallons of liquid Class 3 oxidizers is allowed when such materials are necessary for maintenance purposes, operation or sanitation of equipment when the storage containers and the manner of storage are approved.~~

(c) Section 5003.1.1.1 Extremely Hazardous Substances is hereby added 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) Section 5003.5 Hazard identification signs is hereby amended by modifying the NFPA standard 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.

SECTION 63: That section 14-37 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-37. Cryogenic Fluids (Chapter 55).

Section 5503.4.1 Identification signs is hereby revised 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.

SECTION 64: That section 14-38 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-38. Explosives and Fireworks (Chapter 56).

(a) Section 5601.2 Retail Fireworks is hereby added 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) Section 5601.3 Seizure of Fireworks is hereby added 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) Section 5602 Explosives and blasting is hereby added 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) Section 5608.1 General is hereby amended 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 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) Section 5608.2 Firing is hereby added as follows:

5608.2 Firing. All fireworks displays shall be electrically fired.

SECTION 65: That section 14-39 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-39. Flammable and Combustible Liquids (Chapter 57).

Section 5704.2.3.2 Label or placard is hereby amended by modifying the NFPA standard 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.

SECTION 66: That section 14-40 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-40. Highly Toxic and Toxic Materials (Chapter 60).

Section 6004.2.2.7 Treatment system is hereby amended by modifying the exceptions as follows:

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 automatic-closing 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.

SECTION 67: That section 14-41 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-41. Referenced Standards (Chapter 80).

(a) NFPA 13, 2013 Edition, Standard for the Installation of Sprinkler Systems is hereby amended as follows:

(1) Section 6.8.3 is hereby amended 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 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 amended 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:

5. Quick-response type as defined in 3.6.4.7
6. Residential sprinklers in accordance with the requirements of 8.4.5
7. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers
8. 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 system, where provided. Group R 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. Sound levels in all sleeping areas shall be minimum of 15 DBA above the average ambient sound or a minimum of 75 DBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) 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 than 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 a 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:

- 1) 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 as follows:

Section 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 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 water-flow monitoring system where provided. Group R occupancies containing less than the number of stories, dwelling units or occupant load specified in Section 907.2.8 of the 2010 California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Sound levels in all sleeping areas shall be a minimum of 15 dBA above the average ambient sound or a minimum of 75 dBA with all intervening doors closed, whichever is greater. Alarms shall be audible within all other living areas within each dwelling unit. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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

(c) NFPA 13D 2013 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

(1) Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

(2) Section 4.1.3.1 is hereby added as follows:

4.1.3.1. 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.

(3) Section 4.1.5.2 is hereby added as follows:

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

(4) Section 4.1.3.3 is hereby added as follows:

4.1.3.3 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).

(5) Section 4.1.3.4 is hereby added as follows:

4.1.3.4 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.

(6) Section 7.1.2 is hereby revised 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.

(7) 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 fire code official. Additional interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater. 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.

Exception:

1. When an approved water flow monitoring system is installed, interior audible devices may be powered through the fire alarm control panel.
2. When smoke detectors specified under CBC Section 907.2.11 are used to sound an alarm upon waterflow switch activation.

(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, Standard for the 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:

(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 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 poly-tube, 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:

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

(7) Section 10.6.3.1 is hereby deleted and replaced 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 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.

SECTION 68: That section 14-49 of the Santa Ana Municipal Code is hereby deleted in its entirety:

Sec. 8-103. Reserved.

SECTION 69: That section 14-57 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-57. Application for permit.

The number of fireworks booths allowed to operate in the City of Santa Ana will be limited to a maximum of 85 booths. Organizations that received a permit to operate a firework booth in the previous year will have their operational permit automatically renewed as long as the organization still meets the requirements listed in section 14-56, and have not had any violations of these regulations during the past operational season.

If the number of returning organizations is less than 85 the open fireworks booth operation positions shall be filled by lottery during the following year fireworks season.

Lottery applications for a permit to operate a fireworks booth in the City of Santa Ana must be received at the City of Santa Ana no later than 5:00 pm on April 15th of the year the permit is to be issued. Lottery applications must be complete and all supporting documents included with the application. Lottery applications need not have the booth location, State Fire Marshal permit, or insurance documents submitted until after the lottery is drawn.

If the firework coordinator determines that a lottery is to be run the lottery will be drawn on the first working day after April 20th.

Returning organization applications and the remaining documentation for selected lottery groups must be received at the City of Santa Ana no later than 5:00 pm on May 1st of the year the permit is to be issued.

All fireworks booth permit applications submitted with insufficient information or missing documentation must be corrected before May 31st of the same year, or the first working day after May 31st if May 31st lands on a weekend.

SECTION 70: That section 14-60 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-60. Regulations for temporary stands.

(a) Any person operating a fireworks stand shall abide by and comply with the provisions of this article and other reasonable conditions and restrictions which may be required by the fireworks coordinator prior to granting the permit.

(b) No temporary stand may be erected or constructed on any premises [prior] to June 15th of any year.

SECTION 71: That section 14-61 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-61. Clean premises deposit.

(a) Prior to erecting any such stand, the permittee shall deposit an amount to be set by resolution of the city council, or post a bond in such amount, with the City of Santa Ana to assure the city that the permittee will remove the stand, equipment, materials, and all rubbish from the premises upon which the stand is located, to the satisfaction of the fireworks coordinator, before midnight, July 11th, of the year for which such permit is granted.

(b) If the stand, equipment, materials, and rubbish are removed within the said period of time to the satisfaction of the fireworks coordinator, its City or its agents or employees, the said cash or bond shall be returned to the permittee.

(c) If the premises are not put in proper order, as determined by the fireworks coordinator, the city or its agents or employees may enter upon the property to do everything necessary to clear the premises, and said cash or bond shall be forfeited as liquidated damages for breach of condition subsequent to the permit. As a condition to the permittee's acceptance of the permit, it is expressly agreed that the city or its agents shall have authority to enter upon the premises to carry out the provisions of this section.

SECTION 72: That section 14-63 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-63. Stand location on premises.

No such stand shall be erected within one hundred (100) feet of any gasoline station or commercial garage or within forty (40) feet of any structure. Minimum setback from the street curbing shall be twenty (20) feet, but no such stand shall be less than six (6) feet back from the inside edge of the sidewalk.

The fireworks coordinator may cause any temporary fireworks stand located within the City of Santa Ana to be moved to a different location based upon health and safety concerns.

SECTION 73: That section 14-69 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-69. No smoking on premises.

No smoking shall be permitted in any structure used for storage or sale of fireworks nor within twenty-five (25) feet thereof. "No Smoking" signs shall be prominently displayed in a number prescribed by the City of Santa Ana and/or fire authority having jurisdiction, visible on all sides of the structure.

SECTION 74: That section 14-70 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-70. Electric circuits.

Electrical circuits, wiring, devices and lighting are prohibited in temporary stands unless such installation has been made under a valid electrical permit obtained at the Santa Ana Planning and Building Agency. No permit shall be required for battery-operated portable lighting devices.

SECTION 75: That section 14-74 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-74. Fireworks; public display.

Notwithstanding any other provisions of this article, the fireworks coordinator at his or her discretion may grant permits for public displays of fireworks under his or her supervision. Applications for such public display permits shall be filed with the fireworks coordinator not less than fifteen (15) days before the public display and shall be accompanied by a detailed statement of the pyrotechnic devices to be used in display. If such permit is granted, no pyrotechnic devices shall be discharged except as listed in the statement and the fireworks coordinator may, in granting such permit, eliminate from said statement of pyrotechnic devices, any items as he or she deems hazardous or an unacceptable risk to public safety. Such public display shall be under the supervision of the fireworks coordinator or such persons as he or she shall designate. The fee for the public pyrotechnic display permit shall be established by resolution of the city council. Such display shall be held at the place and time as designated in the permit. The application for such permit shall comply with the provisions of Title 19 California Code of Regulations, Chapter 6; Fireworks. The denial of an application may be appealed to the uniform code appeals board.

SECTION 76: That section 14-77 of the Santa Ana Municipal Code is hereby amended such that it reads as follows:

Sec. 14-77. Seizure of fireworks.

The fire authority having jurisdiction shall seize, take, remove, or cause to be removed, at the expense of the owner, all stocks of fireworks offered or exposed for sale, or held in violation of this articles.

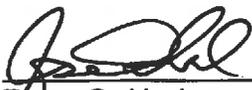
SECTION 77: If any section, subsection, sentence, clause, phrase, or portion of this ordinance is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of Santa Ana hereby declares that it would have adopted this ordinance and each section, subsection, sentence, clause, phrase or portion thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases, or portions be declared invalid or unconstitutional.

SECTION 78: Neither the adoption of this ordinance nor the repeal hereby of any ordinance shall in any manner affect the prosecution for violation or ordinances, which violations were committed prior to the effective date hereof, nor be construed as affecting any of the provisions of such ordinance relating to the collection of any such license or penalty or the penal provision applicable to any violation thereof, nor to affect the validity of any bond or cash deposit in lieu thereof, required to be posted, filed or deposited pursuant to any ordinance and all rights and obligations there under appertaining shall continue in full force and effect.

ADOPTED this 18th day of November, 2013


Miguel A. Pulido
Mayor

APPROVED AS TO FORM:
Sonia R. Carvalho, City Attorney

By:  for _____
Ryan O. Hodge
Assistant City Attorney

AYES: Councilmembers: Amezcuca, Benavides, Martinez, Pulido, Reyna, Sarmiento, Tinajero (7)

NOES: Councilmembers: None (0)

ABSTAIN: Councilmembers: None (0)

NOT PRESENT: Councilmembers: None (0)

CERTIFICATE OF ATTESTATION AND ORIGINALITY

I, MARIA D. HUIZAR, Clerk of the Council, do hereby attest and certify that the attached Ordinance No. NS-2851 to be the original ordinance adopted by the City Council of the City of Santa Ana on November 18, 2013 and that said ordinance was published in accordance with the Charter of the City of Santa Ana.

Date: 11/20/2013

Maria D. Huizar
Clerk of the Council
City of Santa Ana

THE FOREGOING DOCUMENT IS A FULL, TRUE & CORRECT COPY OF	
<input checked="" type="checkbox"/>	THE ORIGINAL ON FILE IN THIS OFFICE.
<input type="checkbox"/>	THE ORIGINAL ON FILE IN
ATTEST:	<u>March 13 20 14</u>
BY:	<u>Maria Huizar</u>
CLERK OF THE COUNCIL, CITY OF SANTA ANA	

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THE REPRODUCED DOCUMENT IS A TRUE & CORRECT COPY OF
AS THE ORIGINAL IS IN THE OFFICE
OF THE ORIGINAL OFFICE

Attest _____

By _____
CLERK OF THE COUNCIL OF THE CITY OF BATAVIA