

BUILDING STANDARDS COMMISSION

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



January 13, 2014

Bill Tarin
Building Director
City of Villa Park
17855 Santiago Blvd.
Villa Park, CA 92861

RE: Ordinance #2013-582

Dear Mr. Tarin:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on December 11, 2013.

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,

A handwritten signature in black ink, appearing to read "Enrique M. Rodriguez".

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

December 6, 2013

James McGowan
California Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833

RECEIVED
2013 DEC 11 P 10:16
CALIFORNIA BUILDING
STANDARDS COMMISSION

RE: City of Villa Park, Building Ordinance

Mr. McGowan,

The City of Villa Park has adopted the current Administrative, Building, Fire, Plumbing, Mechanical, Electrical, Energy, Green, and Existing Building Codes of the State of California.

The City of Villa Park has recommended changes and modifications to the Codes and have advised that certain said changes and modifications to the 2013 editions of the California Building, Residential, Fire, Plumbing, and Green codes are reasonably necessary due to local conditions in the City of Villa Park, and have further advised that the remainder of said changes and modifications are of an administrative or procedural nature, concern themselves with subjects not covered by the Code, or are reasonably necessary to safeguard life and property within the City of Villa Park.

The enclosed City Ordinances and Resolution are for your files.

For more information, please call the City of Villa Park at (714) 998-1500.

Sincerely,



Bill Tarin
Building Director

City of Villa Park
17855 Santiago Blvd.
Villa Park, CA 92861



RESOLUTION NO. 2013-3258

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF VILLA PARK, CALIFORNIA, SETTING FORTH FINDINGS FOR LOCAL AMENDMENTS TO THE 2013 CALIFORNIA FIRE CODE, THE 2013 CALIFORNIA BUILDING CODE AND THE 2013 CALIFORNIA RESIDENTIAL CODE RELATIVE TO LOCAL CLIMATIC, GEOGRAPHICAL AND TOPOGRAPHICAL CONDITIONS, AND REPEALING RESOLUTION NO. 2010-3134

OFFICIAL COPY

Amal M. Alkhalaf

signature

12-6-2013

date

WHEREAS, California Government code Section 50022.1 *et seq.* authorizes the City to enact any ordinance which adopts any code by reference, in whole or in part; and

WHEREAS, 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 Residential Code, the California Building Code, the California Plumbing Code, the California Mechanical Code, and the California Electrical Code, and the California Fire Code and the California Green Building Standards Code, (hereinafter referred to collectively as "Codes"); and

WHEREAS, Health and Safety Code Section 17958 *et seq.* provides that the City of Yorba Linda 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; and

WHEREAS, Health and Safety Code Sections 17958.5 and 18941.5 permits the City to make modifications or changes to the Codes, which are reasonably necessary because of local climatic, geographical, or topographical conditions; and

WHEREAS, Health and Safety Code Section 17958.7 requires that the City Council, before making any modifications or changes pursuant to Section 17958.5 shall make an express finding that such changes or modifications or changes are reasonably necessary because of local climatic, geographical or topographical conditions; and

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

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Villa Park as follows:

Section 1.

I. Climatic Conditions

- A. The jurisdiction of Villa Park 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 2.

The City Council hereby finds that the amendments to the Codes as set forth in detail in Ordinance No. 2013-582 are reasonably necessary based on the climatic, geographical and topographical conditions cited in Section 1 of this Resolution and apply to the amendments as follows:

CALIFORNIA BUILDING CODE		
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
CALIFORNIA RESIDENTIAL CODE		
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 construction	I & II
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

CALIFORNIA FIRE CODE		
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
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

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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

****Note:** The "N/A" refers to amendments to provisions that were not adopted by the State of California as part of the above referenced codes and/or are not amendments to building standards and, as such, are not subject to the findings requirement under Health & Safety Code Sections 17958.5 and 18941.5.

Additional amendments have been made to the California Fire Code, 2013 Edition, the California Building Code, 2013 Edition, and the California Residential Code, 2013 Edition. On the recommendation of the Building Division and Orange County Fire Authority, such amendments are hereby found to be either administrative or procedural in nature or concern themselves with subjects not covered in the Codes. The changes made include provisions making each of the said Codes compatible with other Codes enforced by the City.

Section 3

The Building Division shall file copies of this Resolution and Ordinance No. 2013-582 with the California Building Standards Commission as required by Health and Safety code Section 17958.7.

PASSED, APPROVED AND ADOPTED at a regular meeting of the City Council of the City of Villa Park on this 22nd day of October, 2013.



Brad Reese, Mayor
City of Villa Park

ATTEST. 

Jarad Hildenbrand, City Clerk
City of Villa Park

STATE OF CALIFORNIA }
COUNTY OF ORANGE } SS
CITY OF VILLA PARK }

I, Jarad L. Hildenbrand, City Clerk of the City of Villa Park DO HEREBY CERTIFY that the foregoing Resolution was adopted at a regular meeting of the City Council of the City of Villa Park held on the 22nd day of October, 2013 and was carried by the following roll call vote, to wit:

AYES: COUNCILMEMBERS: *BARNETT, MINS, FOREMAN, PAULY, REESE*

NOES: COUNCILMEMBERS: *none*

ABSENT: COUNCILMEMBERS: *none*

ABSTAIN: COUNCILMEMBERS: *None*


Jarad L. Hildenbrand, City Clerk
City of Villa Park

ORDINANCE NO. 2013-582

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF VILLA PARK, CALIFORNIA, AMENDING CHAPTERS IX AND XI OF THE VILLA PARK MUNICIPAL CODE ADOPTING BY REFERENCE THE CALIFORNIA CODES OF REGULATIONS TITLE 24, PARTS 1-12, KNOWN AND DESIGNATED AS THE 2013 EDITION OF THE CALIFORNIA BUILDING CODE, 2013 EDITION OF THE CALIFORNIA RESIDENTIAL CODE, 2013 EDITION OF THE CALIFORNIA ELECTRICAL CODE, 2013 EDITION OF THE CALIFORNIA PLUMBING CODE, 2013 EDITION OF THE CALIFORNIA MECHANICAL CODE, 2013 EDITION OF THE CALIFORNIA ADMINISTRATIVE CODE, 2013 EDITION OF THE CALIFORNIA REFERENCE STANDARDS CODE, 2013 EDITION OF THE CALIFORNIA ENERGY CODE, 2013 EDITION OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE, 2013 EDITION OF THE CALIFORNIA HISTORICAL BUILDING CODE, 2013 EDITION OF THE CALIFORNIA EXISTING BUILDING CODE AND THE 2013 EDITION OF THE CALIFORNIA FIRE CODE, MAKING AMENDMENTS THERETO, AND RELATED ACTIONS.



OFFICIAL COPY

M. Nashon

signature

12-6-2013

date

THE CITY COUNCIL OF THE CITY OF VILLA PARK DOES ORDAIN AS FOLLOWS:

Section 1. The City hereby adopts Ordinance No. 2013-582 that amends Chapters IX and XI of the Villa Park Municipal Code. This Ordinance shall take effect on January 1, 2014, for all codes.

Section 2. Section 9-1.1 of the Villa Park Municipal Code, entitled "California Codes Adopted", is hereby amended to read in its entirety as follows:

Section 9-1.1. California Codes Adopted.

- a) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 1, as modified herein, known and designated as the California Administrative Code, 2013 Edition.
- b) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 2, known and designated as the California Building Code, 2013 Edition, based on the 2012 International Building Code as published by the International Code Council. The provisions of this code shall constitute the building code regulations of the City.
- c) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 2.5, known and designated as the California Residential Code, 2013 Edition, based on the 2012 International Residential Code as published by the International Code Council. The provisions

of this code shall constitute the One- and Two-Family and Townhouse building code regulations of the City.

- d) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 3, known and designated as the California Electrical Code, 2013 Edition based on the National Electrical Code, 2011 Edition, as published by the National Fire Protection Association. The provisions of this code shall constitute the electrical code regulations of the City.
- e) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 4, known and designated as the California Mechanical Code, 2013 Edition based on the 2012 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials. The provisions of this code shall constitute the mechanical code regulations of the City.
- f) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 5, known and designated as the California Plumbing Code, 2013 Edition based on the 2012 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials. The provisions of this code shall constitute the plumbing code regulations of the City.
- g) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 6, known and designated as the California Energy Code, 2013 Edition.
- h) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 8, known and designated as the California Historical Building Code, 2013 Edition.
- i) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 10, known and designated as the California Existing Building Code, 2013 Edition.
- j) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 11, known and designated as the California Green Building Standards (CALGreen) Code, 2013 Edition.
- k) The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 12, known and designated as the California Referenced Standards Code, 2013 Edition.

Copies of the above publications are on file in the office of the City Clerk for public inspection and are adopted with the same force and effect as though set out herein in full.

Section 3. Section 9-2.1 of the Villa Park Municipal Code remains unchanged and continues to read in its entirety as follows:

9-2.1 Local Amendments.

Pursuant to state law, the City may make changes to the state codes as are reasonably necessary because of local climatic, topographic and geological conditions. Furthermore, the City may make changes to the state codes that are administrative or procedural in nature. The City has found and declared via resolution that the City's amendments to the state codes are based on local climatic, topographic and geological conditions or are administrative or procedural in nature.

Section 4. Section 9-2.2 of the Villa Park Municipal Code remains unchanged and continues to read in its entirety as follows:

9-2.2 Board of Appeals.

All sections in the respective codes, including the California Fire Code adopted in Villa Park Municipal Code Chapter XI, pertaining to the Board of Appeal are hereby amended in their entirety to read as follows:

"In order to hear and decide appeals or orders and determine the suitability of alternate materials and methods of construction and to provide for reasonable interpretations of the provisions of these codes, there shall be and there is hereby created a Board of Appeals, consisting of five members, composed of the Mayor and the other members of the City Council. Said members shall hold their respective membership on said Board of Appeals by reason of, and concurrently with their terms of service as Council Members and shall cease to be such members upon their ceasing to be such Council Members. The Building Official shall be the Secretary of the Board. The Board may adopt reasonable rules and regulations for conducting its investigations and shall render all its decisions and findings on contested matters, in writing to the Building Official, with a duplicate copy thereof to any appellant or contestant affected by any such decision or findings, and may recommend to the City Council such new legislation, if any, as is consistent therewith.

Three members of the Board shall constitute a quorum. The Mayor shall be the presiding officer of the Board and in the Mayor's absence the Mayor Pro-Tempore shall preside. Meetings shall be conducted in accordance with the Brown Act.

The Board shall have the right, subject to such limits as the City Council may prescribe by resolution, to employ at the cost and expense of the City, such qualified individuals as the Board, in its discretion, may deem reasonably necessary in order to assist it in its investigations and in making its findings and decisions."

Section 5. Section 9-2.3 of the Villa Park Municipal Code remains unchanged and continues to read in its entirety as follows:

9-2.3 Fees.

All sections in the respective codes, including the California Fire Code adopted in Villa Park Municipal Code Chapter XI, pertaining to fees are amended to state that fees shall be as set forth by resolution of the City Council.

Section 6. Section 9-2.4 of the Villa Park Municipal Code entitled “Amendments to California Building Code” is hereby amended to read in its entirety as follows:

9-2.4 Amendments To California Building Code.

The California Building Code adopted by the City is hereby amended as follows:

Section 202 Definitions is hereby revised by adding “Approach-Departure Path,” “Emergency Helicopter Landing Facility (EHLF),” “Safety Area,” and “Takeoff and Landing Area” and revising “High-Rise Structure” 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.

Section 403 HIGH-RISE BUILDINGS AND GROUP I-2 OCCUPANCIES HAVING OCCUPIED FLOORS LOCATED MORE THAN 75 FEET ABOVE THE LOWEST LEVEL OF FIRE DEPARTMENT VEHICLE ACCESS is hereby revised as follows:

Section 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

Section 403.1 Applicability is hereby revised as 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.

Section 412.7 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.

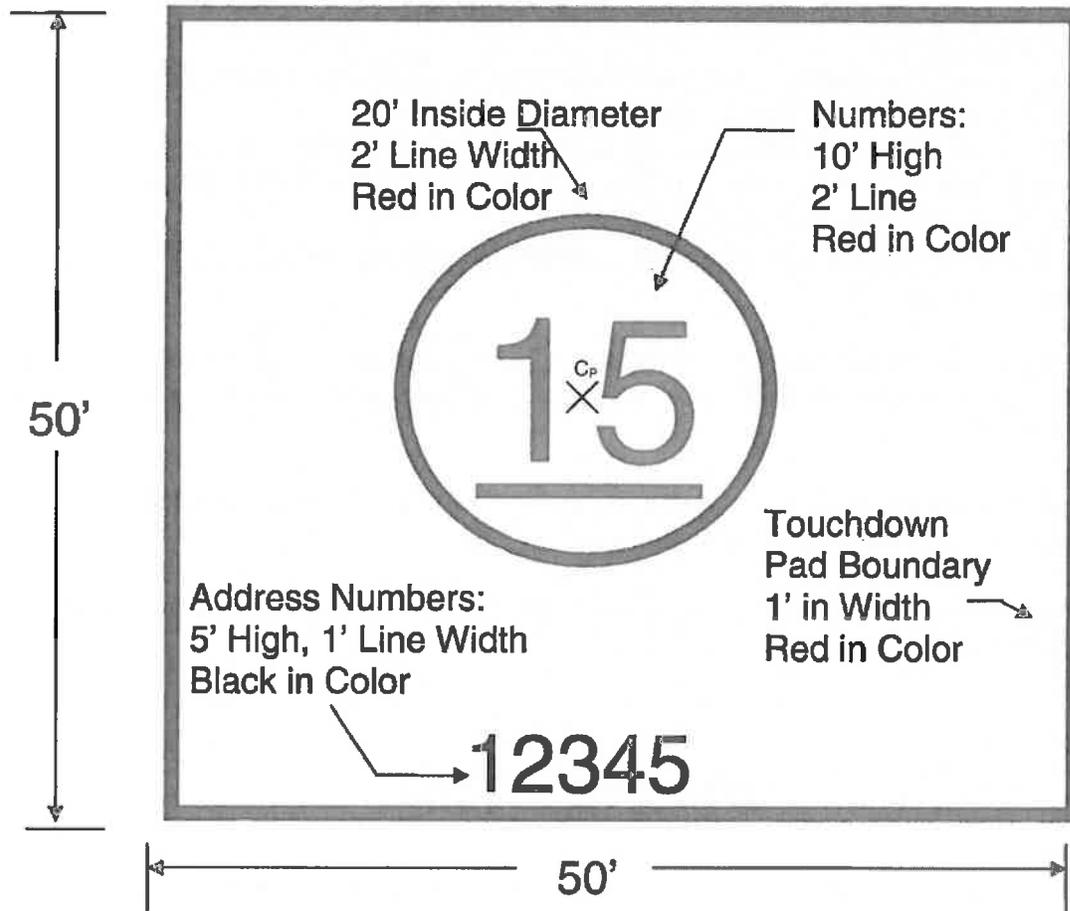
412.7.6.9 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the floor below shall comply with Section 1009.7.2 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 California Fire Code 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).

Chapter 7A
(Materials and Construction Methods for Exterior Wildfire Exposure)

Adopt Chapter 7A Materials and Construction Methods for Exterior Wildfire Exposure in its entirety with the following amendments:

701A.3 Application. New buildings for which an application for a building permit is submitted on or after April 1, 2012, shall comply with all sections of this chapter.

Exceptions:

1. Buildings of an accessory character classified as a Group U occupancy and not exceeding 120 square feet in floor area, when located at least 30 feet from an applicable building.
2. Buildings of an accessory character classified as Group U occupancy of any size located at least 50 feet from an applicable building.
3. Buildings classified as a Group U Agricultural Building, as defined in Section 202 of this code (see also Appendix C – Group U Agricultural Buildings), when located at least 50 feet from an applicable building.
4. Additions to and remodels of buildings originally constructed prior to the applicable application date.

701A.3.1 Application date and where required. New buildings for which an application for a building permit is submitted on or after April 1, 2012, shall comply with all sections of this chapter.”

710A.3.2 Detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this section.

710A.4 Requirements. Accessory structures shall be constructed of non-combustible or ignition-resistant materials.

Chapter 9 (Fire Protection Systems)

Adopt Chapter 9 Fire Protection Systems in its entirety with the following amendments:

Section 903.2 Where required is hereby revised 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 5500 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 5500 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.

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:

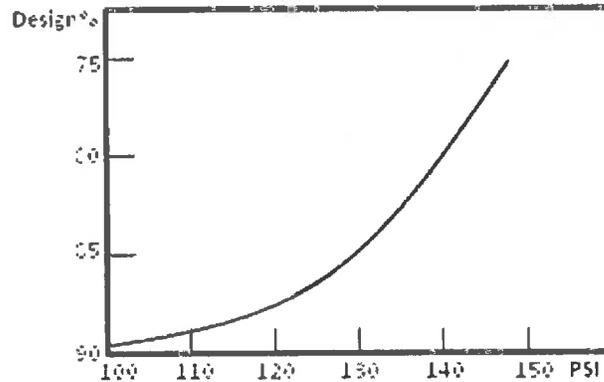
1. **New Buildings:** An automatic sprinkler system shall be installed throughout all new buildings.
2. **Existing Buildings:** An automatic sprinkler system shall be installed throughout any existing building where an addition occurs and the resulting building area as defined by CBC Section 202 exceeds 5500 square feet.

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



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.

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

905.4 Location of Class I standpipe hose connections is hereby revised to include number 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.

Section 907.2.13 High-rise buildings is hereby revised 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 406.5 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 general occupant notification shall be broadcast by the emergency voice/alarm communication system

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.

Section 907.5.2.2 Emergency voice/alarm communication system is revised 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-2 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.

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 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.

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".

Chapter 35

Chapter 35 Referenced Standards is hereby adopted and revised as follows:

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

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.

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

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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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.

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.

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.

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 the California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each dwelling unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall

be powered from an uninterruptible circuit (except for over-current 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.

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:

Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

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.

Section 4.1.3.2 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.

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).

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.

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.

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, throughout all living spaces. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exceptions:

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

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.

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

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.

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.

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.

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

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.

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.

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.

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 7. Section 9-2.5 entitled "Amendments to California Residential Code" is hereby added to the Villa Park Municipal Code to read in its entirety as follows:

9-2.5 Amendments To California Residential Code.

The California Residential Code adopted by the City is hereby amended as follows:

Chapter 2 Definitions

Chapter 2 Definitions is adopted in its entirety with the following amendment:

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.

Chapter 3 Building Planning

Chapter 3 Building Planning is adopted in its entirety with the following amendments and additions:

Section R301.9 Development on or Near Land Containing or Emitting Toxic, Combustible or Flammable Liquids, Gases or Vapors, is hereby added as follows:

R301.9 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.

Section R301.10 Fuel Modification Requirements for New Construction is hereby added as follows:

R301.10 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

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.

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.

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.

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.

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 R327.1.6 Fuel Modification Requirements for New Construction is hereby added as follows:

R327.1.6 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.

Chapter 10 Chimneys and Fireplaces

Chapter 10 Chimneys and Fireplaces is adopted in its entirety with the addition of the following amendments:

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.

Chapter 44 Referenced Standards

Chapter 44 Referenced Standards is adopted in its entirety and revised as follows:.

NFPA 13, 2010 Edition, Installation of Sprinkler Systems is hereby amended as follows:

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.

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**

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.

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.

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.

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.

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.

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:

Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

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.

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.

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).

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.

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

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.

Appendix O Vehicular Gates

Appendix O Vehicular Gates is adopted with only the section indicated below:

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 8. Section 11-1.1 of the Villa Park Municipal Code is amended to read in its entirety as follows:

11-1.1. Adoption of the California Fire Code. The City Council of the City of Villa Park hereby adopts by reference the California Code of Regulations Title 24, Part 9, known and designated as the 2013 California Fire Code, based on the International Fire Code, 2012 Edition, with errata, published by International Code Council (ICC). The provisions of this code shall constitute the fire code regulations of the City. The California Fire Code is on file for public examination in the office of the City Clerk.

Section 9. Section 11-1.2 of the Villa Park Municipal Code is unchanged and continues to read in its entirety as follows:

11-1.2. Enforcement-Inspections.

The California Fire Code as amended by the City shall be enforced by the Orange County Fire Authority, which shall be operated under the Director of Fire Services of the Orange County Fire Authority. The Director of Fire Services of the Fire Authority may detail such members of the fire authority as inspectors as shall be necessary from time to time.

Section 10. Section 11-1.3 of the Villa Park Municipal Code is amended to read in its entirety as follows:

11-1.3 Amendments.

The California Fire Code adopted by the City is hereby amended as follows:

Chapter 1 Scope and Administration

Chapter 1 Scope and Administration is adopted in its entirety with the following amendments:

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.

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.

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

Chapter 2
Definitions

Chapter 2 Definitions is adopted in its entirety with the following amendments:

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.

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

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

Chapter 3 General Requirements

Chapter 3 General Requirements is adopted in its entirety with the following amendments:

Section 304.1.2 Vegetation is hereby revised as follows:

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

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.

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.

Exceptions: 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.

Section 307 OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES is hereby amended as follows:

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

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.

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.

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.

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.

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.

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.

Exceptions:

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

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.

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.

Exceptions:

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.

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.

Section 326 Sky Lanterns or similar devices is hereby added as follows:

326 Sky Lanterns or similar devices. The ignition and/or launching of a Sky Lantern or similar device is prohibited.

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

Chapter 4 Emergency Planning and Preparedness

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

Chapter 5 Fire Service Features

Chapter 5 Fire Service Features is adopted in its entirety with the following amendments:

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.

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.

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.

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.

Sections 510.2; 510.3; 510.4; 510.5; 510.6 are hereby deleted without replacement:

Chapter 6 Building Services and Systems

Chapter 6 Building Services and Systems is adopted in its entirety with the following amendments

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.

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

Chapter 7 Fire-Resistance-Rated Construction

Chapter 7 Fire-Resistance-Rated Construction is adopted in its entirety without amendments.

Chapter 8 Interior Finish, Decorative Materials and Furnishings

Chapter 8 Interior Finish, Decorative Materials and Furnishings is adopted in its entirety without amendments.

Chapter 9 Fire Protection Systems

Adopt Chapter 9 Fire Protection Systems is adopted in its entirety with the following amendments:

Section 903.2 Where required is hereby revised 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 5,500 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 5500 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 5500 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.

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:

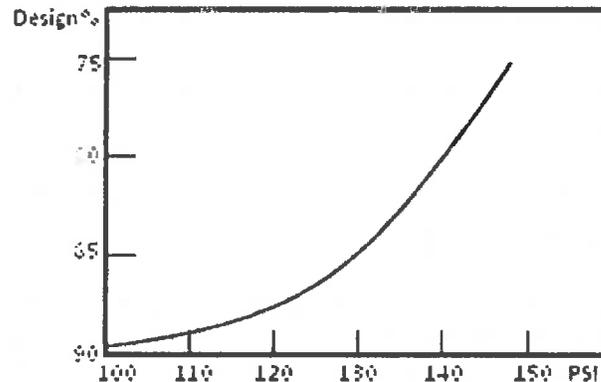
1. **New Buildings:** An automatic sprinkler system shall be installed throughout all new buildings.
2. **Existing Buildings:** An automatic sprinkler system shall be installed throughout any existing building where an addition occurs and the resulting building area as defined by CBC Section 202 exceeds 5500 square feet.

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



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.

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.

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

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.

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-2 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.

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 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.

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."

Chapter 10 Means of Egress

Chapter 10 Means of Egress is adopted in its entirety without amendments

Chapter 11 Construction Requirements for Existing Buildings

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

Chapter 20 Aviation Facilities

Chapter 20 Aviation Facilities is adopted in its entirety with the following amendments:

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.

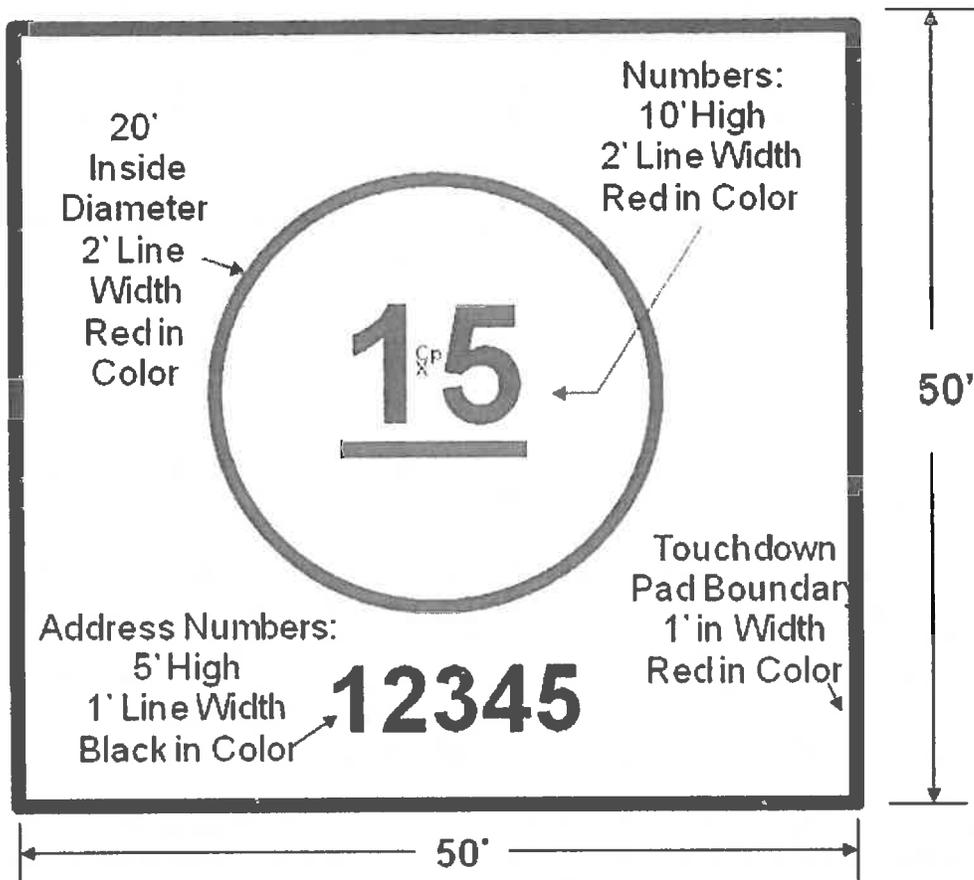
2008.1.8 EHLF Exits. Two stairway exits shall be provided from the landing platform area to the roof surface. For landing areas less than 2,501 square feet in area, the second exit may be a fire escape or ladder leading to the roof surface below. The stairway from the landing facility platform to the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

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

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

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

Figure 2008.1.7 Helicopter Landing Pad Markings



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

**Chapter 21
Dry Cleaning**

Chapter 21 Dry Cleaning is adopted in its entirety without amendments.

**Chapter 22
Combustible Dust-Producing Operations**

Chapter 22 Combustible Dust-Producing Operations is adopted in its entirety without amendments.

**Chapter 23
Motor Fuel-Dispensing Facilities and Repair Garages**

Chapter 23 Motor Fuel-Dispensing Facilities and Repair Garages is adopted in its entirety without amendments.

**Chapter 24
Flammable Finishes**

Chapter 24 Flammable Finishes is adopted in its entirety without amendments.

**Chapter 25
Fruit and Crop Ripening**

Chapter 25 Fruit and Crop Ripening is adopted in its entirety without amendments.

**Chapter 26
Fumigation and Thermal Insecticidal Fogging**

Chapter 26 Fumigation and Thermal Insecticidal Fogging is adopted in its entirety without amendments.

**Chapter 27
Semiconductor Fabrication Facilities**

Chapter 27 Semiconductor Fabrication Facilities is adopted in its entirety without amendments

**Chapter 28
Lumber Yards and Woodworking Facilities**

Chapter 28 Lumber Yards and Woodworking Facilities is adopted in its entirety with the following amendments:

Section 2801.2 Permit is hereby revised 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.

Section 2808.2 Storage site is hereby revised 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.

Section 2808.3 Size of piles is hereby revised 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.

Section 2808.7 Pile fire protection is hereby revised 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.

Section 2808.9 Material-handling equipment, is hereby revised 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.

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.

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.

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.

Chapter 29 Manufacture of Organic Coatings is adopted in its entirety without amendments.

**Chapter 30
Industrial Ovens**

Chapter 30 Industrial Ovens is adopted in its entirety without amendments.

**Chapter 31
Tents and Other Membrane Structures**

Chapter 31 Tents and Other Membrane Structures is adopted in its entirety without amendments.

**Chapter 32
High-Piled Combustible Storage**

Chapter 32 High-Piled Combustible Storage is adopted in its entirety without amendments.

**Chapter 33
Fire Safety During Construction and Demolition**

Chapter 33 Fire Safety During Construction and Demolition is adopted in its entirety without amendments.

**Chapter 34
Tire Rebuilding and Tire Storage**

Chapter 34 Tire Rebuilding and Tire Storage is adopted in its entirety without amendments.

**Chapter 35
Welding and Other Hot Work**

Chapter 35 Welding and Other Hot Work is adopted in its entirety without amendments.

**Chapter 36
Marinas**

Chapter 36 Marinas is adopted in its entirety without amendments.

**Chapter 48
Motion Picture and Television Production Studio Sound Stages, Approved Production
Facilities and Production Locations**

Chapter 48 Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities and Production Locations is adopted in its entirety without amendments.

Chapter 49 Requirements for Wildland-Urban Interface Fire Areas

Chapter 49 Requirements for Wildland-Urban Interface Fire Areas is adopted in its entirety with the following amendments:

Section 4906.3 Vegetation is hereby revised by adding Section “(5)” as follows:

(5) OCFA Vegetation Management Guidelines.

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.

Chapter 50 Hazardous Materials – General Provisions

Chapter 50 Hazardous Materials – General Provisions is adopted in its entirety with the following amendments.

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.

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:

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.

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.

Aerosols

Chapter 51 Aerosols is adopted in its entirety without amendments.

**Chapter 52
Combustible Fibers**

Chapter 52 Combustible Fibers is adopted in its entirety without amendments.

**Chapter 53
Compressed Gases**

Chapter 53 Compressed Gases is adopted in its entirety without amendments.

**Chapter 54
Corrosive Materials**

Chapter 54 Corrosive materials is adopted in its entirety without amendments.

**Chapter 55
Cryogenic Fluids**

Chapter 55 Cryogenic Fluids is adopted in its entirety with the following amendment.

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.

**Chapter 56
Explosives and Fireworks**

Chapter 56 Explosives and Fireworks California Fire Code Chapter 56 is adopted in its entirety with the following amendments:

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 permitted only to the extent authorized by the Villa Park Municipal Code and ONLY in strict accordance with the provisions of said Code.

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

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.

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.

Section 5608.1 General is hereby revised 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.

Section 5608.2 Firing is hereby added as follows:

5608.2 Firing. All fireworks displays shall be electrically fired.

Chapter 57 Flammable and Combustible Liquids

Chapter 57 Flammable and Combustible Liquids is adopted in its entirety with the following amendment.

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.

**Chapter 58
Flammable Gases and Flammable Cryogenic Fluids**

Chapter 58 Flammable Gases and Flammable Cryogenic Fluids is adopted in its entirety without amendments.

**Chapter 59
Flammable Solids**

Chapter 59 Flammable Solids is adopted in its entirety without amendments.

**Chapter 60
Highly Toxic and Toxic Materials**

Chapter 60 Highly Toxic and Toxic Materials is adopted in its entirety with the following amendments.

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.

**Chapter 61
Liquefied Petroleum Gases**

Chapter 61 Liquefied Petroleum Gases is adopted in its entirety without amendments.

**Chapter 62
Organic Peroxides**

Chapter 62 Organic Peroxides is adopted in its entirety without amendments.

**Chapter 63
Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids**

Chapter 63 Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids is adopted in its entirety without amendments.

**Chapter 64
Pyrophoric Materials**

Chapter 64 Pyrophoric Materials is adopted in its entirety without amendments.

**Chapter 65
Pyroxylin (Cellulose Nitrate) Plastics**

Chapter 65 Pyroxylin (Cellulose Nitrate) Plastics is adopted in its entirety without amendments.

**Chapter 66
Unstable (Reactive) Materials**

Chapter 66 Unstable (Reactive) Materials is adopted in its entirety without amendments.

**Chapter 67
Water-Reactive Solids and Liquids**

Chapter 67 Water-Reactive Solids and Liquids is adopted in its entirety without amendments.

**Chapter 80
Referenced Standards**

Chapter 80 Referenced Standards is adopted in its entirety with the following amendments:

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

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.

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

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. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

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.

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.

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.

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 the California Fire Code as requiring a fire alarm system shall be provided with a minimum of one approved interior alarm device in each unit. Interior alarm devices shall be required to provide 55 dBA or 15 dBA above ambient, whichever is greater, throughout all living spaces within each dwelling unit. Sound levels in all sleeping areas with all intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. When not connected to a fire alarm or water-flow monitoring system, audible devices shall be powered from an uninterruptible circuit (except for over-current 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.

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:

Section 4.1.3 is hereby added as follows:

4.1.3 Stock of Spare Sprinklers

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.

Section 4.1.3.2 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.

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).

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.

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.

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, throughout all living spaces. Sound levels in all sleeping areas with all

intervening doors closed shall be a minimum of 15 dBA above the average ambient sound level but not less than 75 dBA, whichever is greater. Audible devices shall be powered from an uninterruptible circuit (except for over-current protection) serving normally operated appliances in the residence.

Exceptions:

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

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

Section 7.3.1.1 is hereby 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.

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

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.

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.

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.

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

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.

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.

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.

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.

Appendices

Appendix B is adopted in its entirety without amendments.

Appendix BB is adopted in its entirety without amendments:

Appendix C is adopted in its entirety without amendments:

Appendix CC is adopted in its entirety without amendments:

Section 11. The amendments to the codes herein have been adopted pursuant to Health and Safety Code sections 17958.5, 17958.7, and 18941.5 and Public Resources Code section 4117 and have been justified by the local conditions prevalent in the City

of Villa Park as more particularly described in City Council Resolution No. 2010-3141 incorporated herein by this reference as if set forth in full.

Section 12. The City hereby repeals prior ordinances 2002-489, 2002-490, 2005-511, 2008-530, and 2010-554 to the extent they are inconsistent with this ordinance.

Section 13. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance, or the application thereof to any person or place, is for any reason held to be invalid or unconstitutional by the decision of any court or competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance or its application to other persons or places. The City Council hereby declares that it would have adopted this Ordinance, and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions of the application thereof to any person or place, be declared invalid or unconstitutional.

Section 14. The City Clerk shall certify as to the adoption of the Ordinance and cause the same to be published and posted as required by law.

PASSED AND ADOPTED by the City Council of the City of Villa Park at a regular meeting of the City Council held on the 19th day of November, 2013.



Brad Reese, Mayor
City of Villa Park

ATTEST:



Jafad L. Hildenbrand, City Clerk
City of Villa Park

STATE OF CALIFORNIA }
COUNTY OF ORANGE } SS
CITY OF VILLA PARK }

I, JARAD L. HILDENBRAND, City Clerk of the City of Villa Park DO HEREBY CERTIFY that the certify that Ordinance No. 2013-582 having been regularly introduced at the meeting of October 22, 2013, was again introduced, the reading in full thereof unanimously waived, and duly passed and adopted at a regular meeting of the City Council held on the 19th day of November, 2013, and said ordinance was adopted by the following vote:

AYES: COUNCILMEMBERS: BARNETT, MILLS, FASCENELLI, REESE
NOES: COUNCILMEMBERS: PAUL
ABSENT: COUNCILMEMBERS: NONE
ABSTAIN: COUNCILMEMBERS: None


Jarad L. Hildenbrand, City Clerk
City of Villa Park