

ORDINANCE NO. 2022-231

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, AMENDING CHAPTERS 13.02 & 13.04 OF TITLE 13 OF THE ALISO VIEJO MUNICIPAL CODE AND ADOPTING BY REFERENCE THE FOLLOWING MODEL CODES INTO THE ALISO VIEJO MUNICIPAL CODE: (1) CALIFORNIA BUILDING CODE, VOLUMES 1 & 2, 2022 EDITION; WITH AMENDMENTS (2) CALIFORNIA ELECTRICAL CODE, 2022 EDITION; (3) CALIFORNIA PLUMBING CODE, 2022 EDITION; (4) CALIFORNIA MECHANICAL CODE, 2022 EDITION; (5) INTERNATIONAL PROPERTY MAINTENANCE CODE, 2021 EDITION; (6) CALIFORNIA ADMINISTRATIVE CODE, 2022 EDITION; (7) CALIFORNIA ENERGY CODE, 2022 EDITION; (8) CALIFORNIA REFERENCED STANDARDS CODE, 2022 EDITION; (9) CALIFORNIA EXISTING BUILDING CODE, 2022 EDITION; (10) CALIFORNIA RESIDENTIAL CODE, 2022 EDITION, WITH AMENDMENTS (11) CALIFORNIA GREEN BUILDING STANDARDS CODE, 2022 EDITION; AND (12) CALIFORNIA FIRE CODE, 2022 EDITION, WITH AMENDMENTS.

WHEREAS, pursuant to California Government Code Section 50022.1 *et seq.* the City of Aliso Viejo ("City") may adopt by reference the California Building Standards Code, 2022 Edition as provided in Title 24 of the California Code of Regulations and other model codes;and

WHEREAS, the California Building Standards Commission ("Commission") recently adopted the 2022 Edition of the California Building Standards Code; and

WHEREAS, California Health and Safety Code Sections 17958.7 and 18941.5 authorize cities to adopt the California Building Standards Code with modifications determined to be reasonably necessary because of local climatic, geological or topographical conditions; and

WHEREAS, the City desires to adopt the California Building Standards Code and other model codes with the necessary amendments to assure the Codes are tailored to the particular safety needs of the City as required by its unique climatic, geological and topographical conditions; and

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

WHEREAS, the Fire Marshal and Building Official have also recommended that changes and modifications be made to the California Building Standards Code, which are necessary for administrative clarification and to establish administrative standards for the effective enforcement of the building standards of the City of Aliso Viejo and do not modify a building standard pursuant to California Health & Safety Code Sections 17958, 17958.7, and/or 18941.5; and

WHEREAS, the City held a public hearing on November 16, 2022, at which time all interested persons had the opportunity to appear and be heard on the matter of adopting the Codes as amended herein; and

WHEREAS, the City published notice of the aforementioned public hearing pursuant to California Government Code Section 6066 on November 3, 2022 and November 10, 2022; and

WHEREAS, any and all other legal prerequisites relating to the adoption of this Ordinance have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, DOES HEREBY ORDAIN AS FOLLOWS:

SECTION 1. Authority. The City Council enacts this Ordinance under the authority granted to the City as follows:

- A. California Government Code Section 50022 *et seq.* authorizes the City to adopt by reference the California Building Standards Code and authorizes the City to adopt other uniform codes by reference;
- B. California Health & Safety Code Sections 17958.7 and 18941.5 authorize the City to adopt the California Building Standards Code with modifications determined to be reasonably necessary because of local climatic, geological or topographical conditions.

SECTION 2. CEQA. The City Council finds that this Ordinance is exempt from the California Environmental Quality Act ("CEQA") pursuant to Sections 15378(a) and 15061(b)(3) as the activity does not qualify as a project and is covered by the general rule that CEQA applies only to projects which have the potential for causing significant effect on the environment. The City Council finds that the changes in this Ordinance are enacted to mitigate the threats posed to public peace, health and safety from earthquakes, storms, flooding, high winds and fire. Therefore, it can be seen with certainty that adoption of this Ordinance will not have a significant adverse effect on the environment and is therefore exempt from CEQA.

SECTION 3. Findings. After receiving public testimony, reviewing the evidence submitted by staff and discussing the proposed ordinance, the City Council hereby finds that the amendment proposed to the California Building Code, California Residential Code, California Plumbing Code and California Fire Code, 2022 editions herein are supported by the following findings:

I. Climatic Conditions:

Amendments to Sections 202, 701A.3, 710A.3.2, 710A.4, and 3109F.1 of the 2022 Edition of the California Building Code; Sections R202, R301.2, R337.1.3, and R1001.13 of the 2022 Edition of the California Residential Code; and Sections 1014.1.4 and 1014.1.2 of the 2022 Edition of the California Plumbing Code are reasonably necessary due to the following climatic conditions:

1. Orange County and the City of Aliso Viejo are located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. The warm climate encourages the proliferation of swimming pool construction which make modifications to the CBC relating to swimming pools desirable to adequately protect small children from drowning hazards. Furthermore, 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 disrupting utility services throughout the County. Obstacles generated by a strong wind, such as fallen trees, streetlights and utility poles 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.

2. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the Orange County Fire Authority's (Fire Department) ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.

3. 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 the inability to pump sufficient quantities of available water to floors in a fire.

4. 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

methods 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. In addition, untreated wood roofs cause or contribute to serious fire hazard and to the rapid spread of fires when such fires are accompanied by high winds. Pieces of burning wood roofs are carried by the wind to other locations and spread fire quickly.

II. Topographical Conditions:

Amendments to Sections 710A.3, 710A.3.2, 710A.4, 903.2, 903.2.8, and 903.3.1.1.1 of the 2022 Edition of the California Building Code and Sections R319.1, R337.1.3, and R1001.13 of the 2022 Edition of the California Residential Code are reasonably necessary due to the following topographical conditions:

1. Natural slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change caused by the hills creates the geological foundation on which communities within Orange County are built and will continue to be built on. With much of the populated flatlands already built upon, future growth will occur in areas with steeper slopes and greater constraints in terrain.
2. 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, accompanied 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 with extended Fire Department emergency response times that exceed the 5-minute goal.
3. Placement of multiple occupancy buildings, location of arterial roads, and fire department staffing constraints due to recent revenue-limiting state legislation have made it difficult for the fire department to locate additional fire stations and provide manpower sufficient to concentrate fire companies and personnel to control fires in high density apartment or condominium buildings. Fire Department equipment does not allow easy access to areas of buildings greater than 55 feet above the level of Fire Department vehicle access. These conditions create the need for built-in on-site fire protection systems to protect occupants and property until fire-fighting apparatus and personnel arrive on the scene.
4. 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:

Amendments to Sections R301.2, R301.9, R309.6, R313.1, R313.2, and R313.3.6.2.2 of the 2022 Edition of the California Residential Code are reasonably necessary due to the following geological conditions:

1. Orange County and the City of Aliso Viejo are located in a highly active seismic area. There are earthquake faults that run along both the northeastern and southwestern boundaries of Orange County. The Newport-Inglewood Fault Zone (NIFZ), which runs through Orange County, was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude, hypocenter off Newport Beach coast), which took 120 lives. The quake damaged areas from Laguna Beach to Marina del Rey and inland to Whittier and poses one of the greatest hazards to lives and property in the nation. Regional planning for reoccurrence is recommended by the State of California, Department of Conservation. There was also an earthquake in December 1989, with the epicenter located near the City of Irvine. The fault on which this quake occurred was unknown prior to this activity. The October 17, 1989, Santa Cruz earthquake resulted in only one major San Francisco fire in the Marina District, but when combined with the 34 other fires and over 500 responses, the Fire Department was taxed to its full capabilities. The Marina District fire was difficult to contain because mains supplying water to the district burst during the earthquake. If more fires had been ignited by the earthquake, it would have been difficult for the fire department to contain them. Experts predict a major earthquake in the Orange County area within the next 50 years. This situation creates the need for both additional fire protection measures and automatic on-site fire protection for building occupants since a multitude of fires may result from breakage of gas and electric lines as a result of an earthquake. As noted by "Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, 1988, State Department of Conservation," page 59; "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."
2. Traffic and circulation congestion presently existing in the City of Aliso Viejo often places fire department response time to fire occurrences at risk. This condition will be exacerbated by any major disaster, including any earthquake wherein damage to the highway system will occur. This condition makes the need for additional on-site protection for property occupants necessary.
3. The City of Aliso Viejo is located in a seismically active area. The viability of the public water system would be questionable at best after a major seismic event. This would leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of any available water to floors above the 55-foot-level. 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 occupants on upper floors.

4. 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.

5. Portions 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 to implement appropriate mitigation.

The City Council finds that the following table sets forth the sections of the 2019 Edition of the California Fire Code that have been modified and the associated local climatic, topographical and/or geological conditions described below supporting the modifications.

2022 California Fire Code
Amendment Findings Legend

CODE SECTION	TITLE (Clarification)	FINDINGS
110.4	Violation penalties	Administrative
110.4.2	Infraction & Misdemeanor	Administrative
202	General definitions	Administrative
304.1.2	OCFA Vegetation Management	I
305.6	Hazardous conditions	I & II
305.7	Disposal of rubbish	I & II
307	Open burning, recreational fires, fire pits, fire rings, and outdoor fireplaces	Administrative
307.6	Fire Pits, Fire Rings, & Outdoor Fireplaces	Administrative
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
308.1.6.3	Sky lanterns	I & III
321	Fuel modification requirements for new construction	I
322	Clearance of brush or vegetation growth from roadways	I
323	Unusual circumstances	Administrative
324	Use of equipment	I
324.1	Use of equipment and devices generating heat, sparks or open flames	I
324.2	Spark arresters	I

407.5	Hazardous material inventory statement	I & II
501.1	Scope	Administrative, I, II & III
510.1	Emergency responder radio coverage	Administrative
903.2	Where required (Sprinklers)	I, II & III
903.2.8	Group R (Sprinklers)	I, II & III
903.3.5.3	Hydraulically calculated systems	I & II
1201.1.1	Energy systems, battery charging devices	I & II
2801.2	Permit	Administrative
2808.2	Storage site	Administrative
2808.3	Size of piles	I
2808.4	Pile separation	I
2808.7	Pile fire protection	I
2808.9	Material-handling equipment	I
2808.11	Temperature control	I
2808.11.1	Pile temperature control	I
2808.11.2	New material temperature control	I
2808.12	Water availability for piles	I
2808.13	Tipping area	I
2808.14	Emergency contact	Administrative
4906.3	OCFA Vegetation Management Guideline	I
4908	Fuel modification requirements for new construction	I
5001.5.2	Hazardous materials inventory statement	Administrative
5003.1.1.1	Extremely hazardous substances	I & III
5608.2	Retail fireworks	Administrative
5608.3	Application for permit	Administrative
5701.1.1	On-Demand Mobile Fueling	N/A
5801.1	Scope	N/A
Chapter 80	Reference Standards	N/A
	2016 NFPA 13 (Sprinkler Systems)	Administrative, II & III
	2016 NFPA 13-D (Single Family Sprinkler Systems)	I & II
	2013 NFPA 14 (Standpipe Systems)	Administrative
	2016 NFPA 24 (Underground Water Supply Systems)	Administrative & III

Other amendments:

All other changes to the codes referenced in this Ordinance are hereby found, declared and determined by the City Council to be primarily procedural and non-substantive, and therefore to be equivalent for the purposes intended by the original codes. These amendments are necessary for administrative clarification,

and do not modify a building standard pursuant to California Health & Safety Code Sections 17958, 17958.7 and/or 18941.5. They establish standards for the effective enforcement of the building standards in the City of Aliso Viejo.

SECTION 4. Chapter 13.02 Building Regulations. Chapter 13.02 of Title 13 entitled “Building Regulations” is hereby removed in its entirety and replaced with the following:

“CHAPTER 13.02 BUILDING REGULATIONS”

- 13.02.010 Adoption of 2022 California Building Code and Related Codes.**
- 13.02.020 Violations.**
- 13.02.030 Board of Appeals.**
- 13.02.040 Fees.**
- 13.02.050 Administration.**
- 13.02.060 Amendments to Chapter 1 of the California Building Code.**
- 13.02.065 Amendments to Chapter 2 of the California Building Code.**
- 13.02.070 Amendments to Chapter 5 of the California Building Code.**
- 13.02.075 Amendments to Chapter 7A of the California Building Code.**
- 13.02.080 Amendments to Chapter 9 of the California Building Code.**
- 13.02.090 Amendments to Chapter 15 of the California Building Code.**
- 13.02.095 Amendments to Chapter 18 of the California Building Code**
- 13.02.100 Amendments to Chapter 31 of the California Building Code**
- 13.02.120 Amendments to the California Residential Code.**
- 13.02.130 Amendments to the California Electrical Code.**
- 13.02.140 Amendments to the California Plumbing Code.**
- 13.02.150 Building deposits.**

The City Council, for the purpose of prescribing regulations for the erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures in the city, hereby adopts the following codes by reference and the amendment to these codes as set forth in Chapters 13.02 of the Aliso Viejo Municipal Code:

- A. The California Building Code, 2022 Edition, Vol. 1&2, with amendments, based on the 2021 International Building Code as published by the International Code Council,
- B. The California Residential Code, 2022 Edition, with amendments based on the 2021 International Residential Code as published by the International Code Council;
- C. The California Electrical Code, 2022 Edition, based on the 2020 National Electrical Code as published by the National Fire Protection Association;
- D. The California Mechanical Code, 2022 Edition, based on the 2021 Uniform Mechanical Code as published by the International Association of Plumbing and Mechanical Officials;
- E. The California Plumbing Code, 2022 Edition, based on the 2021 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials;
- F. The California Green Building Standards Code, 2022 Edition, as published by the California Building Standards Commission;
- G. The California Energy Code, 2022 Edition, as published by the International Code Council;
- H. The California Administrative Code, 2022 Edition, as published by the International Code Council;
- I. The California Referenced Standards, 2022 Edition, as published by the International Code Council;
- J. The California Existing Building Code, 2022 Edition as published by the International Code Council;
- K. The International Property Maintenance Code, 2021 Edition, as published by the International Code Council;
- L. The California Fire Code, 2022 Edition, as published by the International Code Council.

The provisions of these codes as amended by Chapters 13.02 and 13.04 of the Aliso Viejo Municipal Code ("Codes") shall constitute the Building Regulations of the City of Aliso Viejo. The primary codes and the Codes as adopted by reference and amended by the City are on file for public examination in the office of the Building Official. Such Codes are hereby adopted and incorporated as though set forth in full in this section.

13.02.020 Violations.

For all sections of the Codes including any and all amendments to these Codes included within this chapter, the following shall apply pertaining to violations and shall replace any sections of those codes that pertain to violation.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy, or maintain any building or structure in the City, or cause same to be done, contrary to or in violation of any of the provisions of this chapter.

Any person, firm, or corporation violating any of the provisions of this chapter, shall be deemed guilty of a misdemeanor, and each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this chapter is committed, continued, or permitted, and upon conviction of any such violation such persons shall be punished by a fine of not more than \$1,000.00 or by imprisonment for not more than six months, or by both such fine and imprisonment.

13.02.030 Board of Appeals.

For all sections of the Codes, including any and all amendments included within this chapter, the following shall apply pertaining to board of appeals and shall replace any sections of those codes that pertain to board of appeals.

In order to determine the suitability of alternate materials and methods of construction and provisions of these Codes, there shall be 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 finding 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-tem 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 making its findings and decisions.

13.02.040 Fees.

All fees set forth in sections of the Codes adopted by reference and amended by the City in Chapters 13.02 and 13.04 of the Aliso Viejo Municipal Code shall be as set forth by resolution of the city council

13.02.050 Administration.

Chapter 1 of the 2022 California Building Code, as amended by the City in this Chapter, is hereby adopted as the administrative provisions of all the Codes in Chapters 13.02 and 13.04 of the Aliso Viejo Municipal Code.

13.02.060 Amendments to Chapter 1 of the California Building Code.

Chapter 1, Division II, Scope and Administration, is amended as follows:

SECTION 101.1, Title is amended to include the following:

These regulations shall be known as the Building Code of the City of Aliso Viejo, hereinafter referred to as "this code."

SECTION 101.4, Referenced Codes is deleted in its entirety and replaced with the following:

101.4. Referenced Codes. The 2022 California Building Standards Code shall be considered part of the requirements of this code to the extent of each such reference.

SECTION 104.8 Liability is amended to include the following:

The provisions of this section shall apply if the Building Official or his/her authorized representative are employees of this jurisdiction and shall also apply if the Building Official or his/her authorized representatives acting under contract as agents of this jurisdiction.

SECTION 105.2, Work Exempt from Permit, under Subsection Building is amended to revise Item 2 and add Item 14:

Section 105.2. Work Exempt from Permit.

Building:

2. Walls and fences less than 72 inches in height.

14. Decks not exceeding 200 square feet (18.58m²) in area, that are not more 30 inches (762mm) above

grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.2.

SECTION 105.5 is amended as follows:

Section 105.5. Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced with 12 months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The Building Official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 each. The extension shall be requested in writing and justifiable cause demonstrated.

Time limitation for permit expiration as the result of code enforcement shall be as per notice of violation or as otherwise determined by the Building Official.

SECTION 105.8 is added to read as follows:

Section 105.8. Reconstruction. If the value of the reconstruction (or renovations) of a building is equal to or exceeds 75 percent of the value of the building, the entire building shall comply with the code provisions for new construction. The value of the reconstruction (or renovation) for a property shall include the value of all construction stemming from construction-related permits issued within the last two years.

SECTION 107.3, Examination of Documents, is amended to add a paragraph as follows:

An expedited review and permit issuance process shall be provided for EV Charging Stations and simplified forms for submittal will be made available on City's website.

SECTION 109.4, Fees, is amended to read as follows:

Failure to pay fees and obtain a permit before commencing work shall be deemed a violation of this chapter. At the Building Official's discretion, a violation may result in an assessment, which includes the required permit fees, of up to double the permit fees for work on a building, structure, mechanical, gas, electrical or plumbing system before obtaining the necessary permits. Payment of assessed fees shall not relieve any person from fully complying with the requirements of this chapter nor from any other penalties prescribed herein.

SECTION 111.5. Declaration of Intended Use is added to read as follows:

When required by the fire chief, with the concurrence of the building official, any or all owners of any occupancy may be required to record with the county recorder of the County of Orange a legal instrument of intended use. This legal instrument shall be called a declaration of intended use. The declaration of intended use shall be in accordance with the requirements of this section. It shall specifically state, by occupancy classification, all intended uses of all portions of the occupancy and may not be modified or withdrawn without the approval of the fire chief with the concurrence of the building official. Unapproved changes of occupancy or use can be cause for an immediate hearing before the building official and the fire chief or their designees. Such hearing shall be conducted to rule on the revocation of the certificate of occupancy and the revocation of all permits issued to all owners, tenants, operators and occupants of all portions of the occupancy. The declaration of intended use shall be binding on all present and future owners, tenants, operators and occupants.

SECTION 111.5.1, Certified Copies, is added to read as follows:

Section 111.5.1 Certified Copies. A certified copy of the recorded declaration of intended use may be required to be filed with the building official and the fire chief before any certificate of occupancy and/or any permits are issued to any or all owners, tenants, operators or occupants of the occupancy.

13.02.065 Amendments to Chapter 2 of the California Building Code.

Chapter 2, Definitions, is amended as follows:

SECTION 202 Definitions is revised, to add the following definitions:

BARRIER Barrier is a fence, wall, building wall, or any combination of these that completely surrounds the swimming pool and obstructs access to the swimming pool.

SPARK ARRESTER. A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:

1. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
2. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28.

SWIMMING POOL. Any body of water created by artificial means which is designed, intended for use, or used for swimming or immersion purposes, which has a water depth exceeding 18 inches. The term, "pool," includes swimming pools, spas, hot tubs, above-and below-ground, and vinyl-lined pools; pool does not include plumbing fixtures such as bathtubs nor does it apply to man-made lakes, reservoirs, farm ponds, or ponds used primarily for public park purposes, water conservation purposes, irrigation purposes or for the watering of livestock.

13.02.070 Amendments to Chapter 5 of the California Building Code.

Chapter 5, General Building Heights and Areas is amended to read as follows:

SECTION 502.1 Address Identification

502.1. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches in height with a stroke width of not less than 0.5 inch. For R-3 and other occupancies, the numbers shall be a minimum of 6 inches high with a minimum stroke width of 1 inch. Where required by the fire official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

13.02.075 Amendments to Chapter 7A of the California Building Code.

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

SECTION 701A.3 is amended to read as follows:

701A.3 Application. New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date, and additions to and remodel of buildings constructed before 2012 located in areas currently designated as such, shall comply with the provisions of this chapter. The provisions shall also apply to additions, remodels, and accessory structures located within 100 feet of a fuel modification zone, vegetation management area, or similar area containing hazardous combustible vegetation, regardless of whether the property is currently located in a designated Fire Hazard Severity Zone or Wildland-Urban

Interface Fire Area, when materials and/or construction methods for exterior wildfire exposure were previously required at the property by the Building or Fire Code Official.

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 the applicable building.
2. Buildings of an accessory character classified as a Group U occupancy of any size located 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.

SECTION 710A.3.3 is amended to read as follows:

710A.3.3 Detached Miscellaneous Structure Requirements. Detached accessory structures within 50 feet of an applicable building shall comply with the requirements of this section.

SECTION 710A.4 Requirements, is amended to read as follows:

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

13.02.080 Amendments to Chapter 9 of the California Building Code.

Chapter 9, Fire Protection and Life Systems, is amended as follows:

SECTION 903.2, Where Required, is amended to read as follows:

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

1. New buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.19, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area exceeds 5,000 square feet as defined in Section 202 of the California Building Code, regardless of fire areas or allowable area, or is more than two stories in height.

Exception: Subject to approval by the Fire Code Official, open parking garages in accordance with Section 406.5 of the California Building Code.

2. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic sprinkler system shall be provided in an existing building when an addition occurs and one of the following conditions exists:
 - a. When an addition is 33% or more of the existing building area, and the resulting building area exceeds 5000 square feet
 - b. When an addition exceeds 2000 square feet and the resulting building area exceeds 5000 square feet.
 - c. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Additions to Group R-3 occupancies shall comply with Section 903.2.8 (2).

SECTION 903.2.8, Group R, is amended to read 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, with the exception of accessory dwelling units where automatic fire extinguishing systems have not been required for the primary residence.
2. Existing R-3 Buildings: An automatic sprinkler system shall be installed throughout when one of the following conditions exists:
 - a. When an addition is 33% or more of the existing building area as defined in Section 202, and the final area is larger than 3,600 square feet within a two-year period.
 - b. An addition when the existing building is already provided with automatic sprinklers; or,
 - c. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.

Exceptions:

1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies and not housing bedridden clients, not housing nonambulatory clients above the first floor, and not housing clients above the second floor.
2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with Section 435.8.3.3 of the California Building Code.
3. Pursuant to Health and Safety Code, Section 13113, occupancies housing ambulatory children only, none of whom are mentally ill children or children with intellectual disabilities, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and building or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
4. Pursuant to Health and Safety Code, Section 13143.6, occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years) or who is elderly (65 years of age or over).

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

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

SECTION 903.3.1.1.1, Exempt Locations, is amended by revising Item 5 as follows:

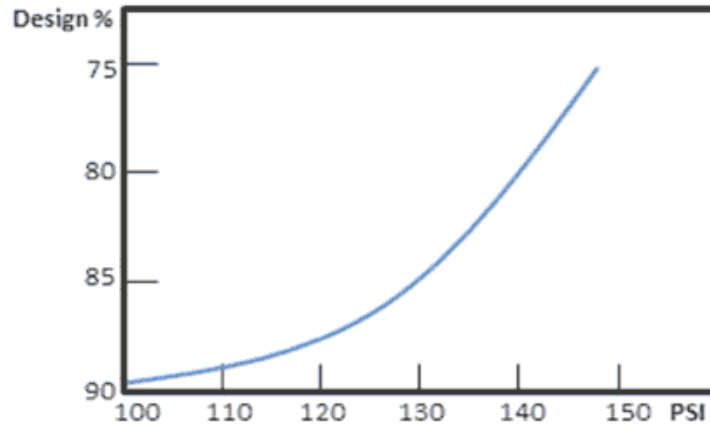
5. When approved by the fire code official, spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, and associated electrical power distribution equipment, provided those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by fire barriers consisting of not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2 hour horizontal assemblies constructed in accordance with Section 712, or both.

SECTION 903.3.5.3, Hydraulically Calculated Systems, is hereby added as follows:

Section 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**



13.02.090 Amendments to Chapter 15 of the California Building Code

Chapter 15, Roof Assemblies and Rooftop Structures

TABLE 1505.1 is amended, by deletion of Table 1501.1 and the addition of a new Table 1505.1 thereto, to read as follows:

**TABLE 1505.1^a
MINIMUM ROOF COVERING CLASSIFICATIONS
TYPES OF CONSTRUCTION**

IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
B	B	B	B	B	B	B	B	B

For SI: 1 foot = 304.8 mm, 1 square foot = 0.0929 m².

a. Unless otherwise required in accordance with Chapter 7A.

1505.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

13.02.095 Amendment to Chapter 18 of the California Building Code

Chapter 18, Soils and Foundations

SECTION 1807.1.6 is amended to read as follows:

1807.1.6 Prescriptive design of concrete and masonry foundation walls. Concrete and masonry foundation walls that are laterally supported at the top and bottom shall be permitted to be designed and constructed in accordance with this section. Prescriptive design of foundation walls shall not be used for structures assigned to Seismic Design Category D, E or F.

13.02.100 Amendments to Chapter 31 of the California Building Code.

Chapter 31, Special Construction

SECTION 3109 Swimming Pools, Spas and General

3109.3 Residential swimming pools is added to the CBC to read Residential swimming pools shall be completely enclosed by a barrier complying with Sections 3109.3.1 through 3109.3.3.

3109.3.1 Barrier height and clearances. The top of the barrier must be at least 60 inches above grade measured on the side of the barrier that faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier must be two inches measured on the side of the barrier that faces away from the swimming pool. Where the top of the pool structure is above grade, the barrier is authorized to be at ground level or mounted on top of the pool structure, at the maximum vertical clearance between the top of the pool structure and the bottom of the barrier must be four inches.

3109.3.1.1 Openings. Openings in the barrier must not allow passage of a 4-inch-diameter sphere.

3109.3.1.2 Solid barrier surfaces. Solid barrier surfaces which do not have openings shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.

3109.3.1.3 Closely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches, the horizontal members shall be located on the swimming pool side of the fence. Spacing between vertical members shall not be greater than 1 ¾ inches in width. Where there are decorative cutouts within vertical members, spacing with the cutouts shall not be greater than 1 ¾ inches in width.

3109.3.1.4 Widely spaced horizontal members. Where the barrier is composed of horizontal members and the distance between the tops of the horizontal members is 45 inches or more, spacing between vertical members must not be greater than 4 inches. Where there are decorative cutouts within vertical members, spacing must not be greater than 1 ¾ inches in width.

3109.3.1.5 Chain link dimensions. Mesh size for chain link fences must not be greater than 1 ¾ inches in width, unless the fence is provided with slats fastened at the top or bottom that reduce the openings to not more than 1 ¾ in width.

3109.3.1.6 Diagonal members. Where the barrier is composed of diagonal members shall not be greater than 1 ¾ inches.

3109.3.1.7 Gates. Access gates must comply with the requirements of Sections 3109.3.1 through 3109.3.1.6 and must be equipped to accommodate a locking device. Pedestrian access gates must open outward away from the pool and must be self-closing and have a self-latching device. Doors or gates other than pedestrian access gates must have a self-latching device and must be equipped with lockable hardware or padlocks and must remain locked at all times when not in use. Release mechanisms must comply with Sections 1010.1.9 and 1109.13. Where release mechanisms of the self-latching device are located less than 60 inches above grade measured on the side of the barrier that faces away from the swimming pool, the release mechanism must be located on the pool side of the gate at least three inches below the top of the gate and the gate barrier may have no opening greater than one-half inch within 18 inches of the release mechanism.

3109.3.1.8 Dwelling wall as a barrier. Where a wall of a dwelling serves as part of the barrier, two safety devices must be provided in accordance with Section 115922 of the California Health and Safety Code.

3109.3.1.9 Pool structure as barrier. Where an above-ground pool structure, and the means of access is a ladder or steps, then the ladder or steps either shall be capable of being secured, locked or removed to prevent access, or the ladder or steps shall be surrounded by a barrier that meets the requirements of Sections 3109.3.1.1 through 3109.3.1.8. Where the ladder or steps are secured, locked or removed, any opening shall not allow the passage of a 4-inch-diameter sphere.

3109.3.2 Indoor swimming pools. Wall surrounding indoor swimming pools shall not be required to comply with Section 3109.3.1.8. through 3109.3.3.

3109.3.3 Prohibited Locations. Barriers shall be located as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers. There shall be a clear zone of not less than 36" between the exterior of the enclosure and any permanent structures or equipment such as pumps,

filters and heaters that can be used to climb the enclosure.

13.02.120 Amendments to the California Residential Code.

Chapter 1, Scope and Application, is amended as follows:

SECTION R105.5 is amended as follows:

R105.5. Expiration. Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within 12 months after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. The Building Official is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 each. The extension shall be requested in writing and justifiable cause demonstrated.

Time limitation for permit expiration as the result of code enforcement shall be as per notice of violation or as otherwise determined by the Building Official.

Chapter 2, Definitions, is amended as follows:

SECTION R202 Definitions is amended by adding "Barrier," OCFA" and "Spark Arrester" as follows:

BARRIER. Barrier is a fence, wall, building wall, or any combination of these that completely surrounds the swimming pool and obstructs access to the swimming pool.

OCFA. Orange County Fire Authority, fire authority having jurisdiction.

SPARK ARRESTER. A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:

1. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
2. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28 combustible vegetation.

Chapter 3, Building Planning, is amended as follows:

SECTION R301.2, Climatic and Geographic Design Criteria, is amended as follows:

R301.2 Climatic and Geographic Design Criteria, Table R301.2(1) Climatic and Geographic Design Criteria.

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

GROUND SNOW LOAD	WIND DESIGN		SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e	ICE BARRIER UNDERLAYMENT REQUIRED ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	Speed ^d (mph)	Topographic effects ^k		Weathering ^a	Frost line Depth ^b	Termite ^c					
Zero	110	No	D ₂ or E	Severe	12-24"	Very Heavy	50	No	04-19-2006 2006-082	0	64

MANUAL J DESIGN CRITERIAⁿ

ELEVATION	LATITUDE	WINTER HEATING	SUMMER COOLING	ALTITUDE CORRECTION FACTOR	INDOOR DESIGN TEMPERATURE	DESIGN TEMPERATURE COOLING	HEAT TEMPERATURE DIFFERENCE
390	34	41	85		70	75	
COOLING TEMPERATURE DIFFERENCE	WIND VELOCITY HEATING	WIND VELOCITY COOLING	COINCIDENT WET BULB	DAILY RANGE	WINTER HUMIDITY	SUMMER HUMIDITY	
7			68	22		11 (50% RH)	

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

- a. Weathering may require a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code. The grade of masonry units shall be determined from ASTM C 34, C 55, C 62, C 73, C 90, C 129, C 145, C 216 or C 652.
- b. The City of Aliso Viejo does not have any Flood Hazards Zones.

Section R301.9, Fuel Modification Requirements for New Construction, is hereby added as follows:

R301.9 Fuel Modification Requirements for New Construction. All new structures and facilities adjoining land containing hazardous combustible vegetation shall be approved and in accordance with the requirements of OCFA Guideline C-05 "Vegetation Management Guideline – Technical Design for new Construction Fuel Modification Plans and Maintenance Program."

Section R309.6, Fire sprinkler attached garages, and carports with habitable space above, is hereby amended by modifying the exception to read 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:

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 R319.1, Address identification, is hereby revised as follows:

R319.1 Address Identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches in height with a stroke width of not less than 0.5 inch. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building address cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure. Address identification shall be maintained.

SECTION R337.1.3, Application, is hereby revised to read as follows:

R337.1.3 Application. New buildings located in any Fire Hazard Severity Zone or any Wildland-Urban Interface Fire Area designated by the enforcing agency constructed after the application date, and additions to

and remodel of buildings constructed before 2012 located in areas currently designated as such, shall comply with the provisions of this chapter. The provisions shall also apply to additions, remodels, and accessory structures located within 100 feet of a fuel modification zone, vegetation management area, or similar area containing hazardous combustible vegetation, regardless of whether the property is currently located in a designated Fire Hazard Severity Zone or Wildland-Urban Interface Area, when materials and/or construction methods for exterior wildfire exposure were previously required at the property by the Building or Fire Code Official.

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 a 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.

SECTION R337.1.6, Fuel Modification Requirements for New Construction, is hereby added as follows:

R337.1.6 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. 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 9, Roof Assemblies, is amended as follows:

SECTION R902.1 is amended by revising it to allow only class A or B roofs as follows:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class A or B roofing shall be installed in areas designated by this section. Classes A or B roofing required by this section to be listed shall be tested in accordance with UL 790 or ASTM E 108.

Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry and exposed concrete roof deck.
2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile, or slate installed on noncombustible decks.

SECTION R902.1.3 is amended by revising it to require a minimum Class B roof as follows:

R902.1.3 Roof coverings within all other areas. The entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, the entire roof covering of every new structure, and any roof covering applied in the alteration, repair or replacement of the roof of every existing structure, shall be a fire-retardant roof covering that is at least Class B.

SECTION R902.2, first paragraph is amended by revising it to allow only Class A or B treated wood roofs as follows:

R902.2 Fire-retardant-treated shingles and shakes. Fire-retardant-treated wood shakes and shingles are wood shakes and shingles complying with UBC Standard 15-3 or 15-4 which are impregnated by the full-cell vacuum-pressure process with fire-retardant chemicals, and which have been qualified by UBC Standard 15-2 for use on Class A or B roofs.

Chapter 10, Chimneys and Fireplaces, is amended as follows:

Section R1001.13, Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices, is hereby added as follows:

R1001.13 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices. Outdoor fireplaces, fire pits, fire rings, or similar exterior devices shall comply with this section.

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

Section R1001.13.1, Gas-fueled devices, is hereby added as follows:

R1001.13.1 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. 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 R1003.9.2.

Section R1001.13.2, Devices using wood or fuels other than natural gas or liquefied-petroleum gas, is hereby added as follows:

R1001.13.2 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 Section R1001. 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.

Section R1001.13.3, Devices using wood or fuels other than natural gas or liquefied-petroleum gas, is hereby added as follows:

R1001.13.3 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) 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.

13.02.135 Amendments to the California Electrical Code

Article 310.106(B) Conductor Material is amended by the addition of a second paragraph to read as follows:

Copper wire shall be used for wiring No. 6 and smaller in all installations. Consideration for use of aluminum wiring can be made by the Building Official for feeder lines only on an individual basis where adequate safety measures can be ensured.

Article 310 Conductors for General Wiring is amended by the addition of Article 310.121 to read as follows:

310.121 Continuous inspection of aluminum wiring. Aluminum conductors of No. six (6) or smaller used for branch circuits shall require continuous inspection by an independent testing agency approved by the Building Official for proper torque of connections at their termination point.

13.02.140 Amendments to the California Plumbing Code.

SECTION 1014.1.4 is added to read as follows:

Grease interceptors/traps in new construction shall comply with one of the following standards:

1. Laterals must be oversized two pipe diameter increments at the point of connection with the interceptor discharge downstream to the sewer main; or
2. Grease interceptors/traps must connect directly to the sewer main with no additional connections.

SECTION 1014.1.2, Maintenance is amended by adding the following paragraph:

In locations where a grease interceptor/trap is present, and the discharge of the interceptor/traps is connected to the building lateral, such laterals must be cleaned on a semi-annual basis by a qualified professional. Verification of such cleaning shall be submitted to the Building Department for approval on an annual basis. Verification shall be in the form of a statement and/or invoice from the person performing the cleaning. Premises that have had an overflow within the last 24 months shall clean the laterals and verify such cleaning as often as deemed necessary by the Building Official.

13.02.150 Building deposits.

- A. As a part of any application for, and prior to the issuance of, any building permit such as where damage may occur to public property, the applicant, if required, shall post a cash deposit in an amount established to cover the city's cost of opening and closing of the necessary files, administration of the permit status, and code enforcement, if necessary. The current deposit amount established for an encroachment permit is \$3,000.
- a. Any remaining portion of the deposit required by this section shall be returned to the applicant, without interest, upon completion of the work for which the building permit was issued, or upon the request of the applicant if the building permit application is withdrawn prior to commencement of work.
 - b. The deposit required by this section shall be forfeited entirely, and retained by the city as a penalty, if the applicant fails to comply with any provision of this code as it applies to the work for which the building permit was issued or if the applicant fails to request a refund of the deposit within 30 days of either expiration of the building permit or completion of the work for which the building permit was issued.
 - c. Nothing in this section shall preclude the city from initiating any enforcement or legal action for violation of any provision of this code.
 - d. For purposes of this section, "completion of the work" shall mean final inspection approval or issuance of a certificate of occupancy, as applicable.

SECTION 5. Chapter 13.04 2022 California Fire Code. Chapter 13.04 of Title 13 entitled "2022 Edition of the California Fire Code" is hereby amended to read in full as follows:

"CHAPTER 13.04 2022 EDITION OF THE CALIFORNIA FIRE CODE"

13.04.005 Adoption of the 2022 Edition of the California Fire Code.

13.04.010 Chapter 1, Scope and Administration, amended.

13.04.020 Chapter 2, Definitions, amended.

13.04.030 Chapter 3, General Requirements, amended.

13.04.040 Chapter 4, Emergency Planning and Preparedness, amended.

13.04.050 Chapter 5, Fire Service Features, amended.

13.04.070 Chapter 9, Fire Protection and Life Safety Systems, amended.

13.04.080 Chapter 11, Construction Requirements for Existing Buildings, amended.

13.04.085 Chapter 12, Energy Systems, amended.

13.04.100 Chapter 28, Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities, amended.

13.04.110 Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, amended.

13.04.120 Chapter 50, Hazardous Materials – General Provisions, amended.

13.04.130 Chapter 55, Cryogenic Fluids, adopted.

13.04.140 Chapter 56, Explosives and Fireworks, amended.

13.04.150 Chapter 57, Flammable and Combustible Liquids, adopted.

13.04.160 Chapter 60, Highly Toxic and Toxic Materials, adopted.

13.04.170 Chapter 80, Referenced Standards, amended.

13.04.180 Appendices

The City Council, for the purpose of prescribing regulations for the erecting, construction, enlargement, alteration, repair, improving, removal, conversion, demolition, occupancy, equipment, use, height, area and maintenance of all buildings and structures in the city, hereby adopts the following codes by reference and the amendment to these codes as set forth in Chapters 13.04 of the Aliso Viejo Municipal Code:

13.04.005 Adoption of the 2022 Edition of the California Fire Code.

Except as hereinafter provided, the 2022 Edition of the California Fire Code, including Chapter 1 and Appendices B, BB, C, CC, based on the 2018 Edition of the International Fire Code, as published by the International Code Council, is hereby adopted by the city of Aliso Viejo for the purpose of prescribing regulations governing conditions hazardous to life and property from fire and explosion hazards, save and except such portions as are hereinafter added, deleted, modified or amended. One copy of all the above is now on file in the office of the clerk for public inspection. This code is adopted with the same force and effect as though set out herein in full.

13.04.010 Chapter 1, Scope and Administration, amended.

110.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or shall fail to comply with any issued orders or notices 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 subject to penalties assessed as prescribed in the OCFA Prevention Field Services adopted fee schedule. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

SECTION 110.4.2 Infraction and misdemeanor, is hereby added as follows:

110.4.2 Infraction and misdemeanor. 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. 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 are guilty of a misdemeanor.

13.04.020 Chapter 2, Definitions, amended.

SECTIONS 202 General Definitions is hereby revised by adding "OCFA" and "Spark Arrester" as follows:

202 General Definitions

OCFA: Orange County Fire Authority, fire authority having jurisdiction.

SPARK ARRESTER. A listed device constructed of noncombustible material specifically for the purpose of meeting one of the following conditions:

1. Removing and retaining carbon and other flammable particles/debris from the exhaust flow of an internal combustion engine in accordance with California Vehicle Code Section 38366.
2. Fireplaces that burn solid fuel in accordance with California Building Code Chapter 28.

13.04.030 Chapter 3, General Requirements, amended.

Chapter 3 General Requirements. Adopt Chapter 3 in its entirety, with the exception of Sections 308.1.4, 311.5 through 311.5.5, 318, and 319, and 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. Type, amount, arrangement, and maintenance of vegetation in a fuel modification area, interior slope, or similarly hazardous area shall be in accordance with OCFA Guideline C-05 "Vegetation Management Guideline—Technical Design for New Construction, Fuel Modification Plans, and Maintenance Program."

SECTION 305.6 Hazardous Conditions is hereby added as follows:

SECTION 305.6 Hazardous conditions. Outdoor fires burning wood or other solid fuel are not allowed when any of the following conditions applies:

1. When predicted sustained winds exceed 8 MPH and relative humidity is less than 25%, or a red flag condition has been declared.
2. When an official sign was caused to be posted by the fire code official, or a public announcement is made.

No outdoor fires using any fuel type are permitted when predicted sustained winds exceed 20 MPH or when such fires present a hazard as determined by the fire code official.

SECTION 305.7 Disposal of rubbish is hereby added as follows:

305.7 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 revised as follows:

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

Sections 307.6 Outdoor Fireplaces, Fire Pits, Fire Rings, or similar devices used at Group R Occupancies is hereby added as follows:

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

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

SECTION 307.6.1 Gas-fueled devices is hereby added as follows:

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 and vegetation 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 as defined in Section 202.

Section 307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas is hereby added as follows:

307.6.2 Devices using wood or fuels other than natural gas or liquefied-petroleum gas. Permanent outdoor fireplaces burning wood or other solid fuel shall be constructed in accordance with the California Building Code with clearance from combustible construction and building openings as required therein. 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 25 feet of combustible structures unless within an approved permanent 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 in accordance with Sections 305, 307, and 308.

Exceptions:

1. Portable fireplaces and fire rings/pits equipped with a device to arrest sparks shall be located at least 3 feet from combustible construction at R-3 occupancies,
2. Portable fireplaces, and fire pits/rings equipped with a device to arrest sparks, shall be located at least 15 feet from combustible structures at other R occupancies.

Section 307.6.2.1 Where prohibited, is hereby added as follows:

307.6.2.1 Where prohibited. The burning of wood and other solid fuels shall not be conducted within a fuel modification zone, Wildfire Risk Area (WRA), Wildland-Urban Interface Area (WUI), or in locations where conditions could cause the spread of fire to the WRA or WUI.

Exceptions:

1. Permanent fireplaces that are not located in a fuel modification zone.
2. Where determined by the Fire Code Official that the location or design of the device should reasonably prevent the start of a wildfire.

Section 308.1.6.3 Sky lanterns is hereby revised as follows:

308.1.6.3 Sky lanterns. A person shall not ignite, release, or cause to be released a sky lantern.

Section 321 Fuel Modification Requirements for New Construction is hereby added as follows:

321 Fuel Modification Requirements for New Construction. All new structures and facilities adjoining land containing hazardous combustible vegetation shall be approved and in accordance with the requirements of OCFA Guideline C-05 "Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program."

Section 322 Clearance of brush or vegetation growth from roadways is hereby added as follows:

322 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 323 Unusual Circumstances is hereby added as follows:

323 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 324 Use of Equipment is hereby added as follows:

324 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 202 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 324.1 Use of Equipment and Devices Generating Heat, Sparks or Open Flames is hereby added as follows:

324.1 Equipment and devices generating heat, sparks or open flames. During any time of the year within Wildfire Risk Areas, within or immediately adjacent to any forest- or brush-covered land or non-irrigated grass-covered land, no person shall use or operate any welding equipment, cutting torches, tar pots, grinding devices, or other tools or equipment that may produce a spark, fire, or flame that could result in a wildfire without doing the following:

1. First clearing away all flammable material, including snags, from the area around such operation for a distance of 30 feet or other approved method to reduce fire spread into the wildlands. If 30-foot clearing cannot be achieved, then an alternate method shall be approved by the AHJ prior to work starting.
2. Maintain one serviceable round point shovel with an overall length of not less than 46 inches and one backpack pump water-type fire extinguisher fully equipped and ready for use at the immediate area during the operation.
3. Stop work when winds are 8 MPH or greater 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.
4. Keep a cell phone nearby and call 911 immediate in case of fire.

Section 324.2 Spark Arresters is hereby added as follows:

324.2 Spark arresters. Spark arresters shall comply with Section 202, and when affixed to the exhaust system of engines or vehicles subject to Section 324 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.

13.04.040 Chapter 4, Emergency Planning and Preparedness, amended.

Chapter 4: Emergency Planning and Preparedness. Adopt only the sections, subsections, and amendment listed below:

401 – 401.9
402
403.2
403.5 – 403.5.4
403.10.2.1.1
403.13 – 403.13.3
404.5 – 404.6.6
407

Section 407.5 is revised as follows:

407.5 Hazardous Materials Inventory Statement. Where required by the fire code official, each application for a permit shall OCFA's Chemical Classification Packet in accordance with Section 5001.5.2.

13.04.050 Chapter 5, Fire Service Features, amended.

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

SECTION 501.1 Scope is revised as follows:

501.1 Scope. Fire service features for buildings, structures and premises shall comply with this chapter and, where required by the fire code official, with OCFA Guideline B-09, "Fire Master Plan for Commercial & Residential Development." Fire service features for buildings, structures and premises located in State Responsibility Areas, and Local Responsibility Areas designated as Very High Hazard Fire Severity Zone shall also comply with OCFA Guideline B-09a, "Fire Safe Development in State Responsibility Areas, and Local Responsibility Areas designated as Very High Hazard Fire Severity Zone."

Section 510.1 Emergency responder radio coverage in new buildings 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 utilized by the jurisdiction, measured 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 the Orange County Sheriff's Department, Communications and Technology Division guidelines and specifications and, where the functionality or performance requirements in the California Fire Code are more stringent, this code.

Exceptions:

1. In buildings or structures where it is determined by the fire code official that the radio coverage system is not needed, including but not limited to the following:
 - a. Existing buildings or structures, unless required by the Building Official and OCFA for buildings and structures undergoing extensive remodel and/or expansion.
 - b. Elevators.
 - c. Structures that meet all of the following:
 - i. Three stories or less, and

- ii. Do not have subterranean storage or parking, and
 - iii. Do not exceed 50,000 square feet on any single story.
- d. Structures that meet all of the following:
- i. Residential structures four stories or less, and
 - ii. Constructed of wood, and
 - iii. Do not have subterranean storage or parking, and
 - iv. Are not built integral to an above ground multi-story parking structure.

Should a structure that is three stories or less and 50,000 square feet or smaller on any single story include subterranean storage or parking, then this ordinance shall apply only to the subterranean areas.

2. In facilities where emergency responder radio coverage is required and such systems, components or equipment required could have a negative impact on the normal operations of the facility, the fire code official shall have the authority to accept an automatically activated emergency radio coverage system.

Section 510.2 Emergency responder radio coverage in existing buildings is deleted without replacement:

Section 510.3 Permit required is deleted without replacement.

13.04.070 Chapter 9, Fire Protection and Life Safety Systems, amended.

Adopt Chapter 9 Fire Protection and Life Safety 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 5,000 square feet (465 m²) as defined in Section 202, regardless of fire areas or allowable area, or is more than two stories in height.

Exception: Subject to approval by the Fire Code Official, open parking garages in accordance with Section 406.5 of the California Building Code.

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 5,000 square feet.
- b. When an addition exceeds 2,000 square feet and the resulting building area exceeds 5,000 square feet.
- c. An additional story is added above the second floor regardless of fire areas or allowable area.

Exception: Additions to Group R-3 occupancies shall comply with Section 903.2.8 (2).

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 R-3 Buildings: An automatic sprinkler system shall be installed throughout when one of the following conditions exists:
 - a. When an addition is 33% or more of the existing building area as defined in Section 202, and the final area > 3600 sq./ft, within a two-year period, or,
 - b. An addition when the existing building is already provided with automatic sprinklers; or,
 - c. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a sprinkler system would be similar as in a new building.
 - d. When not used in accordance with Section 504.2 or 506.3 of the California Building Code, an automatic sprinkler system installed in accordance with Section 903.3.1.2 shall be allowed in Group R-2.1 occupancies.
 - e. An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-2.1 or R-4 occupancies.

Exceptions:

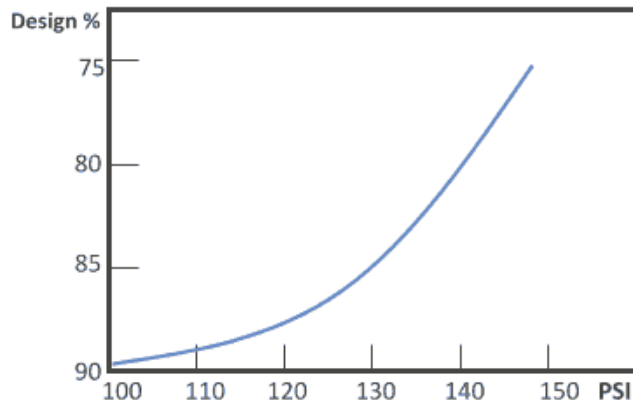
1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies and not housing bedridden clients, not housing non-ambulatory clients above the first floor, and not housing clients above the second floor.
2. Existing Group R-3 occupancies converted to Group R-3.1 occupancies housing only one bedridden client and complying with Section 435.8.3.3 of the California Building Code.
3. Pursuant to Health and Safety Code, Section 13113, occupancies housing ambulatory children only, none of whom are mentally ill children or children with intellectual disabilities, and the buildings or portions thereof in which such children are housed are not more than two stories in height, and building or portions thereof housing such children have an automatic fire alarm system activated by approved smoke detectors.
4. Pursuant to Health and Safety Code, Section 13143.6, occupancies licensed for protective social care which house ambulatory clients only, none of whom is a child (under the age of 18 years), or who is elderly (65 years of age or over).

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 when required by the fire code official, the fire sprinkler system shall not exceed the water supply capacity specified by Table 903.3.5.3.

**TABLE 903.3.5.3
Hydraulically Calculated Systems**



13.04.080 Chapter 11, Construction Requirements for Existing Buildings, amended.

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
1103.9.1
1107
1113
1114
1115
1116

13.04.085 Chapter 12, Energy Systems, amended.

Chapter 12 Energy Systems is adopted in its entirety with the following amendment added:

1201.1.1 Other Systems Where required by the fire code official, other systems and operations including but not limited to battery systems assembly, battery reconditioning and storage, research and development of battery storage systems, electric vehicle manufacturing and testing, and battery charging systems for cars and carts inside of buildings or structures, shall comply with this chapter.

Exception: When approved by the fire code official, charging stations for electric vehicles located in open parking garages of Type I or II construction.

13.04.100 Chapter 28, Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities, amended.

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

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.

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.

Exception: The fire code official is authorized to allow the pile size to be increased where a fire protection plan is provided for approval that includes, but is not limited to, the following:

1. Storage yard areas and materials-handling equipment selection, design and arrangement shall be based upon sound fire prevention and protection principles.
2. Factor that lead to spontaneous heating shall be identified in the plan, and control of the various factors shall be identified and implemented, including provisions for monitoring the internal condition of the pile.
3. The plan shall include means for early fire detection and reporting to the public fire department; and facilities needed by the fire department for fire extinguishment including a water supply and fire hydrants.
4. Fire apparatus access roads around the piles and access roads to the top of the piles shall be established, identified and maintained.
5. Regular yard inspections by trained personnel shall be included as part of an effective fire prevention maintenance program.

Additional fire protection called for in the plan shall be provided and shall be installed in accordance with this code. The increase of the pile size shall be based upon the capabilities of the installed fire protection system and features.

SECTION 2808.4, Pile Separation is hereby revised to read as follows:

2808.4 Pile separation. Piles shall be separated from adjacent piles by minimum distance of 20 feet. Additionally, piles shall have a minimum separation of 100 feet from combustible vegetation.

SECTION 2808.7, Pile fire protection, is hereby revised to read as follows:

2808.7 Pile fire protection. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible conveyor systems and enclosed conveyor systems shall be

equipped with an approved automatic sprinkler system. Oscillating sprinklers with a sufficient projectile reach are required to maintain a 40% to 60% moisture content and wet down burning/smoldering areas.

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.

SECTION 2808.12, Water availability, is hereby added as follows:

2808.12 Water Availability. Facilities with over 2500 cubic feet shall provide a water supply. The minimum fire flow shall be no less than 500 GPM @ 20 psi for a minimum of 1-hour duration for pile heights up to 6 feet and 2-hour duration for pile heights over 6 feet. If there is no water purveyor, an alternate water supply with storage tank(s) shall be provided for fire suppression. The water supply tank(s) shall provide a minimum capacity of 2500 gallons per pile (maximum 30,000 gallons) for piles not exceeding 6 feet in height and 5000 gallons per pile (maximum 60,000) for piles exceeding 6 feet in height. Water tank(s) shall not be used for any other purpose unless the required fire flow is left in reserve within the tank at all times. An approved method shall be provided to maintain the required amount of water within the tank(s).

SECTION 2808.13, Tipping area, is hereby added as follows:

2808.13 Tipping areas shall comply with the following:

1. Tipping areas shall not exceed a maximum area of 50 feet by 50 feet.
2. Material within a tipping area shall not exceed 5 feet in height at any time.
3. Tipping areas shall be separated from all piles by a 20-foot-wide fire access lane.
4. A fire hydrant or approved fire water supply outlet shall be located within 150 feet of all points along the perimeter of the tipping area.
5. All material within a tipping area shall be processed within 5 days of receipt.

SECTION 2808.14, Emergency Contact, is hereby added as follows:

2808.14 Emergency Contact. The contact information of a responsible person or persons shall be provided to the Fire Department and shall be posted at the entrance to the facility for responding units. The responsible party should be available to respond to the business in an emergency situation.

13.04.110 Chapter 49, Requirements for Wildland-Urban Interface Fire Areas, amended.

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

Section 4906.3, Requirements, is hereby revised to read as follows:

4906.3 Requirements. Hazardous vegetation and fuels around all applicable buildings and structure shall be maintained in accordance with the following laws and regulations:

1. Public Resources Code, Section 4291.
2. California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299 (see guidance for implementation "General Guideline to Create Defensible Space").
3. California Government Code, Section 51182.

4. California Code of Regulations, Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.
5. OCFA Guideline C-05 "Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program."

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 a Wildfire Risk Area shall comply with the following:

1. Preliminary fuel modification plans shall be submitted to and approved by the fire code official prior to or concurrently with the 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.
3. The fuel modification plans shall meet the criteria set forth in the Fuel Modification Section of OCFA Guideline C-05 "Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program." The fuel modification plan shall include provisions for the maintenance of the fuel modification in perpetuity.
4. The fuel modification plan may be altered if conditions change. Any alterations to the fuel modification areas shall have prior approval from the fire code official.
5. All elements of the fuel modification plan shall be maintained in accordance with the approved plan and are subject to the enforcement process outlined in the Fire Code.

SECTION 4909, Explosives and Blasting, is hereby added as follows:

Section 4909 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.

13.04.120 Chapter 50, Hazardous Materials – General Provisions, amended.

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 first 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.

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.

13.04.130 Chapter 55, Cryogenic Fluids, adopted.

Chapter 55, Cryogenic Fluids, is adopted in its entirety without amendments.

13.04.140 Chapter 56, Explosives and Fireworks, amended.

Chapter 56, Explosives and Fireworks, is hereby amended as follows:

SECTION 5608.2, Firing, is hereby added as follows:

5608.2 Firing. All fireworks displays, regardless of mortar, device, or shell size, shall be electrically fired.

SECTION 5608.3, Application for Permit, is hereby added as follows

Section 5608.3 Application for Permit. A diagram of the grounds on which the display is to be held showing the point at which the fireworks are to be discharged, the fallout area based on 100 feet per inch of shell size, the location of all buildings, roads, and other means of transportation, the lines behind which the audience will be restrained, the location of all nearby trees, telegraph or telephone line, or other overhead obstructions shall be provided to OCFA.

13.04.150 Chapter 57, Flammable and Combustible Liquids, adopted.

Chapter 57, Flammable and Combustible Liquids, is adopted in its entirety without amendments.

13.04.160 Chapter 60, Highly Toxic and Toxic Materials, adopted.

Chapter 60, Highly Toxic and Toxic Materials, is adopted in its entirety without any amendments.

13.04.170 Chapter 80, Referenced Standards, amended.

Chapter 80, Referenced Standards, is hereby amended as follows:

NFPA 13, 2016 Edition, Standard for the Installation of Sprinkler Systems, is hereby amended as follows:

SECTION 6.7.3 is hereby revised as follows:

6.7.3 Fire department connections (FDC) shall be of an approved type. The FDC shall contain a minimum of two 2 1/2 inch 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 1/2 inch 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 3.6.4.8;
2. Residential sprinklers in accordance with the requirements of 8.4.5;
3. Quick response CMSA sprinklers;
4. SFR sprinklers;
5. Standard-response sprinklers used for modifications or additions to existing light hazard systems equipped with standard-response sprinklers;
6. Standard-response sprinklers used where individual standard-response sprinklers are replaced in existing light hazard systems.

SECTION 11.1.1.1 is hereby added as follows:

11.1.1.1 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.

NFPA 13D, 2016 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is hereby amended as follows:

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.

NFPA 14, 2016 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, 2016 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances, is hereby amended as follows:

SECTION 6.2.8.1 is hereby added as follows:

6.2.8.1 All indicating valves controlling fire suppression water supplies shall be painted OSHA red.

Exceptions:

1. Brass or bronze valves on sprinkler risers mounted to the exterior of the building may be left unpainted.
2. Where OS&Y valves on the detector check assembly are the only control valves, at least one OS&Y valve shall be painted red.

SECTION 6.2.9 is hereby revised to read as follows:

6.2.9 All connections to private fire service mains for fire protection systems shall be arranged in accordance with one of the following so that they can be isolated:

1. A post indicator valve installed not less than 40 feet (12 meters) from the building
 - a. For buildings less than 40 feet (12 meters) in height, a post indicator valve shall be permitted to be installed closer than 40 feet (12 meters) but at least as far from the building as the height of the wall facing the post indicator valve.
2. A wall post indicator valve.
3. An indicating valve in a pit, installed in accordance with Section 6.4.
4. A backflow preventer with at least one indicating valve not less than 40 feet (12 meters) from the building.
 - a. For buildings less than 40 feet (12 meters) in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40 feet (12 meters) but at least as far from the building as the height of the wall facing the backflow preventer.
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

SECTION 10.1.5 IS HEREBY ADDED AS FOLLOWS:

10.1.5 All ferrous pipe and joints shall be polyethylene encased per AWWA C150, Method A, B, or C. All fittings shall be protected with a loose 8-mil polyethylene tube or sheet. The ends of the tube or sheet

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 10.4.1.1 is hereby revised as follows:

10.4.1.1 All bolted joint accessories shall be cleaned and thoroughly coated with asphalt or other corrosion-retarding material after installation.

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

SECTION 10.4.1.1.1 is hereby added as follows:

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

SECTION 10.4.3.2 is hereby deleted and replaced as follows:

10.4.3.2 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.

13.04.180 Appendices

Appendix A is deleted in its entirety without amendments.

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.

Appendix D is deleted in its entirety without amendments.

Appendix E is deleted in its entirety without amendments.

Appendix F is deleted in its entirety without amendments.

Appendix G is deleted in its entirety without amendments.

Appendix H is adopted in its entirety without amendments.

Appendix I is deleted in its entirety without amendments.

Appendix J is deleted in its entirety without amendments.

Appendix K is deleted in its entirety without amendments.

Appendix L is deleted in its entirety without amendments.

Appendix M is deleted in its entirety without amendments.

Appendix N is deleted in its entirety without amendments.

SECTION 7. Effective Date. This ordinance and all codes referenced in this ordinance shall take effect upon the later of (1) 30 days from the adoption of this ordinance or (2) January 1, 2023.

SECTION 8. Repeal of Conflicting Ordinances. Upon the effective date of this ordinance, all former ordinances or parts thereof that conflict with or are inconsistent with the provisions of this ordinance or of the 2022 California Building Standards Code, as adopted and amended herein, are hereby repealed.

SECTION 9. Severability. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this ordinance, 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. The City Council hereby declares that it would have adopted this ordinance, and each section, subsection, subdivision, sentence, clause, phrases, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof, be declared invalid or unconstitutional.

SECTION 10. City Clerk's Certification. The City Clerk shall certify to the adoption of this Ordinance and cause the same to be posted at the duty designated posting places within the City and published once within fifteen days after passage and adoption as required by law; or, in the alternative, the City Clerk may cause to be published a summary of this Ordinance in the Office of the City Clerk five days prior to the date of adoption of this Ordinance, and, within fifteen days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

PASSED, APPROVED AND ADOPTED this 16th day of November 2022.



Ross Chun
Mayor

APPROVED AS TO FORM:



Scott C. Smith, City Attorney

ATTEST:



Mitzi Ortiz, MMC, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF ALISO VIEJO)

I, MITZI ORTIZ, City Clerk of the City of Aliso Viejo, California, DO HEREBY CERTIFY that foregoing Ordinance No. 2022-231 was duly passed and adopted by the City Council of the City of Aliso Viejo at their regular meeting held on the 16th day of November 2022, by the following roll call vote, to wit:

AYES: Mayor Chun, Mayor Pro Tem Hurt, and Councilmembers Ackley and Harrington

NOES: None

ABSENT: None



MITZI ORTIZ, MMC
CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. 2022-231 duly passed and adopted by the Aliso Viejo City Council at its regular meeting held November 16, 2022 and that the Summary of the Ordinance was published on November 3 & 10, 2022 and December 1, 2022 in the Laguna Niguel News.



MITZI ORTIZ, MMC
CITY CLERK

(SEAL)