

ORDINANCE NO. 360

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF LAKE FOREST CALIFORNIA, AMENDING CHAPTERS 8.02, 8.04, 8.06, 8.12, 8.14, 8.16, 8.18, 8.20, 8.22, 8.24, AND 8.26 OF TITLE 8 OF THE CITY OF LAKE FOREST MUNICIPAL CODE AND ADOPTING BY REFERENCE THE 2022 EDITION OF THE CALIFORNIA BUILDING STANDARDS CODE (CALIFORNIA CODE OF REGULATIONS, TITLE 24), TOGETHER WITH CERTAIN ADDITIONS, AMENDMENTS, AND DELETIONS

WHEREAS, pursuant to California Government Code section 50022.1 *et seq.* the City of Lake Forest ("City") may adopt by reference the California Building Standards Code, 2022 Edition as provided in Title 24 of the California Code of Regulations; and

WHEREAS, the California Building Standards Commission (the "Commission") adopted the 2022 California Building Standards Code, which will come into effect on January 1, 2023; and

WHEREAS, California Health & Safety Code sections 17958.5 and 18941.5 authorize cities and counties to modify the California Building Standards Code by adopting more restrictive standards and modifications if such standards and modifications are accompanied by express findings that they are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, the City desires to adopt the California Building Standards Code 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 City held a public hearing on January 3, 2023 at which time all interested persons had the opportunity to appear and be heard on the matter of adopting the California Building Standards Code as amended herein; and

WHEREAS, the City published notice of the aforementioned public hearing pursuant to California Government Code Section 6066 on December 15, 2022 and December 22, 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 LAKE FOREST, CALIFORNIA, DOES ORDAIN AS FOLLOWS:

SECTION 1. Findings. The City Council hereby finds that the proposed amendments to the 2022 California Building Standards Code are reasonably necessary because of local climatic, geologic, or topographic conditions, and adopts the findings provided below to support the modifications to the 2022 California Building Standards Code.

I. Climatic Conditions

- A. The jurisdiction of Lake Forest is located in a semi-arid Mediterranean type climate. It annually experiences extended periods of high temperatures with little or no precipitation. Hot, dry (Santa Ana) winds, which may reach speeds of 70 M.P.H. or greater, are also common to the area. These climatic conditions cause extreme drying of vegetation and common building materials. Frequent periods of drought and low humidity add to the fire danger. This predisposes the area to large destructive fires (conflagration). In addition to directly damaging or destroying buildings, these fires are also prone to disrupt utility services throughout the County. Obstacles generated by a strong wind, such as fallen trees, streetlights, and utility poles, and the requirement to climb 75 feet vertically up flights of stairs will greatly impact the response time to reach an incident scene. Additionally, there is a significant increase in the amount of wind force at 60 feet above the ground. Use of aerial type firefighting apparatus above this height would place rescue personnel at increased risk of injury.
- B. The climate alternates between extended periods of drought and brief flooding conditions. Flood conditions may affect the Orange County Fire Authority's ability to respond to a fire or emergency condition. Floods also disrupt utility services to buildings and facilities within the County.
- C. Water demand in this densely populated area far exceeds the quantity supplied by natural precipitation; and although the population continues to grow, the already-taxed water supply does not. California is projected to increase in population by nearly 10 million over the next quarter of a century with 50 percent of that growth centered in Southern California. Due to storage capacities and consumption, and a limited amount of rainfall, future water allocation is not fully dependable. This necessitates the need for additional and on-site fire protection features. It would also

leave tall buildings vulnerable to uncontrolled fires due to a lack of available water and an inability to pump sufficient quantities of available water to floors in a fire.

- D. These dry climatic conditions and winds contribute to the rapid spread of even small fires originating in high-density housing or vegetation. These fires spread very quickly and create a need for increased levels of fire protection. The added protection of fire sprinkler systems and other fire protection features will supplement normal fire department response by providing immediate protection for the building occupants and by containing and controlling the fire spread to the area of origin. Fire sprinkler systems will also reduce the use of water for firefighting by as much as 50 to 75 percent.

II. Topographical conditions

- A. Natural slopes of 15 percent or greater generally occur throughout the foothills of Orange County. The elevation change caused by the hills creates the geological foundation on which communities within Orange County are built and will continue to build. With much of the populated flatlands already built upon, future growth will occur on steeper slopes and greater constraints in terrain.
- B. Traffic and circulation congestion is an artificially created, obstructive topographical condition, which is common throughout Orange County.
- C. These topographical conditions combine to create a situation which places fire department response time to fire occurrences at risk and makes it necessary to provide automatic on-site fire-extinguishing systems and other protection measures to protect occupants and property.

III. Geological Conditions

The Orange County region is a densely populated area that has buildings constructed over and near a vast and complex network of faults that are believed to be capable of producing future earthquakes similar or greater in size than the 1994 Northridge and the 1971 Sylmar earthquakes. Earthquake faults run along the northeast and southwest boundaries of Orange County. The Newport-Inglewood Fault, located within Orange County was the source of the destructive 1933 Long Beach earthquake (6.3 magnitude) which took 120 lives and damaged buildings in an area from Laguna Beach to Marina Del

Rey to Whittier. In December 1989, another earthquake occurred in the jurisdiction of Irvine at an unknown fault line. Regional planning for reoccurrence of earthquakes is recommended by the State of California, Department of Conservation.

- A. Previous earthquakes have been accompanied by disruption of traffic flow and fires. A severe seismic event has the potential to negatively impact any rescue or fire suppression activities because it is likely to create obstacles similar to those indicated under the high wind section above. With the probability of strong aftershocks there exists a need to provide increased protection for anyone on upper floors of buildings. The October 17, 1989, Santa Cruz earthquake resulted in one major fire in the Marina District (San Francisco). When combined with the 34 other fires locally and over 500 responses, the department was taxed to its fullest capabilities. The Marina fire was difficult to contain because mains supplying water to the district burst during the earthquake. This situation creates the need for both additional fire protection and automatic on-site fire protection for building occupants. State Department of Conservation noted in their 1988 report (Planning Scenario on a Major Earthquake on the Newport-Inglewood Fault Zone, page 59), "unfortunately, barely meeting the minimum earthquake standards of building codes places a building on the verge of being legally unsafe."
- B. Road circulation features located throughout the County also make amendments reasonably necessary. Located throughout 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 by occasional heavy rainfall, causes roadway flooding and landslides and at times may make an emergency access route impassable. There are areas in Orange County that naturally have extended emergency response times that exceed the 5-minute goal.
- C. Soils throughout the County possess corrosive properties that reduce the expected usable life of water services when metallic pipes in contact with soils are utilized.
- D. Portions 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.

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

IV. Administrative

This amendment is necessary for administrative clarification and does not modify a building standard pursuant to California Health & Safety Code Sections 17958, 17985.7, and/or 18941.5. This amendment establishes administrative standards for the effective enforcement of the building standards in the City of Lake Forest.

The findings above are applicable to amendments to the 2022 California Building Code, California Residential Code, California Electrical Code, California Plumbing Code, California Mechanical Code, California Fire Code, as detailed in the following tables:

Code Section	Section Amended	Section Added	California Building Code Local Amendment	Findings
105.2	X		Work Exempt from Permit, Building Item 2	Admin
105.3.2	X		Expiration of Plan Review	Admin
105.5	X		Expiration	Admin
109.1	X		Payment of Fees	Admin
109.2	X		Schedule of Permit Fees	Admin
109.6	X		Fee Refunds	Admin
109.7		X	Plan Review Fees	Admin
109.8		X	Investigation Fees	Admin
110.7		X	Reinspections	Admin
111.3	X		Temporary Occupancy	Admin
113.4		X	Establishment – Board of Appeals	Admin

114.1	X		Unlawful Acts	Admin
117.		X	Underground Utilities Re- quired	Admin
202	X		Definitions – “Spark Ar- rested” Added	Admin
701A.3	X		Application	I, II, & III
903.2	X		Where Required	I, II, & III
903.2.8	X		Group R	I, II, & III
903.3.5.3		X	Hydraulically calculated sys- tems	I, II, & III
903.4	X		Sprinkler system supervision and alarms – Exceptions to	I, II, & III
905.4	X		Location of Class I Stand- pipe Hose Connections	I, II, & III
T1505.1	X		Minimum Roof Covering Classifications, Types of Construction	I, II, & III
1505.1.2.	X		Roof Coverings Within All Other Areas	I, II, & III

Code Sec- tion	Section Amended	Section Added	California Residential Code Local Amendment	Findings
R105.2	X		Work Exempt from Permit, Building Item 2	Admin
R105.3.2	X		Time Limit of Application	Admin
R105.5	X		Expiration	Admin
R108.1	X		Payment of Fees	Admin
R108.2	X		Schedule of Permit Fees	Admin
R108.5	X		Refunds	Admin
R108.7		X	Plan Review Fees	Admin
R108.8		X	Investigation Fees	Admin
R109.5		X	Reinspections	Admin
R110.4	X		Temporary Occupancy	Admin
R112.1	X		General – Board of Appeals	Admin

R113.4	X		Violation penalties	Admin
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Code Section	Section Amended	Section Added	California Electrical Code Local Amendment	Findings
89.108.5.2		X	Enforcement	Admin
89.108.4.2	X		Fees	Admin
89.108.11		X	Penalties	Admin

Code Section	Section Amended	Section Added	California Plumbing Code Local Amendment	Findings
104.5	X		Fees	Admin
104.5.3	X		Fee Refund	
106.3	X		Penalties	Admin

Code Section	Section Amended	Section Added	California Mechanical Code Local Amendment	Findings
104.3.3	X		Time Limitation of Application	Admin
104.5	X		Permit Fees	Admin
104.5.3	X		Fee Refunds	Admin

Code Section	Section Amended	Section Added	California Fire Code Local Amendments	Findings
112.4	X		Violation penalties	Admin
112.4.2		X	Infraction and misdemeanor	Admin
202	X		General Definitions – Added “OCFA” and “Spark Arrester”	Admin
304.1.2	X		Vegetation	I & II
305.6		X	Hazardous conditions	I & II
305.7		X	Disposal of rubbish	I & II

307	X		Open burning, recreational fires, fire pits, fire rings, and outdoor fireplaces	Admin
307.6		X	Outdoor Fireplaces, Fire Pits, Fire Rings, and Outdoor Fireplaces	I & II
307.6.1		X	Gas-fueled devices	I & II
307.6.2		X	Devices using wood or fuels other than natural gas or LPG	I & II
307.6.2.1		X	Where prohibited	I & II
324		X	Fuel modification requirements for new construction	N/A
325		X	Clearance of brush or vegetation growth from roadways	N/A
326		X	Unusual circumstances	N/A
327		X	Use of equipment	N/A
327.1		X	Equipment and devices generating heat, sparks or open flames	I & II
327.2		X	Spark arresters	N/A
407.5	X		Hazardous materials inventory statement	Admin
501.1	X		Scope (fire service features)	Admin
510.1	X		Emergency responder radio coverage in new buildings	Admin
903.2	X		Where required (Sprinklers)	II & III-B
903.2.8	X		Group R (Sprinklers)	II-B & III-B
903.3.5.3		X	Hydraulically calculated systems	I & II
2801.2	X		Permit (Miscellaneous combustible storage)	Admin
2808.2	X		Storage site	Admin

2808.3	X		Size of piles	I
2808.4	X		Pile separation	I
2808.7	X		Pile fire protection	I
2808.9	X		Material-handling equipment	I
2808.11		X	Temperature control	I
2808.11.1		X	Pile temperature control	I
2808.11.2		X	New material temperature control	I
2808.12		X	Water availability for piles	I
2808.13		X	Tipping area	I
2808.14		X	Emergency contact	Admin
2808.15		X	Defining maximum separation contact	Admin
2808.16		X	Push-out area	Admin
4903.3		X	OCFA Vegetation Management Guideline	I
5001.5.2	X		Hazardous materials inventory statement (HMIS)	Admin
5003.1.1.1		X	Extremely hazardous substances	I & III
5608.2		X	Retail fireworks	Admin
5608.3		X	Application for permit	Admin
5801.1	X		Scope	Admin
Chapter 80	X	X	Referenced Standards	I, II, & III
16.12.3.3; 9.4.3.1; 9.2.1.7	X		NFPA 13 2022 Edition, Standard for the Installation of Sprinkler Systems	I & II
7.1.2	X		NFPA 13-D 2022 Edition, Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	I & II

7.3.1.1	X		NFPA 14 2019 Edition Installation of Standpipe and Hose Systems	I & II
6.2.8.1; 6.2.9; 10.1.5; 10.4.1.1; 10.4.1.1.1; 10.4.3.2	X	X	NFPA 24 2022 Edition Standard for the Installation of Private Fire Service Mains and Their Appurtenances	I & II

SECTION 2. Chapter 8.02 of the Lake Forest Municipal Code is hereby amended and restated in its entirety to read as follows:

“Chapter 8.02 California Building Code

8.02.001 Adoption of California Building Code.

The California Building Code, 2022 Edition (California Code of Regulations Title 24, Part 2), based on the 2021 International Building Code as published by the International Code Council, including Chapter 1, together with the amendments provided in this chapter, is hereby adopted by reference as the Building Code of the City of Lake Forest, regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and/or structures in the City.

8.02.020 California Building Code amended.

The 2022 California Building Code is hereby amended as follows:

A. Chapter 1 Division II -- Section 105.2, “Work Exempt From Permit,” Building Item 2, of the California Building Code is hereby amended to read as follows:

2. Fences not over six feet (2134 mm) tall.

Exception: Walls and fences less than six feet in height which are required as a condition of project approval are required to have permits.

B. Chapter 1 Division II – Section 105.3.2, “Expiration of plan review,” is amended to read as follows:

105.3.2 Expiration of Plan Review. Any application for a permit for any proposed work shall be deemed to have been abandoned within one calendar

year following the date of application, unless a permit is issued, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. No extensions shall be allowed. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay the required fees.

C. Chapter 1 Division II Section 105.5, "Expiration," is amended to read as follows:

Section 105.5 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. Before such work can be recommenced a new permit shall be first obtained to do so, and the fee therefore shall be one-half the amount required for a new permit for such work; provided, however, that:

1. No changes have been made or will be made in the original plans and specifications for such work; and
2. Such suspension or abandonment has not exceeded one year; and
3. A re-endorsement of the compliance of the plans with the applicable regulations, by the Director of Community Development, shall be obtained.

In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required by this section for good and satisfactory reasons. The Building Official may extend the time for action by the permittee one or more times for a period not exceeding 180 days each, upon written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. Such written request shall be submitted no later than 60 days after expiration of the permit.

D. Chapter 1 Division II Section 109.1, "Payment of Fees," is amended to read as follows:

109.1 Payment of Fees. A fee as established by Resolution of the City Council shall be paid for each permit at time of issuance.

- E. Chapter 1 Division II Section 109.2, "Schedule of Permit Fees," is amended to read as follows:

109.2 Schedule of Permit Fees. Permit and plan check fees shall be based on the current City of Lake Forest fee schedule adopted by the City Council and amended from time to time. When applicable, the determination of value or valuation under any of the provision of this Code shall be made by the Building Official. In instances where project valuation is used to determine permit and/or plan check fees, the value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems, and any other permanent equipment.

- F. Chapter 1 Division II Section 109.6, "Fee Refunds," is amended to read as follows:

109.6 Fee Refunds. The Building Official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this Code.

The Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment. No refund will be made for less than \$30.00. Permit and plan check fees will be refunded in their entirety when collected in error.

- G. Chapter 1 Division II Section 109.7, "Plan Review Fees," and Section 109.8, "Investigation Fees," are added to read as follows:

109.7 Plan Review Fees. When submittal documents are required by Section 107.1, a plan review fee shall be paid at the time of submitting the submittal documents for plan review. Said plan review fee shall be established by Resolution of the City Council.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 109.1 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in Section 107.3.4.1, an additional plan review fee shall be charged at the rate shown in the fee schedule.

109.8 Investigation Fees: Work without a Permit.

109.8.1 Investigation. Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

109.8.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this Code. The minimum investigation fee shall be the same as the minimum fee set forth in the fee schedule. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this Code nor from any penalty prescribed by law.

- H. Chapter 1 Division II – Section 110.7, “Reinspections,” is hereby added to read as follows:

Section 110.7 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This subsection is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this Code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the inspection record card is not posted or otherwise made available on the work site; the approved plans are not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the Building Official.

To obtain a reinspection, the applicant shall file an application therefore in writing upon a form furnished for that purpose and pay the reinspection fee as established by the City Council.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

- I. Chapter 1 Division II – Section 111.3, “Temporary occupancy,” is hereby amended to read as follows:

111.3 Temporary occupancy. If the Building Official finds that no substantial hazard will result from occupancy of any building or portion thereof before the same is completed, he or she may issue a Temporary Certificate of Occupancy for the use of a portion or portions of a building or structure prior to the completion of the entire building or structure. The application fee for such Temporary Certificate shall be as established by the City Council. The Temporary Certificate of Occupancy may be subject to such conditions as deemed necessary by the Building Official. The violation or failure of any such condition imposed shall be grounds for revocation of such Temporary Certificate of Occupancy.

- J. Chapter 1 Division II – Section 113.4, “Establishment,” is hereby added to read as follows:

113.4 Establishment. The City Council shall be the Board of Appeals.

- K. Chapter 1 Division II – Section 114.1, “Unlawful acts,” is hereby amended to read as follows:

114.1 Unlawful acts.

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, or cause or permit the same to be done in violation of this Code.

Any person, firms, or corporation violating any of the provisions of this Code shall be deemed guilty of a misdemeanor, and each such person 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 Code is committed, continued, or permitted, and upon conviction of any such violation such person 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.

- L. Chapter 1 Division II – Section 117, “Underground Utilities Required,” is hereby added to read as follows:

SECTION 117 UNDERGROUND UTILITIES REQUIRED.

The Building Official shall, as a condition precedent to the issuance of a Building Permit, require all utility services located within the exterior boundary lines of lot or parcel of property to be installed underground if:

1. The property is to be developed with a new or relocated main building;
2. The remodeling, alteration, or addition to an existing main building exceeds 50 percent of the value and/or area of the existing building;
3. A residential building or use is converted to any nonresidential use or purpose.

For purposes of this section, the term “main building” shall mean a building in which is conducted the principal use of the lot or building site on which it is located. If it is determined that practical difficulties, or unreasonable hardships inconsistent with the purposes of this chapter and unique to a particular parcel of property, would result from the literal interpretation of this section, the Building Official may waive, modify, or delay the imposition of any undergrounding requirement imposed pursuant to the section upon written application of any affected property owner. The Building Official shall notify the applicant of his decision in writing by certified mail. If the Building Official determines to delay the installation of required underground utilities, he may require a recorded agreement guaranteeing the future performance of the work, together with adequate performance security enforceable by the City in the form of a cash deposit, bond, letter of credit, or other instrument or security satisfactory to the City Attorney.

For purposes of this section, appurtenances and associated equipment such as, but not limited to, surface-mounted transformers, pedestal-mounted terminal boxes and meter cabinets, and concealed ducts in an underground system, may be placed above ground.

Any person dissatisfied with the decision of the Building Official may file an appeal pursuant to Section 2.04.100 to 2.04.130 of the Lake Forest Municipal Code.

The owner or developer of the property is responsible for complying with requirements of this section and shall provide all necessary facilities on the property to receive such service from the supplying utilities.

- M. Section 202, "Definitions," is hereby revised by adding "Spark Arrester," as follows:

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.

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

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.

O. Adopt Chapter 9 of the California Building Code, "Fire Protection Systems," in its entirety with the following amendments:

1. Section 903.2, "Where Required," is hereby revised to read in its entirety as follows:

903.2 Where Required. Approved automatic sprinkler systems in buildings and structures shall be provided when the following condition exists:

New Buildings: Notwithstanding any applicable provisions of Sections 903.2.1 through 903.2.12, an automatic fire-extinguishing system shall also be installed in all occupancies when the total building area, as defined in Section 202, exceeds 5,000 square feet (465 square meters) or more than two stories in height, regardless of fire areas or allowable area.

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

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

2. SECTION 903.2.8, "Group R," is hereby revised as follows:

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

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

Existing Buildings: An automatic sprinkler system shall be installed throughout any existing building when the floor area of the Alteration within any two-year period exceeds 50% of area of the existing structure and the building area exceeds 5,500 square feet. When the cost of installing an approved automatic sprinkler system exceeds 5% of the cost of the Alteration, with the approval of the Fire Code Official, the required automatic sprinkler system may be omitted.

Exceptions to Existing Buildings requirement:

1. Existing Group R-3 occupancies converted to Group R-3.1 occupancies 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 non-ambulatory client and complying with Section 425.8.3.3 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 or mentally-disabled, and building or portions thereof housing such children not more than two stories in height, which 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 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.

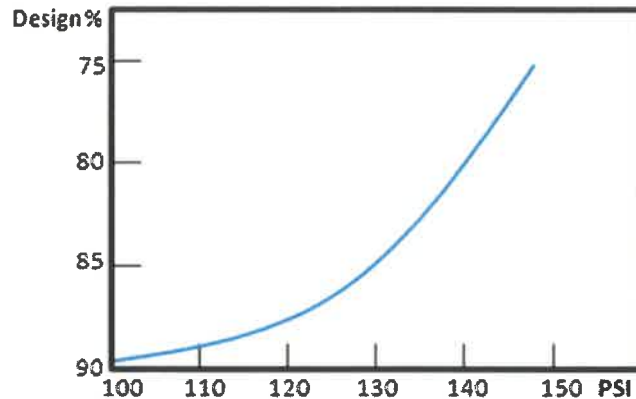
An automatic sprinkler system designed in accordance with Section 903.3.1.3 shall not be utilized in Group R-2.1 or R-4 occupancies.

3. Section 903.3.5.3, "Hydraulically calculated systems," is hereby added as follows:

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

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

**TABLE 903.3.5.3
Hydraulically Calculated Systems**



4. The Exceptions to Section 903.4, "Sprinkler system supervision and alarms," are hereby amended by deleting Exception 3 and Exception 5 and renumbering and further amending the Exceptions as follows:

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area systems serving fewer than 20 sprinklers.
3. Jockey pump control valves that are sealed or locked in the open position.
4. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
5. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.

5. Section 905.4, "Location of Class I Standpipe Hose Connections," is hereby amended by adding Item 7 as follows:

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

P. Table 1505.1 is hereby amended to read as follows:

**TABLE 1505.1
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

Q. Section 1505.1.2, "Roof Coverings Within All Other Areas," is hereby amended to read as follows:

1505.1.2 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 3. Chapter 8.06 of the Lake Forest Municipal Code is hereby added in its entirety to read as follows:

"Chapter 8.06 California Residential Code

8.06.001 Adoption of California Residential Code.

The California Residential Code, 2022 Edition (California Code of Regulations Title 24, Part 2.5), based on the 2021 International Residential Code as published by the International Code Council, together with the amendments provided in this chapter, is hereby adopted by reference as the Residential Code of the City of Lake Forest, regulating the construction of one- and two-family residential dwellings within the City, of which Code not less than one copy has been made and is now filed in the office of the City Clerk; and the same is adopted and incorporated as fully as is set forth at length herein.

8.06.020 California Residential Code amended.

A. Chapter 1 Division II Section R105.2, "Work exempt from permit," Building Item 2, of the California Residential Code shall be amended to read as follows:

2. Fences not over six feet high.

Exception: Walls and fences six feet in height or less which are required as a condition of project approval are required to have permits.

- B. Chapter 1 Division II Section R105.3.2, "Time limitation of application," of the California Residential Code is amended to read as follows:

R105.3.2 Time Limit of Application. Time limit of application. Any application for a permit for any proposed work shall be deemed to have been abandoned within one calendar year following the date of application, unless a permit is issued, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. No extensions shall be allowed. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay the required fees.

- C. Chapter 1 Division II Section R105.5, "Expiration," of the California Residential Code is amended to read as follows:

Section 105.5 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. Before such work can be recommenced a new permit shall be first obtained to do so, and the fee therefore shall be one-half the amount required for a new permit for such work; provided, however, that:

1. No changes have been made or will be made in the original plans and specifications for such work; and
2. Such suspension or abandonment has not exceeded one year; and
3. A re-endorsement of the compliance of the plans with the applicable regulations, by the Director of Community Development, shall be obtained.

In order to renew action on a permit after expiration, the permittee shall pay a new full permit fee.

Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required by this section for good and satisfactory reasons. The Building Official may extend the time for action by the permittee one or more times for a period not exceeding 180 days each, upon written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. Such written request shall be submitted no later than 60 days after expiration of the permit.

- D. Chapter 1 Division II Section R108.1, "Payment of fees," of the California Residential Code is amended to read as follows:

R108.1 Payment of Fees. A fee as established by Resolution of the City Council shall be paid for each permit at time of issuance.

- E. Chapter 1 Division II Section R108.2, "Schedule of permit fees," is amended to read as follows:

R108.2 Schedule of Permit Fees. The determination of value or valuation under any of the provision of this Code shall be made by the Building Official. The value to be used in computing the building permit and building plan review fees shall be the total value of all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems and any other permanent equipment.

- F. Chapter 1 Division II Section R108.5, "Refunds," is amended to read as follows:

R108.5 Fee Refunds. The Building Official may authorize refunding of any fee paid hereunder which was erroneously paid or collected.

The Building Official may authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

The Building Official may authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan reviewing is done.

The Building Official shall not authorize refunding of any fee paid except on written application filed by the original permittee not later than 180 days after the date of fee payment. No refund will be made for less than \$30.00. Permit and plan check fees will be refunded in their entirety when collected in error.

- G. Chapter 1 Division II Section R108.7, "Plan Review Fees," is added to read as follows:

R108.7 Plan Review Fees. When submittal documents are required by Section R106.1, a plan review fee shall be paid at the time of submitting the submittal

documents for plan review. Said plan review fee shall be established by Resolution of the City Council.

The plan review fees specified in this subsection are separate fees from the permit fees specified in Section 109.1 and are in addition to the permit fees.

When submittal documents are incomplete or changed so as to require additional plan review or when the project involves deferred submittal items as defined in Section 107.3.4.1, an additional plan review fee shall be charged at the rate shown in the fee schedule.

- H. Chapter 1 Division II Section R108.8, "Investigation Fees: Work without a Permit," is added to read as follows:

R108.8 Investigation Fees: Work without a Permit.

R108.8.1 Investigation. Whenever any work for which a permit is required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work.

R108.8.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. The minimum investigation fee shall be the same as the minimum fee set forth in the fee schedule. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law.

- I. Section R109.5, "Reinspections," is hereby added to the California Residential Code is to read as follows:

Section R109.5 Reinspections. A reinspection fee may be assessed for each inspection or reinspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

This subsection is not to be interpreted as requiring reinspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspections before the job is ready for such inspection or reinspection.

Reinspection fees may be assessed when the inspection record card is not posted or otherwise made available on the work site; the approved plans are

not readily available to the inspector, for failure to provide access on the date for which inspection is requested, or for deviating from plans requiring the approval of the Building Official.

To obtain a reinspection, the applicant shall file an application therefore in writing upon a form furnished for that purpose and pay the reinspection fee as established by the City Council.

In instances where reinspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

- J. Section R110.4, "Temporary occupancy," of the California Residential Code is amended to read as follows:

R110.4 Temporary Certificate. If the Building Official finds that no substantial hazard will result from occupancy of any building or portion thereof before the same is completed, he or she may issue a Temporary Certificate of Occupancy for the use of a portion or portions of a building or structure prior to the completion of the entire building or structure. The application fee for such Temporary Certificate shall be as established by the City Council. The Temporary Certificate of Occupancy may be subject to such conditions as deemed necessary by the Building Official. The violation or failure of any such condition imposed shall be grounds for revocation of such Temporary Certificate of Occupancy.

- K. Section R112.1, "General," of the California Residential Code is amended to read as follows:

R112.1 General. The City Council shall be the Board of Appeals.

- L. Section R113.4, "Violation penalties," of the California Residential Code is amended to read as follows:

R113.4 Violations.

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, or cause or permit the same to be done in violation of this Code.

Any person, firms, or corporation violating any of the provisions of this Code shall be deemed guilty of a misdemeanor, and each such person 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 Code is committed, continued, or permitted, and upon conviction of any such violation such person 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.”

SECTION 4. Chapter 8.14 of the Lake Forest Municipal Code is hereby amended and restated in its entirety to read as follows:

“Chapter 8.14 California Electrical Code

8.14.001 Adoption of California Electrical Code.

California Electrical Code, 2022 Edition (California Code of Regulations, Title 24, Part 3), based on the 2020 National Electrical Code as published by the National Fire Protection Association, including Article 89, together with the amendments provided in this chapter, is hereby adopted by reference as the Electrical Code of the City of Lake Forest, regulating all installation, arrangement, alteration, repair, use and other operation of electrical wiring, connections, fixtures and other electrical appliances on premises within the City, of which Code not less than one copy has been made and is now filed in the office of the City Clerk; and the same is adopted and incorporated as fully as is set forth at length herein.

8.14.010 California Electrical Code amended.

A. Section 89.108.5.2 is hereby added to the California Electrical Code to read as follows:

89.108.5.2 Enforcement.

This Code is intended to be suitable for mandatory application by the City of Lake Forest over electrical installations within incorporated territory of the City. The Building Official of the City of Lake Forest shall have the authority for enforcement of the Code and the responsibility for making interpretations of the rules, for deciding upon the approval of equipment, materials and wiring methods as set forth in the California Electrical Code, and for the granting the special permission contemplated in a number of the rules.

The Building Official may waive specific requirements in this Code or permit alternate methods, where it is assured that equivalent objectives can be achieved by establishing and maintaining effective safety.

This Code may require new products, constructions, or materials which may not yet be available at the time the Code is adopted. In such event, the Authority Having Jurisdiction may permit the use of the products, constructions, or materials which comply with the most recent previous edition of this Code adopted by the jurisdiction.

- B. Section 89.108.4.2 of the California Electrical Code is amended to read as follows:

89.108.4.2 Fees.

- (a) Fees shall be established by resolution of the City Council.
- (b) The fees required in this section must be paid to the City for each electrical installation for which a permit is required by this Code.
- (c) No permit shall be issued to any person, firm or corporation unless all fees for permits or additions to permits are paid in full. When an electrical plan is required to be submitted, a plan check fee shall be paid at the time of submittal.
- (d) Failure to take out a permit and to pay fees before commencing work shall be deemed evidence of violation of the provisions of this Code. Double the amount of permit fees shall be assessed for work commenced before a permit is issued.
- (e) Whenever any work for which a permit is required under the provisions of this Code has been commenced without the authorization of such permit, a special investigation may be required before a permit will be issued for such work. In addition to the regular permit fee and any penalty fee, the said special investigation fee which may be collected shall be established by resolution of the City Council.
- (f) Fees for annual permits shall be paid at the time such permits are issued. In addition, fees for all new work installed under such permit since the date of the previous inspection shall be paid, in accordance with the fee schedule, at the time the annual permit is issued.
- (g) Fees for additional inspections.
 - (1) Each permit shall be entitled to one reinspection without additional charge, in addition to the required number of inspections established by the Building Official. On jobs which may be completely inspected on one inspection trip, two inspection trips will be allowed without additional charge for said second trip.

Exception: The number of inspection trips will not be limited on progress jobs; provided, however, that only one inspection will be permitted for checking a correction. For the purpose of this section, progress jobs are those where circumstances beyond the control of the installer make it impossible for the electrical work to be completed at any specific time.

(2) If more inspection trips than specified in paragraph (g)(1) above are required due to the fault or error on the part of the installer or his employees, an additional fee as established by resolution of the City Council may be required of the installer for each additional inspection trip.

(h) Refunds.

(1) The Building Official shall collect such fees as are provided to be paid by this Code. He shall make no refunds on fees collected amounting to less than \$30.00, or on any plan checking fee or on any permit fee where one year has elapsed from the date of issuance.

(2) Refunds may be made to the permittee in the amount equal to 80 percent of the permit fee paid where work authorized by said permit has not commenced.

(3) Refunds may be made in an amount equal to 100 percent of the amount paid for each permit when a permit has been inadvertently issued outside the jurisdiction of the City or duplicate permits have been issued and two fees have been collected for the same work.

C. Section 89.108.11 is hereby added to the California Electrical Code to read as follows:

89.108.11 Penalties. Any person, firm, or corporation violating any of the provisions of this Code 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 Code is committed, continued or permitted; and upon conviction of any such violation such person 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.”

SECTION 5. Chapter 8.16 of the Lake Forest Municipal Code is hereby amended and restated in its entirety to read as follows:

“Chapter 8.16 California Plumbing Code

8.16.001 Adoption of California Plumbing Code.

California Plumbing Code, 2022 Edition (California Code of Regulations, Title 24, Part 5), based on the 2021 Uniform Plumbing Code as published by the International Association of Plumbing and Mechanical Officials, including Chapter 1, together with the amendments provided in this chapter, is hereby adopted by reference as the Plumbing Code of the City of Lake Forest, regulating erection, installation, alteration, repair, relocation, replacement, maintenance or use of plumbing systems within the City, of which Code not less than one copy has been made and is now filed in the office of the City Clerk; and the same is adopted and incorporated as fully as is set forth at length herein.

Whenever the term “Authority Having Jurisdiction” is used in this Code, it shall mean the Building Official of the City.

Whenever the terms “Building Official” and “assistants” are used in this Code, they shall be construed to mean the Director of Community Development for the City of Lake Forest or her designated representative.

8.16.010 California Plumbing Code amended.

A. Section 104.5, “Fees,” of Chapter 1 of the Plumbing Code is hereby amended to read as follows:

Section 104.5 Fees

104.5 Fees. Fees shall be assessed in accordance with the provisions of this section and as set forth by Resolution of the City Council.

Failure to pay fees and obtain a permit before commencing work shall be deemed a violation of this Code, except when it can be proven to the satisfaction of the Building Official that an emergency existed which made it impractical to first obtain the permit. A violation shall result in an assessment of double permit fees for work done prior to permit issuance. Payment of a double fee shall not relieve any person from fully complying with the requirements of this Code nor from any other penalties prescribed herein.

For the purpose of this section, a sanitary plumbing outlet on or to which a plumbing fixture or appliance may be set or attached shall be construed to be

a fixture. Fees for reconnection and retest of existing plumbing systems in re-located buildings shall be based on the number of plumbing fixtures, gas systems, water heaters, or other appliances involved.

When a permit has been obtained to connect an existing building or existing work to the public sewer or to a new private disposal facility, backfilling of private sewage disposal facilities abandoned consequent to such connection is included in the building sewer permit.

- B. Section 104.5.3, "Fee Refunds," of Chapter 1 of the Plumbing Code is hereby amended to read as follows:

Section 104.5.3 Fee Refunds.

104.5.3.1 Refunds. Permit fee refunds will be made in an amount equal to 80 percent where work authorized by said permit has not commenced; except that no refund will be made for less than \$30.00, and no refund will be made if one year has elapsed from the date of permit issuance.

104.5.3.2 Plan check fee refunds will be made in an amount equal to 80 percent if the request for such refund is received before the commencement of the first complete plan check; except that no refund will be made for less than \$30.00, and no refund will be made if one year has elapsed from the date of plan check fee payment.

104.5.3.3 Permit and plan check fees will be refunded in their entirety when inadvertently paid for a project outside the jurisdiction of the City or as duplicate fees, except that no refund will be made if 1 year has elapsed from the date of payment."

- C. Section 106.3, "Penalties," of Chapter 1 of the Plumbing Code is hereby amended to read as follows:

Section 106.3 Violation and Penalties.

Any person, firm or corporation violating any of the provisions of this Code 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 Code is committed, continued or permitted; and upon conviction of any such violation such person 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."

SECTION 6. Chapter 8.20 of the Lake Forest Municipal Code is hereby amended and restated in its entirety to read as follows:

“Chapter 8.20 California Mechanical Code

8.20.001 Adoption of California Mechanical Code.

California Mechanical Code, 2022 Edition (California Code of Regulations, Title 24, Part 4), based on the 2021 Uniform Mechanical Code as published by the International Association Plumbing and Mechanical Officials, including Chapter 1, together with the amendments provided in this chapter, is hereby adopted by reference as the Mechanical Code of the City of Lake Forest, regulating and controlling the design, construction, installation, quality of materials, location, operation and maintenance of heating, ventilating, cooling, refrigeration systems, incinerators and other miscellaneous heat producing appliances, of which Code not less than one copy has been made and is now filed in the office of the City Clerk; and the same is adopted and incorporated by reference as if set forth at length herein.

8.20.010 California Mechanical Code amended.

A. Section 104.3.3, “Time Limitation of Application,” of the Mechanical Code, is hereby amended to read as follows:

104.3.3 Expiration of plan review. Any application for a permit for any proposed work shall be deemed to have been abandoned within one calendar year following the date of application, unless a permit is issued, and plans and other data submitted for review may thereafter be returned to the applicant or destroyed by the Building Official. No extensions shall be allowed. In order to renew action on an application after expiration, the applicant shall resubmit plans and pay the required fees.

B. Section 104.5, “Fees,” of the Mechanical Code, is hereby amended to read as follows:

104.5 Permit fees. A fee as established by Resolution of the City Council shall be paid for each permit at the time of issuance. Failure to pay fees and obtain a permit before commencing work shall be deemed a violation of this Code except when it can be proven to the satisfaction of the Building Official that an emergency existed which made it impractical to first obtain the permit. A violation shall result in an assessment of double permit fees for work done prior to permit issuance. Payment of a double fee shall not relieve any person from fully

complying with the requirements of this Code nor from any other penalties prescribed herein.

C. Section 104.5.3, "Fee Refunds," of the Mechanical Code, is hereby amended to read as follows:

104.5.3 Fee Refunds.

104.5.3.1 Permit fee refunds will be made in an amount equal to 80 percent where work authorized by said permit has not commenced, except that no refund will be made for less than \$30.00, and no refund will be made if one year has elapsed from the date of permit issuance.

104.5.3.2 Plan check fee refunds will be made in an amount equal to 80 percent if the request for such refund is received before the commencement of the first complete plan check, except that no refund will be made for less than \$30.00, and no refund will be made if one year has elapsed from the date of plan check fee payment.

104.5.3.3 Permit and plan check fees will be refunded in their entirety when inadvertently paid for a project outside the jurisdiction of the City of Lake Forest or as duplicate fees, except that no refund will be made if one year has elapsed from the date of payment."

SECTION 7. Chapter 8.24 of the Lake Forest Municipal Code is hereby amended and restated in its entirety to read as follows:

"Chapter 8.24 California Fire Code

8.24.010. Adoption of California Fire Code.

Except as hereinafter provided, the 2022 California Fire Code (California Code of Regulations, Title 24, Part 9), based on the International Fire Code, 2021 Edition, with errata, published by the International Code Council (ICC), with appendices and amendments thereto, including Chapter 1, are hereby adopted by the City of Lake Forest for the purpose of prescribing regulations governing conditions hazardous to the life and property from fire or explosion, save and except such portions as are hereinafter added, deleted, modified or amended. One copy of all the above is now on file in the office of the City Clerk for public inspection and is adopted with the same force and effect as through set out herein in full.

8.24.020. California Fire Code amended.

The California Fire Code adopted herein by reference is hereby modified by the following additions, amendments, and deletions:

1. **Chapter 1 General Requirements.** Adopt Chapter 1 in its entirety, with the following amendments:

Section 112.4, "Violation penalties," is hereby revised as follows:

112.4 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 112.4.2, "Infraction and misdemeanor," is hereby added as follows:

112.4.2 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.

2. **Chapter 2 Definitions** is adopted in its entirety as amended by State Fire Marshall ("SFM") with the following amendments:

Section 202, "General Definitions," is hereby revised by adding the terms "OCFA" and "Spark Arrester," as follows:

202 General Definitions

OCFA. Orange County Fire Authority, the 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.
3. **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 further 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:

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

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

Section 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' 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 324, "Fuel Modification Requirements for New Construction," is hereby added as follows:

324 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 325, "Clearance of brush or vegetation growth from roadways," is hereby added as follows:

325 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 326, “Unusual Circumstances,” is hereby added as follows:

326 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 327, “Use of Equipment,” is hereby added as follows:

327 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 327.1, “Use of Equipment and Devices Generating Heat, Sparks or Open Flames,” is hereby added as follows:

327.1 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 authority having jurisdiction 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 immediately in case of fire.

Section 327.2, “Spark Arresters,” is hereby added as follows:

327.2 Spark arresters. Spark arresters shall comply with Section 202, and when affixed to the exhaust system of engines or vehicles subject to Section 327 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.

4. **Chapter 4: Emergency Planning and Preparedness.** Adopt only those sections and subsections adopted by the SFM with the following amendment:

Section 407.5, “Hazardous Materials Inventory Statement,” is revised as follows:

407.5 Hazardous Materials Inventory Statement. Where required by the Fire Code Official, each application for a permit shall comply with OCFA’s Chemical Classification Guideline in accordance with Section 5001.5.2.

5. **Chapter 5, “Fire Service Features,”** is adopted in its entirety as amended by SFM 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-01, “Fire Master Plan for Commercial & Residential Development.”

Section 510.1, “Emergency responder communication 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 of the jurisdiction at the exterior of the building. This section shall not require improvement of the existing public safety communication systems. The Emergency Responder Radio Coverage System shall comply with 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.

- 6. **Chapter 6, Building Services and Systems,**” is adopted in its entirety as amended by SFM.
- 7. **Chapter 7, “Fire and Smoke Protection Features,”** is adopted in its entirety as amended by SFM.
- 8. **Chapter 8, “Interior Finish, Decorative Materials and Furnishings,”** is adopted in its entirety as amended by SFM.
- 9. **Adopt Chapter 9, “Fire Protection and Life Safety Systems,”** is adopted in its entirety as amended by SFM with the following amendments:

Section 903.2, “Where required,” is hereby revised as follows:

903.2 Where required. Approved automatic fire 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, an automatic fire sprinkler system shall

also be installed in all occupancies when the total building area, as defined in Section 202, exceeds 5,000 square-feet (465 square-meters) 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 that are smaller than the area specified in section 903.2.10 (3) or 903.2.10.1 of the California Fire Code.

2. Existing Buildings: Notwithstanding any applicable provisions of this code, an automatic fire 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 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. Group R-3 occupancies shall comply with Section 903.2.8 (2).

Section 903.2.8, “Group R,” is hereby revised as follows:

903.2.8 Group R. An automatic fire 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 fire sprinkler system shall be installed throughout all new buildings.
2. **Existing R-3 Buildings:** *An automatic fire sprinkler system shall be installed throughout when one of the following conditions exists:*
 1. When the floor area of alterations within any two-year period exceeds 50 percent of gross floor area of the existing structure and the building gross floor area exceeds 5,500 square feet; or:

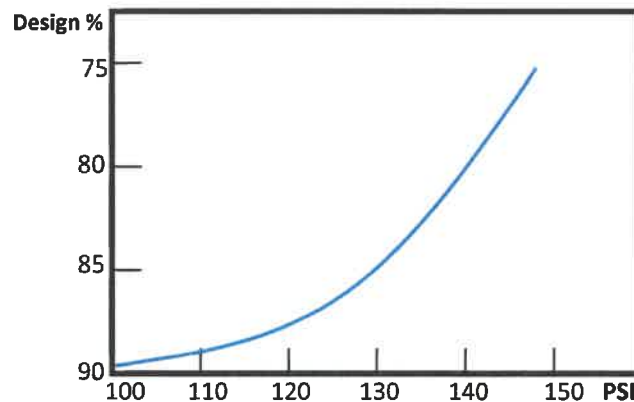
2. When an existing Group R Occupancy is being substantially renovated, and where the scope of the renovation is such that the Building Code Official determines that the complexity of installing a fire sprinkler system would be similar as in a new building.

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**



10. **Chapter 10, “Means of Egress,”** is adopted in its entirety as amended by SFM.
11. **Chapter 11, “Construction Requirements for Existing Buildings.”** Adopt only those sections and subsections adopted by SFM.
12. **Chapter 12, “Energy Systems,”** is adopted in its entirety as amended by SFM.
13. **Chapter 20, “Aviation Facilities,”** is adopted in its entirety.

14. **Chapter 21, “Dry Cleaning,” Chapter 22, “Combustible Dust-Producing Operations,” Chapter 23, “Motor Fuel-Dispensing Facilities and Repair Garages,” Chapter 24, “Flammable Finishes,”** are adopted in their entirety as amended by SFM.
15. **Chapter 25, “Fruit and Crop Ripening,” and Chapter 26, “Fumigation and Insecticidal Fogging,”** are deleted in their entirety.
16. **Chapter 27, “Semiconductor Fabrication Facilities,”** is adopted in its entirety without amendments.
17. **Chapter 28, “Lumber Yards and Agro-Industrial, Solid Biomass and Woodworking Facilities,”** is adopted in its entirety with the following amendments:

Section 2801.2, “Permit,” is hereby revised as follows:

2801.2 Permit. Permits shall be required as set forth in Section 105.6 and 105.6.29.

Section 2808.2, “Storage site,” is hereby revised as follows:

2808.2 Storage site. Storage sites shall be level and on solid ground, elevated soil lifts or other all-weather surface. Sites shall be thoroughly cleaned and approval obtained from the Fire Code Official 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 in height, 50 feet in width and 100 feet 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. Factors 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 as follows:

2808.4. Pile separation. Piles shall be separated from adjacent piles by a 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 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 as follows:

2808.9 Material-handling equipment. All material-handling equipment operated by an internal combustion engine shall be provided and maintained with an approved spark arrester. Approved material-handling equipment shall be available for moving wood chips, hogged material, wood fines and raw product during fire-fighting operations.

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 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 comply with the requirements of this chapter and 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 2,500 gallons per pile (maximum 30,000 gallons) for piles not exceeding 6 feet in height and 5,000 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.

Section 2808.15, "Maximum Grid of Piles and Rows," is hereby added as follows:

2808.15 Maximum Grid of Piles and Rows. Rows of Piles shall not exceed 500 feet by 500 feet. Grids shall be separated by a minimum 50-foot clear space used for no other purpose.

2808.16, "Push-out / Clear area," is hereby added as follows:

2808.16 Push-out / Clear area. Piles exceeding 20 cubic yards shall be provided with push-out areas. Push-out areas shall be maintained clear at all times to allow for the largest pile to be spread out to a depth of 2 feet in height. Push-out areas shall be located within 250 feet of all edges of any pile and shall be located a minimum of 20 feet from any building.

18. **Chapter 29, "Manufacture of Organic Coatings,"** and **Chapter 30, "Industrial Ovens,"** are adopted in their entirety without amendments.
19. **Chapter 31 "Temporary Special Event Structures and Other Membrane Structures,"** and **Chapter 32, "High-Piled Combustible Storage,"** are adopted in their entirety as amended by SFM.
20. **Chapter 33, "Fire Safety During Construction and Demolition,"** is adopted in its entirety without amendments.
21. **Chapter 34, "Tire Rebuilding and Tire Storage,"** is adopted in its entirety as amended by SFM.

22. **Chapter 35, “Welding and Other Hot Work,” Chapter 36, “Marinas,” Chapter 37, “Combustible Fibers,” Chapter 39, “Processing and Extraction Facilities,” Chapter 40, “Storage of Distilled Spirits and Wines,” Chapter 48, “Motion Picture and Television Production Studio Sound Stages, Approved Production Facilities and Production Locations,”** are hereby adopted in their entirety without amendments.

23. **Chapter 49, “Requirements for Wildland-Urban Interface Fire Areas,”** is adopted in its entirety with the following amendment:

Section 4903.3 Fuel Modification Plans is hereby added as follows:

4903.3 Fuel Modification Plans. Fuel modification plans shall be reviewed and approved by OCFA for all new buildings to be built or installed in a wild-fire risk area. Plans shall meet the criteria set forth in OCFA Guideline C-05 “Vegetation Management Guideline – Technical Design for New Construction Fuel Modification Plans and Maintenance Program.

24. **Chapter 50, “Hazardous Materials – General Provisions,”** is adopted in its entirety as amended by SFM with the following amendments:

Section 5001.5.2, “Hazardous Materials Inventory Statement (HMIS),” is hereby revised 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 Guideline, which shall be completed and approved prior to approval of plans, and/or the storage, use or handling of chemicals on the premises.

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 any residential zoned or residentially developed property.

25. **Chapter 51, “Aerosols,” Chapter 53, “Compressed Gases,” Chapter 54, “Corrosive Materials,” and Chapter 55, “Cryogenic Fluids,”** are adopted in their entirety without amendments.

26. **Chapter 56, “Explosives and Fireworks,”** is adopted in its entirety with the following amendments:

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.

27. **Chapter 57, “Flammable and Combustible Liquids.”** Adopt Chapter 57, with the exception of Section 5707, in its entirety and with the following amendment:

Section 5701.1.1, “On-Demand Mobile fueling,” is added as follows:

Section 5701.1.1 On-Demand Mobile fueling. On-demand mobile fueling of Class I, II, and III liquids into the fuel tanks of vehicles is prohibited.

28. **Chapter 58, “Flammable Gases and Flammable Cryogenic Fluids.”** Adopt Chapter 58, with the exception of Section 5809, in its entirety and with the following amendment:

Section 5801.1, “Scope,” is revised as follows:

Section 5801.1 Scope. The storage and use of flammable gases and flammable cryogenic fluids shall be in accordance with this chapter, NFPA 2 and NFPA 55. Compressed gases shall also comply with Chapter 53 and cryogenic fluids shall also comply with Chapter 55. Flammable cryogenic fluids shall comply with Section 5806. Hydrogen motor fuel-dispensing stations and repair garages and their associated above-ground hydrogen storage systems shall also be designed, constructed, and maintained in accordance

with Chapter 23. Mobile fueling of gaseous and liquid hydrogen, compressed natural gas (CNG), and liquefied natural gas (LNG) into the fuel tanks of vehicles is prohibited.

Exceptions:

1. Gases used as refrigerants in refrigeration systems (see Section 605).
 2. Liquefied petroleum gases and natural gases regulated by Chapter 61.
 3. Fuel-gas systems and appliances regulated under the California Mechanical Code and the California Plumbing Code other than gaseous hydrogen systems and appliances.
 4. Pyrophoric gases in accordance with Chapter 64.
29. **Chapter 59, “Flammable Solids,” Chapter 60, “Highly Toxic and Toxic Materials,” Chapter 61, “Liquefied Petroleum Gases,” Chapter 62, “Organic Peroxides,” Chapter 63, “Oxidizers, Oxidizing Gases, and Oxidizing Cryogenic Fluids,” Chapter 64, “Pyrophoric Materials,” Chapter 65, “Pyroxylin (Cellulose Nitrate) Plastics,” Chapter 66, “Unstable (Reactive) Materials,” and Chapter 67, “Water-Reactive Solids and Liquids,”** are adopted in their entirety without amendments.
30. **Chapter 80, “Referenced Standards,”** is adopted in its entirety with the following amendments:

NFPA 13, 2022 Edition, Standard for the Installation of Sprinkler Systems, is hereby amended as follows:

Section 16.12.3.3 is hereby revised as follows:

16.12.3.3 Fire department connections (FDC) shall be of an approved type. The location shall be approved and be no more than 150 feet from a public 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 2½” 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 or as approved. When the fire sprinkler density design requires more than 500 gpm (including inside hose stream demand), or a standpipe system is included, four 2½” inlets shall be provided.

Section 9.4.3.1 is hereby revised as follows:

9.4.3.1 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 3.3.215.4.16
2. Residential sprinklers in accordance with the requirements of Chapter 12
3. Quick response CMSA sprinklers
4. ESFR 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 9.2.1.7 is hereby revised as follows:

9.2.1.7 Concealed spaces filled with noncombustible insulation shall not require sprinkler protection when approved by fire code official.

NFPA 13D 2022 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 sprinkler system piping shall not have separate control valves installed unless supervised by a central station, proprietary, or remote station alarm service.

NFPA 14, 2019 Edition, Installation of Standpipe and Hose Systems, is hereby amended as follows:

Section 7.3.1.1 is hereby deleted in its entirety.

NFPA 24, 2022 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 amended as follows:

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 ft (12 m) from the building
 - (a) For buildings less than 40 ft (12 m) in height, a post indicator valve shall be permitted to be installed closer than 40 ft (12 m) 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 ft (12 m) from the building.
 - (a) For buildings less than 40 ft (12 m) in height, a backflow preventer with at least one indicating valve shall be permitted to be installed closer than 40 ft (12 m) 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 amended 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 10.4.3.2.1 through 10.4.3.2.4.”

SECTION 8. Upon the effective date of this Ordinance, all former ordinances or parts thereof conflicting or inconsistent with the provisions of this ordinance of the codes herein adopted by reference and any other ordinance in conflict herewith are hereby repealed and declared to be of no further force and effect.

SECTION 9. The City Council finds that this Ordinance is not subject to the California Environmental Quality Act (CEQA) pursuant to sections 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment) and 15060(c)(3) (the activity is not a project as defined in Section 15378) of the CEQA Guidelines, California Code of Regulations, Title 14,

Chapter 3, because it has no potential for resulting in physical change to the environment, directly or indirectly.

SECTION 10. If any section, subsection, subdivision, sentence, clause, phrase, or portion of this Ordinance for any reason is held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have adopted this Ordinance, and each section, subsection, subdivision, sentence, clause, phrase, or portion thereof, irrespective of the fact that any one or more sections, subsections, subdivisions, sentences, clauses, phrases, or portions thereof be declared invalid or unconstitutional.


SECTION 11. Adoption of this Ordinance includes the whole of each California Building Standards Code, together with accumulative supplements, and associated standards referenced therein, including such portions as may be added by the provisions of this chapter, and except such portions as may be deleted or modified by the provisions of this chapter. One copy of said codes has been and is on file in the Office of the City Clerk of the City of Lake Forest.

SECTION 12. The City Clerk shall certify as to the adoption of this Ordinance and shall cause a summary thereof to be published at least five days prior to the meeting at which the proposed Ordinance is to be adopted and shall post a certified copy of the proposed Ordinance in the Office of the City Clerk, and within 15 days of the adoption, shall post a certified copy of this Ordinance, including the vote for and against the same, in the Office of the City Clerk, in accordance with Government Code section 36933.

SECTION 13. This ordinance shall be effective on February 3, 2023, which is to be no less than 30 days after its adoption.

[SIGNATURES ON FOLLOWING PAGE]

PASSED, APPROVED, AND ADOPTED this 3rd day of January 2023.



DOUG CIRBO, MAYOR

ATTEST:



LISA BERGLUND, MPA
CITY CLERK

APPROVED AS TO FORM:




MATTHEW E. RICHARDSON
CITY ATTORNEY

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF LAKE FOREST)

I, Lisa Berglund, City Clerk of the City of Lake Forest, California do hereby certify that the foregoing Ordinance No. 360 was duly introduced and placed upon its first reading at a regular meeting of the City Council on the 6th day of December, 2022, and thereafter, said Ordinance was duly adopted and passed at a regular meeting of the City Council on the 3rd day of January, 2023, by the following vote, to wit:

AYES: COUNCIL MEMBERS: CIRBO, TETTEMER, PEQUEÑO,
VOIGTS, YU
NOES: COUNCIL MEMBERS:
ABSENT: COUNCIL MEMBERS:
ABSTAIN: COUNCIL MEMBERS:



LISA BERGLUND, MPA
CITY CLERK