REPORT TO LAW & LEGISLATION COMMITTEE
City of Sacramento

915 I Street, Sacramento, CA 95814-2671

STAFF REPORT
April 3, 2012

Honorable Members of the
Law and Legislation Committee

Title: Ordinance: Amendments to City Code Chapter 15.36 Relating to Fire Code

Location/Council District: Citywide

Recommendation: Staff recommends that the Committee approve and forward to the City Council the attached amendment to Chapter 15.36 of the City Code relating to California Fire Code.

Contact: Michael Bartley, Fire Marshal, 916-808-1620

Presenters: Michael Bartley, Fire Marshal

Department: Fire

Division: Fire Prevention

Organization No: 12001111

Description/Analysis

Issue: Establishment of a citywide fire code that prescribes requirements consistent with nationally recognized good practices for providing a reasonable level of life safety and property protection from the hazards of fire, dangerous conditions in new and existing buildings, and to provide safety to firefighters and emergency responders during emergency operations.

Policy Considerations: The proposed amendments are consistent with the city's operating principle to promote safety, livability and economic vitality.

Environmental Considerations: This report concerns administrative activities that do not constitute a "project" under CEQA and the State CEQA Guidelines, California Code of Regulations, Title 14, Sections 15061(b) (3) and 15378(b) (2).

Sustainability Considerations: There are no sustainability considerations applicable to amending City Code related to fire code.

Committee/Commission Action: Staff seeks Committee's direction to complete outreach efforts and forward the amendments to the City Council for review and adoption at the April 26, 2012 council meeting.

Rationale for Recommendation: As an integral part of local efforts to provide a reasonable level of life safety and property protection from the hazards of fire, and to provide safety to firefighters and emergency responders during emergency operations, the amendments provide for the adoption of the 2010 California Fire Code and the adoption of a regionally common set of local amendments.

Financial Considerations: Local amendments may be more restrictive than state requirements and may incur additional costs related to installation of fire sprinkler systems in new city buildings. Additional costs may be incurred related to installation, maintenance, and testing of bi-directional amplifiers for new city buildings impeding emergency radio communications.

Emerging Small Business Development (ESBD): Not applicable.

Respectfully Submitted by: Michael C. Bartley
Michael Bartley,
Fire Marshal

Approved by: Ray S Jones
Ray S. Jones,
Fire Chief

Table of Contents:

Pg 1 Report

Attachments

Pg 3 Background
Pg 4 Table 1
Pg 6 Ordinance

Attachment 1

Background:

By state law, California's Building Standards Commission must adopt regulations concerning building and fire safety while local agencies are allowed to adopt amendments to that code for the purpose of mitigating several factors unique to their locale. In 2010, the California Building Standards Commission adopted a new California State Fire Code based on the 2009 International Fire Code (IFC). To be consistent with that implementation, the attached ordinance repeals existing city fire codes and amendments, and adopts:

- The 2010 California Fire Code (CFC);
- As local amendments, provisions of the 2009 IFC that were not adopted by the state, and
- Other local amendments to the CFC

A copy of the 2010 California Fire Code is available for viewing at the City Clerk's Office. Those sections of the 2009 International Fire Code not adopted by the state include sections concerning local code enforcement and general fire safety (i.e. trash, vegetation, etc.). These sections are not normally adopted by the state.

The local amendments were developed in cooperation with county fire agencies and are comparable to those in the proposed 2010 Sacramento County Fire Code.

This report does not provide a "strikethrough" or "working" copy of past local city amendments; instead, Attachment 2, Table 1 provides a convenient outline of the proposed changes.

Outreach included city agencies (Development Services, General Services, Utilities, Historic Preservation), and private organizations (North State Building Industry Association, Metro Chamber of Commerce, Sacramento Rental Housing Association, American Fire Sprinkler Association and the Automatic Fire Alarm Association, and others).

ATTACHMENT 2

TABLE 1

Section	PROPOSED AMENDMENTS	CHANGES
102.8	Gives the fire code official authority to enforce applicable standards.	New.
104.2.1	Inspection record card and construction documents on site at time of inspection.	Omitted fire plans and added construction documents to the language
104.3.2	Citation and Administrative Penalties	Added city misdemeanor code section reference.
104.7.2.1	Contract Inspector.	A, B and C removed. Chief establishes policies and procedures for term of contract.
105.6	Establishes operational permits for various occupancies.	Permit list updated from last code adoption, with some additions.
105.7.15	Solar photovoltaic power systems	Requires a permit for construction, addition or modification
106.2.2	Inspection Record Card.	Removed section, already stated in 2010 CFC.
106.2.3	Administrative Costs.	Cost recovery for time spent at job sites not ready for inspection.
108.1	Board of Appeals.	Amended to be the same as previous code adoption.
202	False Alarm.	Definition is changed to be the same as the Sacramento county code.
Chapter 3	General Precautions Against Fire	Adopt Entire Chapter except Section 308.1.4
Chapter 4	Emergency Planning and Preparedness	Adopt Entire Chapter
503.1.2	Additional Access.	Adds an additional road for >40 dwelling units.
505.1	Address Identification.	Adding sections for multiple tenant buildings, spaces, and address illumination same as Sacramento county code.
507.5.1	Where Required (Fire Hydrant Systems).	Gives more options for water supplies in remote areas.
511	Emergency Access Gates & Barriers	Section relocated from Appendix K to Chapter 5.
605.11.1	Technical Criteria	Establishes the requirements for installation, additions and modifications of solar photovoltaic power systems.

903.2	Where Required (Fire Sprinklers).	Requires sprinklers in buildings >3599 sq ft.
903.2.10.2	Covered marinas, piers & floats	Requires sprinklers >3599 sq ft.
903.4.1.1	Fire Control Room	Provides direct access from exterior to extinguishing system valves and fire alarm equipment same as Sacramento county code.
907.7.5	Central Station Monitoring	Requires approval of central stations by EMS communications center
907.7.5 (D)	Fire Alarm Signal Interference	Ensures fire alarm signal integrity.
1101.3	Aviation Facilities	Establishes fire permit(s) for aviation facilities
1107.9	Refueling at Rooftop Heliports	Prohibits Rooftop Refueling
1703.3	Notification	Establishes requirements to notify Fire Department of Fumigation and Insecticidal Fogging Operations.
3301.1.1	Seizure of fireworks	Authorizes the Chief to seize fireworks which are in violation.
3308.2	Fireworks display permit	Requires a permit for public display
3308.3	Sale of fireworks	Requires a permit for sale and display of safe and sane fireworks
3308.4	Pyrotechnic Special Effects Material	Requires a permit for use, storage or manufacture.
3404.2.14.1	Removal and disposal of tanks	Prohibits site disassembly of tanks
Chapter 47	Referenced NFPA (National Fire Protection Association) Standards	Adopted NFPA standards with exceptions
Appendix B	Fire flow requirements	Sets fire flow requirements and sprinkler credits - Exception #2 is new, allowing greater credit for ESFR type systems .
Appendix C	Considerations for existing Fire Hydrants	Added requirements for hydrant design and location when changes demand an increased fire flow
Appendix C Table C105.1	Number and Distribution of Fire Hydrants	Amends the requirements for the number of Fire Hydrants and Spacing
Appendix J	Emergency Responder Radio Coverage	Adopts the entire chapter.

ORDINANCE NO. 2012-

Adopted by the Sacramento City Council

Date Adopted

AN ORDINANCE REPEALING AND REENACTING CHAPTER 15.36 OF THE SACRAMENTO CITY CODE AND ADOPTING BY REFERENCE THE 2010 CALIFORNIA FIRE CODE, WITH LOCAL AMENDMENTS.

BE IT ENACTED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

SECTION 1.

In connection with the local amendments to the 2010 California Fire Code (Part 9 of the 2010 California Building Standards Code, Title 24, California Code of Regulations) as set forth in this Ordinance, and pursuant to Health and Safety Code sections 17958, 17958.5, 17958.7, and 18941.5, the City Council finds and determines that:

A. The local amendments are reasonably necessary because of local climatic, topographical, and geological conditions.

B. The standards contained in the local amendments are more restrictive than those in the 2010 California Fire Code.

C. Local Climatic Conditions:

1. Climate impacts fire behavior and other major emergency events because it cannot be controlled. The drying out of wood shakes and wild land fuels in the summer months allows for easy ignition.

2. The building of homes within weed-covered rural areas and the combustible weeds on vacant urban lots, coupled with windy conditions, is a recipe for disaster. Sacramento has four distinct seasons: summer, winter, fall, and spring. The distinctions of these seasons are an attraction to the area and one reason why significant population growth has occurred. The population growth has impacted emergency service levels causing a strain on emergency services, and the result is increased response times.

3. Sacramento has significant variations in weather patterns. Summers are arid and warm, winters are cool to freezing, fall and spring can bring any combination of weather patterns together. It is this cyclical uncertainty that allows weather events such as the rapid melting of the snow pack that causes flooding in the low-lying valley areas of Sacramento. As rivers rise and fall with the runoff, access to common areas of recreation and boating

is affected. The doubling of average rainfall called an "El Nino" event has occurred from time to time and may cause the grass to mature and grow in excess of six feet high before it dries out. Ten square feet of land with this type of fuel is equivalent to the explosive force of one gallon of gasoline.

4. Average yearly rainfall is approximately 19 inches. This rainfall normally occurs from October to April. Low-level fog (Tule fog) is present throughout the winter months, which may bring visibility to almost zero feet. The fog delays emergency responders and has caused numerous vehicle accidents including the December 11, 1997, Interstate 5 incident in Elk Grove that involved 36 vehicles and caused 31 casualties including 5 fatalities. The fog can also cause freezing and slick roadways.

5. During the summer months there is generally no measurable precipitation. Temperatures for this dry period range from 70 to 112 degrees Fahrenheit and are frequently accompanied by light to gusty Delta winds. The relative humidity during summer months range from 2% to 30%, which is arid. The city contains many acres of grasslands, which, in conjunction with the dry and windy conditions, create a hazardous situation that has led to extensive grass and brush fires in recent years. More development is extending from the urban core into the grass-covered areas. Wind-driven fires have led to serious consequences in similar areas of the state.

6. In the past, several consecutive years of drought conditions have occurred, thus reducing the available water supply. Ground water as well as surface supplies have all been affected. The drought conditions have led to lower water tables, reduced fire flow testing, water contamination, and water conservation efforts. Additionally, demands on water systems have increased due to population growth. These impacts have negatively impacted water use and availability for the fire service. The degradation of water systems reduces the quality of fixed fire protection, as well as fire suppression activities. Some water purveyors have reduced the standard pressure maintained within their systems. This change will make many fire protection systems less effective and corrective measures such as adding pressure and increasing necessary booster pumps may be required at great cost to the community.

D. Local Topographical Conditions:

1. Sacramento is divided by several topographical features, including major rivers, minor rivers and creeks, lakes, sloughs, natural parkways, open space, bridges/overpasses, freeways, railroad tracks including light rail, drainage canals, and sprawling industrial facilities. Traffic has to be channeled around several of these topographical features and limitations, which creates traffic congestion and delays emergency response. These features are located between many of the fire stations located within

Sacramento. It is imperative that no delays affect the timely response of fire fighters.

2. Heavy traffic congestion on the City's major streets already acts as a barrier to timely response for fire and emergency vehicles. Some roadways are expected to double their traffic flow within the next ten years. In the event of an accident or other emergency at one of the key points of intersection between a road and river or freeway, sections of the City could be isolated or response time could be sufficiently slowed so as to increase the risk of injury or damage.

3. Preservation of wetland areas, natural parkways, riparian corridors along rivers/streams, vernal pools, open space and endangered species habitat have all contributed to access problems as well as exemption from vegetation abatement programs. These situations, though environmentally important, increase the demands on the fire service due to the extreme fire hazard created by fuel loading and limited access.

E. Local Geological Conditions:

1. Sacramento is subject to ground tremors from seismic events as the City is located in a Design Category D, which relates to a high risk of earthquakes. Large portions of Sacramento have very poor soil conditions. Additionally, the very low elevations are subject to a very high water table. Experience with lightly-loaded footing and foundations and concrete slabs on grade revealed structural cracks resulting in differential settlement, in addition to moisture migrating from the soil to occupied, habitable areas of buildings.

   The agricultural history for many parts of Sacramento has resulted in many areas having caustic or "hot" soil conditions due to the heavy use of fertilizers, pesticides, insecticides, etc. Unprotected metal pipe, when buried in these areas, is subject to corrosion and premature failure.

F. Based on the above climatic, topographical, and geological conditions, the local amendments enacted in Section 2 of this ordinance are reasonable and necessary pursuant to Health and Safety Code section 18941.5. While it is clearly understood that the adoption of such amendments may not prevent the incidence of fire, these amendments attempt to reduce the severity and potential loss of life and property, and enhance protection of the environment.

G. California Health and Safety Code section 17958.7 requires that the modifications or change be expressly marked and identified as to which each finding refers. The following table identifies the code sections that have been modified which are "building standards" as defined in Health and Safety Code Section 18909, and the associated conditions for modification due to local climatic, geological and topographical reasons.

Section Number (2010 California Fire Code)	**Local Climatic/Geological/Topographical Condition** (Findings in this Ordinance Section 1)
104.2.1	D1
104.3.2	C1,2,3,4,5,6 & & D1,2,3 & E1
104.7.2.1	D1
105.6	D1
105.7.15	C1,2,3,4,5,6 & D1,2,3 & E1
202	D2 & D4
Chapter 3	C1,2,3,4,5,6 & D1,2,3 & E1
Chapter 4	C1,2,3,4,5,6 & D1,2,3 & E1
503.1.2	C2,3,4,6 & D1,2 &
505.1	C3 & D1,2 & E1
507.5.1	C1,2,3,4,5,6 & D1,2,3 & E1
511	C1,2,3,4,5,6 & D1,2 3
903.2	C1,2,3,4,5,6 & D1,2,3 & E1
903.2.10.2	C1,2,3,4,5,6 & D1,2,3 & E1
903.4.1.1	C1,2,3,4,5,6 & D1,2,3 & E1
907.7.5	C1,2,3,4,5,6 & D1,2,3 & E1
907.7.5(D)	C1,2,3,4,5,6 & D1,2,3 & E1
1101.3	D1
1107.9	C1,2,3,4,5,6 & D1,2,3 & E1
1703.3	C1,2,3,4,5,6 & D1,2,3 & E1
3301.1.1	C1,2,5,6 & D1,2
3308.2	C1,2,3,4,5,6 & D1,2,3 & E1
3308.3	D1
3308.4	D1
3404.2.14.1	C1,2,3,4,5,6 & & D1,2,3 & E1
Chapter 47	C1,2,3,4,5,6 & & D1,2,3 & E1
Appendix B	C1,2,3,4,5,6 & D1,2,3 & E1

Appendix C & Table C105.1	C1,2,3,4,5,6 & D1,2,3 & E1
Appendix J	C1,2,3,4,5,6 & D1,2,3 & E1

SECTION 2

Chapter 15.36 of the Sacramento City Code is hereby repealed in its entirety and reenacted to read as follows:

Chapter 15.36

2010 California Fire Code

15.36.010 Adoption of the 2010 California Fire Code.

The city council hereby adopts by reference and incorporates in this code the 2010 California Fire Code (Part 9 of the 2010 California Building Standards Code, Title 24, California Code of Regulations) except as expressly amended or superseded by the local amendments set forth in this chapter.

15.36.020 Short title.

This chapter shall be known and may be cited as the "fire prevention code" of the city.

15.36.030 Definitions.

"Chief" or "fire code official" means the fire chief of the city or the fire chief's designated representative.

15.36.040 Penalties.

Any violations of this chapter shall be punishable as set forth in section 15.04.060 of this code.

15.36.050 Local amendments to the 2010 California Fire Code.

The 2010 California Fire Code (Part 9 of the 2010 California Building Standards Code, Title 24, California Code of Regulations) is amended as set forth in this section.

A. **DIVISION II ADMINISTRATION** of **CHAPTER 1** is amended as follows:

1. **SECTION 104 GENERAL AUTHORITY AND RESPONSIBILITIES** is amended by adding the following:

a. **104.2.1 Inspection record card**. Work requiring Fire Department inspection and approval shall have available on site an inspection record card and approved set of construction documents to allow the Chief to conveniently make the required entries thereon regarding inspection of work.

b. **104.3.2 Citations and administrative penalties**. The Chief may issue citations for infractions or misdemeanor violations of this Chapter in accordance with City Code Section 1.28.020, and may impose administrative penalties pursuant to City Code Section 1.28.010C or any successor provision.

c. **104.7.2.1 Contract inspector**. The Chief or his/her designated representatives may require the owner or the person in possession or control of the building or premises to provide, without charge to the fire department, a special inspector ("Contract Inspector"), when the department has no technical expertise available to conduct the required inspections. The Contract Inspector shall be a qualified person who shall demonstrate their competency to the satisfaction of the Chief. The Chief shall establish policies and procedures to be followed by the Contract Inspector for the duration of the contracted duties.

2. **SECTION 105 PERMITS** is amended by adding the following:

a. **105.6.2.1 Apartments**. An operational permit is required for apartments and/or complexes exceeding three units in total.

b. **105.6.2.2 Artists live/work**. An operational permit is required for use of an artist live/work facility.

c. **105.6.3.1 Battery systems**. An operational permit is required for the use and storage within buildings for battery systems having a liquid capacity of more than 50 gals.

d. **105.6.11.1 Day cares**. An operational permit is required for a day care facility.

e. **105.6.12 Dry cleaning plants**. An operational permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.

f. **105.6.14.1 Fire alarm systems**. An operational permit is required to use or operate a fire alarm system in a

commercial building.

g. **105.6.16 Flammable/combustible liquids**. An operational permit is required for the use and storage of Flammable or Combustible liquids in accordance with 2009 IFC Section 105.6.16 sub-sections 1-11.

h. **105.6.19 Fumigation and thermal insecticidal fogging**. An operational permit is required to operate a business of fumigation or thermal insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used or stored.

i. **105.6.20.1 Helistops and heliports**. An operational permit is required to use or operate a helistop, heliport, rooftop emergency landing area, or undesignated helistop.

j. **105.6.22.1 Hotels and motels**. An operational permit is required for use of a hotel or motel.

k. **105.6.24.1 Institutions**. An operational permit is required for use of an institution as defined by CCR Title 24.

l. **105.6.28.1 Marinas**. An operational permit is required for use of a marina.

m. **105.6.30 Open burning**. An operational permit is required for the use of such items that emit an open flame or create a situation that results in open burning.

n. **105.6.33 Organic coatings.** An operational permit is required for any organic-coating manufacturing operations producing more than 1 gallon of a coating in 1 day.

o. **105.6.34 Places of assembly**. An operational permit is required to operate a place of assembly.

p. **105.6.37 Pyroxylin plastics**. An operational permit is required for the use, storage, or handling of cellulose nitrate plastics greater than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics and for the assembly or manufacture of articles involving pyroxylin plastics.

q. **105.6.37.1 Radioactive materials**. An operational permit is required for use or storage of any amount of materials capable of producing beta or gamma radiation.

r. **105.6.38 Refrigeration equipment**. An operational permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.

s. **105.6.39 Repair garages/motor fuel-dispensing facilities**. An operational permit is required for the operation of repair garages and automotive, marine and fleet motor fuel-dispensing facilities.

t. **105.6.41 Spraying/dipping**. An operational permit is required to conduct a spraying or dipping operation utilizing flammable or combustible liquids or the application of combustible powders regulated by Chapter 15.

3. **Section 105.7 Required construction permits** is amended by adding the following.

   a. **105.7.15 Solar photovoltaic power systems.** A construction permit is required for the installation, addition or modification of solar photovoltaic power systems.

4. **Section 105.6.9 Covered mall buildings** is adopted and amended to read as follows:

   a. **105.6.9 Covered and partially covered mall buildings**. An operational permit is required for the use of locations described as Covered and Partially Covered Mall Buildings.

5. **Section 105.6.27 LP-gas** is adopted and amended to read as follows:

   a. **105.6.27 LPG**. An operational permit is required for the use and storage of LPG cylinders in quantities greater than 25 gallons.

6. **Section 105.6.29 Miscellaneous combustible storage** is adopted and amended to read as follows:

   a. **105.6.29 Miscellaneous combustible storage**. An operational permit is required to store in any building or upon premises in excess of 1,500 cubic feet gross volume of combustible empty packing cases, pallets, boxes, barrels, or similar containers, rubber tires, rubber, cork or similar combustible material.

7. **Section 105.6.42 Storage of scrap tires and tire byproducts** is adopted and amended to read as follows:

a. **105.6.42 Storage of scrap tires and tire byproducts**. An operational permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts exceeding 1,500 cubic feet of total volume.

8. **Section 105.6.45 Waste handling** is adopted and amended to read as follows:

   a. **105.6.45 Waste/recycling Handling.** An operational permit is required for the operation of wrecking yards, junk yards, or any waste/recycling material handling facility.

9. **SECTION 106 INSPECTIONS** is amended by adding the following:

   a. **106.2.3 Administrative costs.** The authority having jurisdiction may bill a contractor for cost recovery for time spent at the test/inspection site as well as administrative costs.

10. **Section 108.1 Board of appeals established** is amended to read as follows:

    a. **108.1 Board of appeals established**. In order to hear appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

11. **SECTION 109 VIOLATIONS** is amended by adding the following:

    a. **109.2.3.1 Citations**. The Chief, or his/her duly authorized representative, may issue citations for non compliance or infractions or misdemeanor violations of this chapter pursuant to Section 13871 of the Health and Safety Code of the State of California and Chapter 5c (commencing with Section 853.6) of Title 3 of Part 2 of the Penal Code of the State of California.

B. **CHAPTER 2 SECTION 202 GENERAL DEFINITIONS** is amended by adding the following:

ELECTRONIC MONITORING SYSTEM shall mean an approved method to electronically detect and transmit to an approved alarm service provider's Type A (listed) Central Station, information indicating that the automatic fire sprinkler system or electronic fire detection system has been activated and shall have the ability to relay the alarm to the (a) Sacramento Regional Fire/EMS Communications Center; or (b) to the Sacramento International Airport Communication Center in an approved manner.

QUALIFIED ATTENDANT shall mean an individual that has been trained in the proper methods of the handling, storage and dispensing of any material, product or substance regulated by the code. These shall include, but not be limited to ammonia, chlorine, cryogenic fluids, flammable and combustible liquids and gases. Said attendant must be able to demonstrate to the satisfaction of the Chief that he or she possesses adequate knowledge in the subject area.

C. **SECTION 202 GENERAL DEFINITIONS, FALSE ALARM** is amended to read as follows:

FALSE ALARM. False alarm shall mean the giving, signaling or transmission to any public fire station or company or to any officer or employee thereof, whether by telephone, spoken word or otherwise, information to the effect that there is a fire, medical emergency, rescue request, or other need for emergency service at or near the place indicated by the person giving, signaling, or transmitting such information, and there is found to be no need for emergency services.

D. **CHAPTER 3 GENERAL PRECAUTIONS AGAINST FIRE** is adopted except for **Section 308.1.4 Open-flame cooking devices** which is deleted.

E. **CHAPTER 4 EMERGENCY PLANNING AND PREPAREDNESS** is adopted and amended by adding the following:

1. **401.9 Cost recovery**. Any costs incurred by the Fire Department related to any response to a Nuisance or False alarm will be charged to that person, owner, operator, responsible party, firm or corporation causing the transmission of a False/Nuisance Alarm. An Administrative Penalty may be applied for the transmission of False/Nuisance Alarm.

F. **CHAPTER 5 FIRE SERVICE FEATURES** is amended as follows:

1. **503.1.2 Additional access** is amended by adding the following:

   503.1.2.1 Required access. Two fire apparatus access roads shall be provided in accordance with Sections 501 and 503 for every facility, building, subdivision, development, campus, complex, containing 40 or more residential units hereafter constructed or moved into or within the jurisdiction.

2. **505.1 Address identification** is amended by adding the following:

   a. **505.1.1 Multiple tenant buildings**. Multiple tenant spaces serviced by vehicular access to the rear through any driveway, alleyway, or parking lot shall have numbers or addresses placed prior to occupancy on all new and existing buildings as to be plainly visible and legible from the rear access way when deemed necessary by the Chief. Multiple tenant spaces serviced by rear access through a corridor, exit court, or exit yard shall have approved numbers or addresses displayed on the rear of the tenant space, when deemed necessary by the Chief.

   b. **505.1.2 Multiple tenant spaces**. Multiple tenant spaces that front on interior walkways or pedestrian malls shall have approved numbers or addresses placed over the entrance door in all new and existing buildings. An illuminated enunciator or directory board shall be required at every entrance where deemed necessary by the Chief.

   c. **505.1.3 Illumination**. Addressing shall be illuminated at night in all new buildings. Signs shall be internally or externally illuminated. When the luminance or the face of a sign is from an external source, it shall have an intensity of not less than 5.0 foot-candles. Internally illuminated signs shall provide equivalent luminance. In all cases, addresses shall be readily identifiable from the nearest fire apparatus access road servicing the building.

3. **Section 507.5.1 Where required** is amended to read as follows:

   a. **507.5.1 Where required**. Where any portion of the facility or building hereafter constructed or moved into or within the

jurisdiction is in excess of 150 feet from a water supply on a public street, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided when required by the Chief.

4. **SECTION 511 EMERGENCY ACCESS GATES & BARRIERS** is added to read as follows:

a. **Section 511 Emergency access gates & barriers.**

i. **511.1 Scope.** Where a new gate or barrier is installed on a fire access roadway, the Fire Department shall have emergency access. Gates or barriers shall have a Click-2-Enter option for motorized gates or provided with a Knox pad lock or Knox box with appropriate keys for access to the premise.

ii. **511.2 Definitions.**

GATES AND BARRIERS – shall mean a gate, crossbar, door or other obstructive device which is utilized for the purpose of restricting, controlling or obstructing entry or exit by motor vehicles or pedestrians to or from a private roadway and which is not staffed on a twenty-four hour, seven day per week basis by a person capable of providing immediate access to a police or fire safety vehicle or person.

PRIVATE DRIVEWAY - A private way for vehicular travel that provides access from an off-street parking area to a public or private drive.

PRIVATE STREET OR ROADWAY - shall mean any roadway (not dedicated as public right-of-way) that is owned and maintained by abutting property owners, or association of property owners that is utilized for the purpose of providing vehicular or pedestrian access to a subdivision, apartment complex, condominiums or other residential development or wild land, excluding off street parking areas, driveways, and driveways to off-street parking areas.

iii. **511.3 Permit.**

A permit issued by the fire authority having jurisdiction is required to install any secured access gate system.

Applications to install gates or barriers should be submitted to the city of Sacramento, Fire Prevention office. Plans shall be approved by the fire authority and a permit issued prior to installation. In addition to the required plans the following documents shall be submitted when required by the Chief.

1. Written concurrence of property owners in the form of a notarized letter indicating that all property owners served by the gate installation agree to the installation and operation.

2. A notarized "Road Maintenance Agreement" identifying the addition of the gates and operating systems.

3. The fire authority having jurisdiction shall inspect all gates for proper installation and operation prior to activation or use.

iv. **511.4 Requirements for vehicle gates.**

1. All gates shall be UL 325 compliant.

2. Gates shall not be installed within a required turning radius of a fire access roadway.

3. Access for single direction traffic shall be unobstructed 16 feet wide and 13, 6" high.

4. Access for bi-directional traffic shall be unobstructed 20' wide and 13', 6" inches high.

5. Swinging gates for single direction traffic shall swing in the direction of vehicle travel.

6. Swinging gates for bi-directional traffic shall swing into the property being entered.

7. All gates shall be accessible from the driving lane nearest the edge of the street by turning radii of at least 35' inside and 55' outside.

   After passing through a gate, the nearest curb of any cross street shall be no less than 40 feet.

v. **511.5 Operation of gates general.**

1. Electrically operated gates shall be equipped with the following approved fire department methods for entry and exit:

   a. Key override switch (Knox®), and

   b. Radio operated controller (Click2Enter© or other approved equipment).

   EXCEPTION:
   Radio controlled exit may be waived by installation of a "free exit" loop.

2. Gates requiring radio-controlled access shall be provided with an approved 2 inch by 2 inch, blue, reflective marker visible to approaching traffic. It shall be located in the center of the exit gate.

   a. Wiring for electrical gates shall be provided by AC current, underground installation. An electrical permit is required by the Sacramento Building Department.

   b. Electrically operated gates shall fail to the open position when the power is off. They shall remain open until power is restored.

   c. Knox® Company authorization forms are required for orders of key switches, boxes and padlocks. The forms may be obtained by calling the Sacramento Fire Department.

vi. **511.6 Manual gates or barriers.**

1. May be approved on a case-by-case basis for nighttime security of business property or access to wild lands.

2. They shall be constructed in a manner that reflects good construction practices acceptable to the fire authority having jurisdiction.

3. They shall be accessible by means of an approved fire department padlock (Knox®) or by the installation of an approved key box (Knox®).

4. Approved manual gates or barriers across emergency access roadways shall be provided with an 18-gauge metal sign in the center of and on both sides of the gate that shall read, "FIRE LANE-NO PARKING". Letters shall be red on a white background and be a minimum of 3" high with a 1/2" stroke.

5. For nighttime security only, gates to close off a fire lane, in order to minimize dumping and vandalism shall be approved with (Knox®) padlock access. Gates to be closed during business hours are required to be electronically operated.

vii. **511.7 Prohibitions.**

1. No gate shall be installed where access requires the use of a proximity reader or card.

2. Direction-limiting devices, such as fixed tire spikes, are prohibited.

3. The total number of vehicle access control devices or systems, through which emergency vehicles must pass to reach any address shall not exceed one.

4. No commercial property owner shall install fences and gates where more than one gate must be opened in order to reach within 150 feet of the rear portion of any building.

viii. **511.8 Pedestrian gates.**

1. All vehicle gates obstructing pedestrian access to a public way (street) shall have an approved pedestrian gate installed within 10 feet of the vehicle gate.

2. Gates shall be handicap accessible and comply with exit door requirements of the California Building Code.

3. An approved key box (Knox®) shall be installed at least 48" above grade on the outside of the gate. It shall be provided with a key to open the pedestrian gate.

4. No pedestrian gate shall be located in the median between two vehicle gates.

EXCEPTION:
Private driveways serving one single-family residence are exempt from this requirement.

ix. **511.9 Additional requirements.**

Because of the delays caused by vehicle access control devices or systems, additional fire protection requirements may be applied based on other access limitations, such as narrow or winding streets, or dead-end streets without an approved turnaround available for fire apparatus. Other than the obstruction and the reduced width controlled within this standard, no other requirement of the fire authority having jurisdiction shall be adversely affected by the placement of any vehicle access control device or system in any required fire apparatus access road. Fire department approval does not waive any requirement by other authorities having jurisdiction.

G. **CHAPTER 6 SECTION 602 DEFINITIONS** is amended by adding the following:

1. **ROOF ACCESS POINTS.** An area that does not place ladders over openings (i.e., windows or doors) and are located at strong points of building construction and in locations where it does not conflict with overhead obstructions such as tree limbs, wires, or signs.

2. **SLOPED ROOF.** For the purpose of solar photovoltaic power systems, a roof with a greater than a 2-in-12 pitch.

3. **STRUCTURAL STRONG POINT.** Bearing wall or other such suitable load bearing member.

H. **SECTION 605 ELECTRICAL EQUIPMENT, WIRING AND HAZARDS** Is amended by adding the following:

1. **605.11 Solar photovoltaic power systems.** A permit shall be required for installation, modification, addition of solar photovoltaic systems.

2. **605.11.11 Technical criteria.** The fire code official shall maintain a document providing the specific technical information and requirements for the installation of solar photovoltaic systems. This document shall contain, but not be limited to, the various requirements for the installation of solar photovoltaic systems and other technical data.

I. **CHAPTER 9 Section 903.2 Where required** is amended by adding the following:

1. **For all occupancies except Group R-3.1 and detached U**, an automatic sprinkler system shall be installed and equipped with an electronic monitoring system as follows:

   a. In every new building where the total floor area exceeds 3, 599 square feet or greater.

   b. An automatic fire sprinkler system shall be installed in every building when there is an addition to the floor area in existence on the effective date of this ordinance of 20 percent or more within a 12-month period and the aggregate floor area of the building exceeds 3,599 square feet.

   c. For the provisions of this section, area separation walls shall not apply to eliminate the installation of a sprinkler system.

      EXCEPTION:
      Non-combustible, detached canopies open on four sides not exceeding the basic allowable square footage in CBC Table 503 used exclusively for the parking or storage of private or pleasure vehicles and noncombustible storage (includes fuel islands).

2. **Section 903.2.10** is amended by adding the following:

   a. **903.2.10.2 Covered floats, marinas and piers**. A fire sprinkler system shall be provided for all covered floats,

marinas, piers, and any/all other covered floating structures that are commercially operated and exceeds 3,599 sq. ft.

3. **Section 903.3.1.3 NFPA 13D sprinkler systems** is adopted and amended to read as follows:

   a. **Section 903.3.1.3 NFPA 13D sprinkler systems.** Automatic sprinkler systems installed in one - and two - family dwellings and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D and the city of Sacramento, Department of Utilities and Department of Fire standards.

4. **Section 903.4.1 Monitoring** is amended by adding as follows:

   a. **Sub-section 903.4.1.1 Fire control room**: An approved fire control room shall be provided for all buildings protected by an automatic fire extinguishing system. Said room shall contain all system control valves, fire alarm control panels and other fire equipment required by the Chief. Fire control rooms shall be located within the building at a location approved by the Chief, and shall be provided with a means to access the room directly from the exterior. Durable signage shall be provided on the exterior side of the access door to identify the fire control room. Fire Control Rooms shall not be less than 200 sq ft.

   EXCEPTION:
   Group R, Division 3 Occupancies.

5. **Section 907.7.5 Monitoring** is amended to read as follows:

   Section 907.7.5 Monitoring. Required alarm systems shall be monitored by an approved alarm service provider's Type A (listed) Central Station as established by Sacramento Regional Fire/EMS Communication Center. The Central Station monitoring company or approved alarm company shall notify the authority having jurisdiction in writing, within 24 hours, of systems that are found not to be in compliance with applicable codes. Receipt of supervisory signals by the monitoring company require the dispatch of a runner or maintenance person (arrival time not to exceed 3 hours), unless the condition can be restored to normal through the subscriber's efforts.

   EXCEPTION:
   Monitoring by a supervising station is not required for:

1. Single and multiple-station smoke alarms required by Section 907.2.11.

2. Group I-3 occupancies *shall be monitored in accordance with Section 907.2.11.*

3. *Automatic sprinkler systems* in one and two family dwellings.

907.7.5(A) Branch electrical circuits. When providing a fire alarm circuit in a multiple occupancy type building (multiple metering), the circuit shall be energized from the building meter panel board. When a separate source of power (i.e. emergency generator) is provided the fire alarm circuit shall be energized from the emergency panel board.

907.7.5(B) Alarm transmission. The activation of a fire sprinkler system, hood extinguishing system, special extinguishing system or a fire alarm/detection system shall cause the system to initiate a signal to the Central Station within 90 seconds. Retransmission from the Central Station to the Fire Dispatch Center shall not exceed 60 seconds.

EXCEPTION:
Hood extinguishing systems or special extinguishing systems installed in existing buildings without a fire alarm system need not be monitored.

907.7.5(C) Signal interference. Signal Amplification shall be required to provide signal integrity at the discretion of the Chief. All costs regarding the installation, maintenance, and continuous operation of those lines of transmission shall be the responsibility of the building owner.

Section 907.7.5.1 Automatic telephone dialing devices. Two separate telephone lines (numbers) shall be provided from the protected premises to the Central Station, which use Digital Alarm Communicator Transmitters (DACT). All costs regarding the installation, maintenance, and continuous operation of those lines shall be the responsibility of the building owner.

J. **CHAPTER 11 Section 1101.3 Permits** is amended to read as follows:

Section 1101.3. Permits. For permits to operate an airport, heliport, helistop, aircraft refueling vehicle, application of flammable or combustible finishes, and hot work, see Section 105.6.

Section 1101.3.1 Helicopter use permits. A permit is required for any person, firm or business landing a helicopter at a site other than an approved airport or heliport as described by Federal Aviation Administration F.A.R. Part 77, for the purpose of advertising, promotions, lifting, or rides whether for public or private use. Sufficient information shall be provided to the Chief to allow determination of operational safety.

K. **SECTION 1107 HELISTOPS AND HELIPORTS** is amended by adding the following:

1. **Section 1107.9. Fueling at rooftop heliports**. Refueling at rooftop heliports, helistops or emergency landing areas shall not be permitted.

L. **CHAPTER 17 Section 1703.3 Notification** is adopted to read as follows:

Section 1703.3. Notification. The Fire Code Official and Fire Chief shall be notified in writing at least 24 hours before the structure is to be closed in connection with the utilization of any toxic or flammable fumigant. Notification shall give the location of the enclosed space to be fumigated or fogged, the occupancy, the fumigants or the insecticides to be utilized, the person or person's responsible for the operation and the date and time at which the operation will begin. Notice of any fumigation or thermal insecticidal fogging shall be served with sufficient advance notice to the occupants of the enclosed space involved to enable the occupants to evacuate the premises.

M. **CHAPTER 33 EXPLOSIVES AND FIREWORKS** is amended by adding the following:

1. **Section 3301.1.1 Seizure of fireworks.** The Chief is authorized to seize, take, remove or cause to be removed at the expense of the owner all stocks of fireworks offered or exposed for sale, stored or held in violation of local, state, or federal regulations.

2. **Section 3308.2 Permit application.** Permits are required to conduct a fireworks display as required by local and state regulations.

3. **Section 3308.3 Sales**. Permits are required for the sale and display of "Safe and Sane" approved fireworks as permitted and regulated by Chapter 8.48 of the Sacramento City Code as presently constituted, and as hereinafter amended.

4. **Section 3308.4 Pyrotechnic special effects material.** A permit is required to manufacture, compound, store or use pyrotechnic special effects material as required by local and state regulations. A permit for use shall be granted only to a licensed pyrotechnic operator.

N. **CHAPTER 34 Section 3404.2.14 Removal and disposal of tanks** is amended by adding the following:

1. **Section 3404.2.14.1 Removal.** (7) Tanks shall not be disassembled at the site by any means.

O. **CHAPTER 47 REFERENCED STANDARDS** is amended to read as follows:

1. **NFPA** - National Fire Protection Association

a. All NFPA Standards current as of the date of this code's adoption shall be adopted except: 11C 13E 13R 297 473 550 902 1001 1002 1003 1021 1031 1033 1035 1041 1201 1221 1402 1404 1405 1410 1500 1561 1581 1710 1720 1901 1911 1914 1931 1932 1971 1975 1981 1982 1983 1999.

P. **APPENDIX B** is adopted and amended to read as follows:

1. **Section B105.2 Buildings other than one- and two-family dwellings**. The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

EXCEPTION
A reduction in required fire flow of up to 50 percent, as approved by the Chief, is allowed when the building is provided with an automatic sprinkler system approved pursuant to the adopted NFPA Standards. The resulting fire flow shall not be less than 1500 gallons per minute (5677.5 L/min.). Reduction of fire flow does not apply to number of fire hydrants required or duration of fire flow required.

A reduction in required fire flow of up to 75 percent, as approved by the Chief, for warehouse buildings of Type I, Type II, and Type III-N construction that are provided with early suppression fast response fire sprinkler systems. Reduction of fire flow does not apply to number of fire hydrants required or duration of fire flow required.

Q. **APPENDIX C** is adopted and amended by adding the following:

1. **Section C104.2 Existing single outlet 2 1/2 inch hydrants.** Existing single outlet 2 ½ inch hydrants shall be changed to an approved steamer style hydrant, when construction or use increases the required fire flow.

2. **Section C104.3 Water main improvements**. Where water main improvements are required to meet GPM flow, and the existing water main has a single 2 1/2 inch outlet fire hydrant, an upgrade of hydrants will be required.

3. **Section C104.4 Existing hydrants**. Existing hydrants affected by right of way improvements shall be moved to an approved location at no cost to the fire authority.

4. **Section C104.5 Hydrant type**. The Chief shall approve the type of fire hydrants to be installed in public right of way or on private property prior to any such installation under the City Utilities Standard.

R. **TABLE C105.1 NUMBER AND DISTRIBUTION OF FIRE HYDRANTS of APPENDIX C** is amended to read as follows:

TABLE NO. C105.1

NUMBER AND DISTRIBUTION OF FIRE HYDRANTS

FIRE FLOW REQUIREMENT (gpm) c	MINIMUM NUMBER OF HYDRANTS	AVERAGE SPACING BETWEEN HYDRANTS a, b, d & e (Ft.)	MAXIMUM DISTANCE FROM HYDRANT TO ANY POINT ON STREET OR ROADWAY FRONTAGE (Ft.)
1750 or less	1	300	150
2000-2250	2	300	150
2500-3250	3	300	150
3500-4250	4	300	150
4500-5250	5	300	150
5500-5750	6	300	150
6000-6250	6	250	150
6500-7250	7	250	150
7500 or more	8 or more [b]	200	120

NOTE: Table C105 footnotes: is amended to read as follows:

a. Reduce by 100 feet for dead-end streets or roadways.

b. Hydrants shall be required on both sides of the street whenever one of more of the following conditions exist:

i. Streets have median center dividers that make access to hydrants difficult, cause time delay or create undue hazard or both.

ii. When there are four or more lanes of traffic.

iii. Width of street in excess of 88 feet.

iv. The existing street being widened or having a raised median center divider in the future pursuant to the General Plan Roadway Improvement Plans for the City of Sacramento.

c. One Hydrant for each 1000 gpm or fraction thereof.

d. Where new water mains are extended along streets where hydrants are not needed for protection of structures or similar fire problems, fire hydrants should be provided at not less than 1000 foot (305 m) spacing to provide for transportation hazards. In addition, there shall be at least one hydrant at each intersection.

e. Average spacing between hydrants may be extended to 500 feet on streets serving one and two family dwellings.

S. **APPENDIX J EMERGENCY RESPONDER RADIO COVERAGE** is adopted in its entirety.

15.36.060 Adoption of ordinance.

Adoption of this ordinance repealing and reenacting Sacramento City Code Chapter 15.36 does not affect any administrative, civil, or criminal prosecutions or proceedings brought or to be brought, pursuant to Chapter 15.36 or other provisions of the Sacramento City Code, or pursuant to applicable federal, state, or local laws, to enforce provisions of Chapter 15.36 as they existed prior to the effective date of this ordinance. The provisions of Chapter 15.36, as they exist prior to the effective date of this ordinance, shall continue to be operative and effective with regard to any acts occurring prior to the effective date of this ordinance.