

ORDINANCE NO. 17-19 N.S.

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RICHMOND
AMENDING CHAPTER 8.16 OF THE CITY OF RICHMOND MUNICIPAL CODE
ENTITLED "FIRE PREVENTION CODE"**

SECTION 1.

Chapter 8.16 entitled "FIRE PREVENTION CODE" of the City of Richmond Municipal Code is hereby amended to read as follows:

Sections:

8.16.010	Adoption of the California Fire Code.
8.16.020	Establishment and duties of Fire Prevention Division.
8.16.030	Definitions.
8.16.035	Findings and Conclusion.
8.16.040	Amendments to the California Fire Code.
8.16.050	New materials, processes or occupancies which may require permits.
8.16.060	Fire hazards and nuisances - Abatement.
8.16.065	Emergency Response Cost Recovery Fee.
8.16.070	Smoke and carbon monoxide detectors.
8.16.080	Very High Fire Hazard Severity Zones.
8.16.090	False Fire Alarms.

8.16.010 Adoption of the 2019 California Fire Code

There is adopted by the city for the purpose of prescribing regulations governing conditions hazardous to life property from fire, and explosion. Adoption of text of the International Fire Code and The California Fire Code, 2019 Edition (California Code of Regulations, Title 24, Part, 9 [based on the 2018 International Fire Code published by the International Code Council]), hereinafter referred to as the "California Fire Code" or the "Code," is hereby adopted by this reference subject to the changes, additions, and deletions (amendments) set forth in this ordinance. The California Fire Code referred to in this ordinance includes Appendix Chapters: A, B, C, D, E, F, G, H, I & J, as amended by the changes, additions and deletions set forth in this ordinance. In addition, all applicable reference standards will be included as part of this ordinance. Three copies of the 2019 California Fire Code are on file in the Office of the City Clerk for use and examination by the public.

8.16.020 Establishment and duties of the Fire Prevention Division.

The California Fire Code shall be enforced by the Fire Prevention Division in the Fire Department of the City of Richmond, hereinafter referred to as the "Richmond Fire Department", which is hereby established and which shall be operated under the supervision of the Chief of the Richmond Fire Department, hereinafter referred to as the "Fire Chief."

- a) The Fire Marshal in charge of the Fire Prevention Division shall be appointed by the Fire Chief.
- b) The Deputy Fire Marshal in charge of the Fire Prevention Division in the absence of the Fire Marshal shall be appointed by the Fire Chief.
- c) The Chief of the Fire Department shall recommend to the City Manager the employment of technical staff members, who, when such authorization is made, shall be selected on the basis of examination to determine their qualifications for the position.

- d) The Fire Chief may designate and direct certified and or qualified members of the suppression forces toward the enforcement of the California Fire Code.

8.16.030 Definitions.

- a) Wherever the word “**jurisdiction**” is used in the in California Fire Code, it means the City of Richmond.
- b) Wherever the words “Fire Code Official” are used they mean Fire Marshal or Deputy Fire Marshal in the absence of the Fire Marshal.
- c) Wherever the words “**Fire Chief**” are used in the California Fire Code they mean the Fire Chief of the City of Richmond, or said Fire Chief's authorized representative. The term “**Chief**” also means Fire Chief.
- d) Wherever the words “Key Box” are used in the California Fire Code they mean Knox Box.

8.16.035 Findings and Conclusion.

- a) Findings. Pursuant to Sections 17958.5 and 17958.7 of the State of California Health and Safety Code, the City Council of the City of Richmond finds that the following changes or modifications are needed and are reasonably necessary because of certain local climatic, geological and topographic conditions.
- b) Local Conditions. The following local conditions make necessary the changes or modifications in the California Fire Code and the State Building Standards Code in order to provide a reasonable degree of fire and life safety in the City.

(1) Climatic.

- a) Precipitation and Relative Humidity. Precipitation ranges from 15 to 24 inches per year with an average of 15 inches per year. Ninety percent falls during the months of October through March and 10 percent from April through September.

Typically, 0.8 percent of rainfall occurs during the fire season. This is a dry period of at least six months. Additionally, the area is subject to recurrent drought. The Climatic region is currently in a drought phase that has lasted eight years. A previous drought began in 1978 and lasted four years. Additional droughts can be expected locally in the future.

Relative humidity remains in the middle range most of the time. It ranges from 45 to 65 percent during spring, summer and fall; and from 60 to 90 percent in the winter. The coastal fog that occasionally occurs can raise summer humidity, particularly at night. Summer humidity can fall as low as 12 percent.

- b) Temperature. Temperatures have been recorded as high as 106⁰ F. Average summer highs are in the 90⁰F range.
- c) Winds. Prevailing winds in the area are from the south or southwest in the mornings and from the north or northwest in the afternoons. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 14 miles per hour (MPH) to 23 MPH range, gusting from 25 to 35 MPH. Forty (40) MPH winds are experienced occasionally and winds up to 55 MPH have been registered locally. During the winter half of the year, strong, dry, gusty winds from the north move through the area for several days, creating extremely dry conditions.
- d) Impact. The above-referenced local climatic conditions affect the acceleration, intensity, and size of fire in the community. Times of little or no rainfall, of low humidity, and high temperatures create extremely hazardous conditions, particularly as they relate to wood shake and

shingle roof fires and conflagrations. The winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another commonly found in the City of Richmond. During wood shake and shingle roof fires, or exposure fires, winds can carry sparks and burning brands to other structures, thus spreading the fire and causing conflagrations.

Hot, dry winds that can be experienced any time of the year can force a fire to move in any direction in heavily vegetated interface areas. In building fires, winds can literally force fires back into the building and can create a blow torch effect, in addition to preventing "natural" ventilation and cross-ventilation efforts. Winds, high temperatures, and low humidity expose the entire community to the threat of conflagration.

(2) Geological.

a) Seismicity. Contra Costa County is located in Seismic Risk Zone 4, which is the worst earthquake area in the United States. Buildings and other structures in Zone 4 can experience major seismic damage. Contra Costa County is in close proximity to the San Andreas Fault and contains all or portions of the Hayward, Calaveras, Concord, Antioch, Rodgers, Mt. Diablo, and other lesser faults. The Hayward fault has been identified as a likely sight for a major earthquake event in the 7+ Richter range. Minor tremblers from seismic activity are not uncommon in the area.

b) Impact. Earthquakes of the magnitude experienced locally can cause major damage to electrical transmission facilities which, in turn, cause power failures while at the same time starting fires throughout the city. The occurrence of multiple fires will quickly deplete existing fire department resources, thereby reducing and/or delaying their response to any given fire. Additionally, without electrical power, elevators, smoke management systems, lighting systems, alarm systems and other electrical equipment urgently needed for building evacuation and fire control in large buildings would be inoperative, thereby resulting in loss of life and/or major fire losses in such buildings.

The above local geologic conditions increase the magnitude, exposure, accessibility problems, and fire hazards presented to the City of Richmond. Fire following an earthquake has the potential of causing greater loss of life and damage than the earthquake itself. Hazardous materials, particularly toxic gases, could pose the greatest threat to the largest number, should a significant seismic event occur. Public Safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwelling or structure fires. Other variables may tend to intensify the situation, such as:

1. The extent of damage to the water system;
2. The extent of isolation due to bridge and/or freeway overpass collapse;
3. The extent of roadway damage and/or amount of debris blocking the roadway;
4. Climatological conditions (hot, dry weather with high winds);
5. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours;
6. The availability of timely mutual aid or military assistance; or
7. The likelihood that small fires will rapidly grow to conflagration proportions.

(3) Topographic.

a) Soils. The area is replete with various soils which are unstable; clay loam and alluvial fans being predominant. These soil conditions are moderately to severely prone to swelling and shrinking, are plastic and tend to liquefy.

b) Vegetation. Highly combustible dry grass, weeds and brush are common in the hilly and open space areas adjacent to built-up locations six to eight months of each year. Many of these areas frequently experience wildland fires which threaten nearby buildings, particularly those with wood roofs or sidings. This condition can be found throughout the City, especially in wildland interface areas.

c) Surface Features. The arrangement and location of natural and manmade surface features, including hills, canyons, creeks, steep slopes, and historical slides, housing developments, commercial developments, fire stations, streets and roads, combine to limit feasible response routes for fire resources. Fires moving through steep terrain can move 16-30 times faster than on level ground. Erratic terrain and erratic winds can cause fires to grow in an unpredictable manner.

d) Buildings, Landscaping and Terrain. Many commercial and residential buildings and apartment complexes have building and landscape features and designs which preclude or greatly limit any approach or operational access to them by fire department vehicles. There are many concentrations of houses and other buildings with untreated wood shake or shingle roofs or sidings in the City which are well within 10 feet of each other. There are many such buildings to which access to all but one side is made virtually impossible due to landscaping, fences, electrical transmission lines, slopes or other buildings.

e) Electrical Transmission Equipment. Above-ground electrical power transmission lines suspended on poles and towers exist throughout the City. Many of the power poles are nearing the end of their useful life and would fail early in an area-wide fire. Many power line poles are located adjacent to streets and roads and many of the transmission wires are suspended above dry vegetation and untreated wood shake or shingle roofs. These cables are also suspended above large areas of dry vegetation and untreated wood shake or shingle roofs.

f) Impact.

The previously listed local topographical conditions increase the magnitude, exposure and accessibility problems associated with the fire hazards which arise within the City. Should a significant emergency event occur, such as an area-wide conflagration, public safety resources would have to be prioritized to mitigate the greatest threat, and may likely be unavailable for smaller single dwelling or structure fires. Other variables may tend to intensify the situation, such as:

1. The extent of damage to the water system;
2. The extent of isolation due to bridge and/or freeway overpass collapse;
3. The extent of roadway damage and/or amount of debris blocking the roadways;
4. Climatical conditions (hot, dry weather with high winds);
5. Time of day will influence the amount of traffic on roadways and could intensify the risk to life during normal business hours;
6. The likelihood that small fires will rapidly grow to conflagration proportions.

g) Conclusion.

Local climatic, geologic and topographic conditions impact fire prevention efforts, and the frequency, spread, acceleration, intensity, and size of fires which involve buildings in this community. Further, the local climatic, geologic and topographic conditions impact potential damage to all structures from earthquake and subsequent fire. Therefore, it is found to be

reasonably necessary that the 2019 California Fire Code be changed or modified to mitigate the effects of the risks associated with the above conditions.

8.16.040 Amendments to the California Fire Code.

Pursuant to Section 17958 of the State of California Health and Safety Code, the City Council of the City of Richmond, in adopting and amending the 2019 Edition of the California Fire Code, changes or modifies such provisions which are described in the following sections. The following changes and/or modifications to the 2019 Edition of the California Fire Code are found to be reasonably necessary to mitigate the impacts described above which are caused by the above described local climatic, geological and topographic conditions. The pertinent chapters and sections of the California Fire Code which are amended are as follows:

A. Amendment of Chapter 1, Scope and Administration is amended as follows:

(1) Section 101.1 is amended to read as follows:

(a) **Section 101.1 Title.** These regulations shall be known as the Fire Code of the City of Richmond, hereinafter referred to as “this code.”

(2) Section 102.1 is amended by adding item (5) to the following:

(a) **Section 102.1 Construction and design provisions.**

5. Where not otherwise limited by law, the provisions of this code shall apply to vehicles, ships, boats, trains, and mobile vehicles when said vehicles are fixed in a specific location within the boundaries of this jurisdiction.

(3) Section 103.5 is amended by adding a subsection to read as follows:

(a) **Section 103.5 Fire Prevention Personnel as Peace Officers** The Fire Chief and said Chief's designees shall have the powers of peace officers while engaging in the performance of their duties with respect to the prevention, investigation and suppression of fires and the protection and prevention of life and property against the hazards of fire and conflagration.

The Fire Chief, or his/her duly authorized agents, may issue citations for violations of this ordinance in the same manner as a county or city is authorized to do so by Chapter 5C (commencing with Section 853.5), Title 3, Part 2, of the California Penal Code.

(4) Section 104.2.1 is amended by adding subsection to read as follows:

(a) **Section 104.2.1 Plan Review.** Whenever any land is to be developed or a building is to be constructed, before undertaking any construction or development, applicants shall submit building plans and specifications to the Richmond Fire Department which includes an aerial pre-fire plan for said Department's retention and review for compliance with this ordinance and other applicable regulations.

(5) Section 104.2.2 is amended by adding subsection to read as follows:

(a) **Section 104.2.2. Development Requirements.** This section shall be applicable whenever any land is developed or a building is constructed or improved which would require:

1. Provision of a water supply for fire protection;
2. Provision of access for fire apparatus;
3. An occupancy for the storage, handling, or use of any hazardous substance, material process or device;

4. Occupancies for which a fire department has responsibility for enforcement of laws or ordinances for fire safety or for the preservation of property or lives; or
5. Provisions to control the spread of fire.

(6) Section 104.12 is amended by adding subsection to read as follows:

(a) **Section 104.12. Fire Chief Fire Prevention Scope.** The Fire Chief may order, in writing, the correction, elimination or abatement of any fire or life hazard or any violation of this ordinance including the code and standards incorporated by reference herein when the correction, elimination or abatement is necessary for the prevention or suppression of fires or conflagrations or for the protection or preservation of life or property against the hazards of fire or conflagration.

(7) Section 104.12.1 is amended by adding subsection to read as follows:

a) **Section 104.12.1 Penalties.** Every person who violates any provision of this ordinance, and any provision of the California Fire Code as adopted by reference herein, is guilty of a misdemeanor. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue. Any violator shall be required to correct or remedy such violations or defects within a time specified by the Fire Chief or, when not otherwise specified, within ten (10) days. The application of the aforesaid misdemeanor penalty shall not be held to prevent the enforced removal of prohibited conditions.

This section is drafted pursuant to Section 13871 of the Health and Safety Code and is not intended to create a different or separate penalty.

(8) Section 105.6 is amended to read as follows:

a) **Section 105.6 Required operational permits.** The fire code official is authorized to issue operational permits for the operations set forth in Sections 105.6.1 through 105.6.64. Make sure all operational permits are numbered correctly.

(9) Table 105.6.9 is amended to read as follows:

a) **Table 105.6.9. Permit Amounts for Compressed Gases.** Only the listed amount for Inert and simple asphyxiant is amended to read 1,000 cubic feet at NTP. The remaining gases listed remain unchanged.

TYPE OF GAS	Amount (cubic feet at NTP)
Inert and simple asphyxiant	1,000 ^a

a. For carbon dioxide used in beverage dispensing applications, see Section 105.6.4.

(10) Section 105.6.31.1 is added to read as follows:

a) **Section 105.6.31.1 Tank Vehicle Dispensing.** An operational permit is required the fueling of motor vehicles at approved locations from a tank vehicle. Also includes the limited or temporary fueling operations for special events (i.e. fueling or watercraft from shore, piers, floats, or barges).

(11) Section 105.6.38 is amended to read as follows:

a) **Section 105.6.38 Cannabis/Plant Extraction Related System(s)/Operations.** An operational permit is required for any of the following cannabis/plant extraction related systems operations.

- | | |
|-----------------------------|---------------------------|
| 1. Cultivation | 2. Manufacturing |
| 3. Plant Extraction Systems | 4. Distribution |
| 5. Testing/Lab | 6. Carbon Dioxide Systems |

(12) Section 105.6.48 is amended to read as follows:

a) **Section 105.6.50 Wood products.** An operational permit is required to store chips, hogged material, wood or other combustible pallets, lumber or plywood in excess of 200 cubic feet (6 m³)/34.19 square feet.

(13) Section 105.6.52 is amended by adding subsection to read as follows:

a) **Section 105.6.52 Temporary assembly permit.** A temporary assembly permit is required 10 days prior to conduct an event that will assemble more than 1,000 people. Any event that has more than 3,000 people shall require two personnel from the Fire Prevention Division for the duration of the event to ensure that compliance of all codes are adhered to. A site floor plan review and inspection fee will be assessed. A floor plan outlining, but not limited to, the following is required.

1. Number of people expected to attend
2. Number of exits
3. Location of fire extinguisher
4. Location of tables & chairs
5. Location of stage
6. Location of tents – requires separate permit
7. Location of cooking area(s)
8. Location of any open flames used for cooking or decorating

(14) Section 105.6.53 is amended by adding subsection to read as follows:

a) **Section 105.6.53 Christmas tree sales permit.** An operational permit is required to engage in the business of Christmas tree sales operation.

(15) Section 105.6.54 is amended by adding subsection to read as follows:

a) **Section 105.6.54 Asbestos removal.** A permit is required to conduct asbestos-removal operations regulated by Section 3319.

(16) Section 105.6.55 is amended by adding subsection to read as follows:

a) **Section 105.6.55 Battery systems.** A permit is required to operate stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L) pursuant to Section 608.

(17) Section 105.6.56 is amended by adding subsection to read as follows:

a) **Section 105.6.56 Firework aerial display.** A permit is required to conduct a firework display regulated by California Code of Regulations, Title 19 and Chapter 56 of this code.

(18) Section 105.6.57 is amended by adding subsection to read as follows:

a) **Section 105.6.57 Model rockets.** A permit is required to sell model rocket motors or launch model rockets (in excess of 3 launches per event) pursuant to California Code of Regulations, Title 19, Division 1, Article 17.

(19) Section 105.6.58 is amended by adding subsection to read as follows:

a) **Section 105.6.58 Temporary water supply.** A permit is required to use a temporary water supply for construction of residential projects or subdivisions pursuant to Section 3312.1.

(20) Section 105.6.59 is amended by adding subsection to read as follows:

a) **Section 105.6.59 Tire storage.** A permit is required to store more than 1,000 cubic feet (28.3m³)/100 square feet of tires inside buildings pursuant to Chapter 34.

(21) Section 105.6.60 is amended by adding subsection to read as follows:

a) **Section 105.6.60 Change of occupancy/Site or miscellaneous inspection.** A permit is required for a requested inspection for the change of occupancy including, but not limited to inspections conducted when required by Building Official, Planning, or other governmental agency and where not elsewhere listed.

(22) Section 105.6.61 is amended by adding subsection to read as follows:

a) **Section 105.6.61 Five (5) year sprinkler test.** An operational permit is required to engage in the business of conducting the five (5) year test of an automatic fire sprinkler systems or standpipe, in accordance with NFPA 25 (Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems), 2013 California Edition.

(23) Section 105.6.62 is amended by adding subsection to read as follows:

a) **Section 105.6.62 Apartment, live-work, condo, hotel or motel.** An operational permit is required to operate an apartment dwelling, live-work, condo, hotel or motel.

(24) Section 105.6.63 is amended by adding subsection to read as follows:

a) **Section 105.6.63 Care facility.** An operational permit is required to operate a care facility as listed:

1. Day care with an occupant load greater than eight (8) persons.
2. Residential or commercial institutional care facility, occupancies complying with Health and Safety Code Section 13235 are exempt.

(25) Section 105.6.64 is amended by adding subsection to read as follows:

a) **Section 105.6.64 Emergency responder radio system.** An operational permit is required to operate an Emergency Responder Radio System.

(26) Section 105.7.1 is amended to read as follows:

a) **Section [A] 105.7 Required construction permits.** The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.25.

(27) Section 105.7.1 is amended to read as follows:

a) **Section [A] 105.7.1 Automatic fire-extinguishing systems.** A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Routine maintenance does not require a fire permit, except conducting a five (5) year test of an automatic fire sprinkler system or standpipe, in accordance with NFPA 25 (Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems), 2013 California Edition does require a fire permit per Section 105.6.61.

(28) Section 105.7.4 is amended to read as follows:

a) **Section 105.7.4 Compressed Gases**

Exception #1: Routine maintenance requires a fire permit approval process including but not limited to the plan review & inspection requirements by fire code official and or designee(s).

(29) Section 105.7.12 is amended by adding subsection to read as follows:

a) **Section 105.7.12 Gates and barricades across fire apparatus access roads.** A construction permit is required for the installation of or modification to a gate or barricade across a fire apparatus access road pursuant to Section 503 of California Fire Code (2019 edition).

(30) Section 105.7.13 is amended to read exception item #1 as follows:

a) **Section 105.7.13 Hazardous Materials**

Exception #1: Routine maintenance requires a fire permit approval process including but not limited to the plan review & inspection requirements by fire code official and or designee(s).

(31) Section 105.7.26 is amended by adding subsection to read as follows:

a) **Section 105.7.26 Construction, alteration, or renovation of building for which a building permit is required.** Plans shall be submitted to the fire code official for all land developments or for the construction, alteration, or renovation of a building within the City where a building permit is required.

b) **Section 105.7.26.2 Pre-construction inspection.** An inspection shall be conducted by an inspector from the Richmond Fire Prevention Division along with the closest responding engine company once any combustible materials are delivered on-site pursuant to Section 3312.1.

Exception: Non-sprinklered Group R-3 Occupancies where work does not involve a substantial addition or expansion.

c) **Section 105.7.26.3 Vegetation management plan.** A construction permit is required to implement a vegetation management plan.

d) **Section 105.7.26.4 Fire protection plan.** A construction permit is required to implement a fire protection plan.

(32) Section 105.7.27 is amended by adding subsection to read as follows:

a) **Section 105.7.27 Medical gas systems.** A construction permit is required for the installation of, or modification to, a medical gas system pursuant to Section 5306.

(33) Section 105.7.28 is amended by adding subsection to read as follows:

a) **Section 105.7.28 Refrigeration equipment.** A permit is required to install a mechanical refrigeration unit or system regulated by Chapter 6, Section 605.

(34) Section 105.7.29 is amended by adding subsection to read as follows:

a) **Section 105.7.29 Land Development, Subdivisions.** Plans shall be submitted to the fire code official for all land developments or improvements proposed within the jurisdiction that involve the subdivision of land.

(35) Section 105.7.30 is amended by adding subsection to read as follows:

a) **Section 105.7.30 Water supply for fire protection.** Plans shall be submitted to the fire code official for the purpose of determining whether adequate water supplies, fire hydrants, and associated systems are provided for all facilities, buildings or portions of buildings either constructed or moved into the City pursuant to Section 507 and Section 3312.1.

(36) Section 105.8 & 105.8.1 is added to read as follows:

a) **Section 105.8 Responsibility of construction permittee.** Construction permits shall be presumed by the Fire Prevention Division to incorporate all of the work that the applicant, the

applicant's agent, employees and/or contractors shall carry out. Work performed shall be in accordance with the approved plans and with all requirements of this code and any other laws or regulations applicable thereto. No Fire Prevention Division approval shall relieve or exonerate any person from the responsibility of complying with the provisions of this code nor shall any vested rights be created for any work performed in violation of this code.

b) **Section 105.8.1 Responsibility of operational permittee.** Operational permits shall be presumed by the Fire Prevention Division to incorporate all of the requirements of the operational permit that the applicant, the applicant's agent, employees and/or contractors shall carry out. All requirements shall be in accordance with this code and any other laws or regulations applicable thereto. No Fire Prevention Division approval shall relieve or exonerate any person from the responsibility of complying with the provisions of this code nor shall any vested rights be created for any requirements not followed in violation of this code.

(37) Section 106.2.1 is amended by adding subsection read as follows:

a) **Section 106.2.1 Local Fees.** The City Council may, by resolution, establish a schedule of non-discriminatory fees to be charged and collected, solely to defray the Richmond Fire Department's reasonable costs for plan review of fire protection equipment and systems, including, but not limited to, the plans set forth in Section 105.1.2; requested or required inspection services; and issuance of permits. Such fees shall become effective only after the City Council has reviewed such and approved the fee schedule. At least one copy of such approved fee schedule shall be filed with the City Clerk's Office. Additional copies shall be kept in the main business office of the Richmond Fire Department for reference by, and distribution to, the public.

(38) Section 106.6 is amended by adding subsection to read as follows:

a) **Section 106.6 Fire Suppression and Emergency Mitigation Fees.** The Richmond Fire Department may charge fees that reasonably constitute the cost of suppression of any fire or emergency mitigation against a property owner or other responsible person when the fire or emergency is a result of that person's violation of any federal, state statute or local ordinance. The Richmond Fire Department may charge fees to recover the reasonable costs of services necessary to protect the public health and safety associated with motor vehicle incidents, hazardous materials spills, discharges or threatened discharge of hazardous (or suspected hazardous) materials, motor vehicle fires, motor vehicle extrications, pipeline or power line incidents, and origin and cause investigations.

(39) Section 110.4 is amended to read as follows:

a) **Section 110.4 Violation penalties.** Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than \$5,000 dollars, in accordance with Government Code Section 530694. The imposition of one penalty for any violation shall not excuse the violation or permit it to continue. All such persons shall be required to correct or remedy such violations or defects within a reasonable time. When not otherwise specified, 10 days will apply. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

b) **Section 110.4.2 Vegetation Abatement.** In addition to the imposition of the penalties herein described, the fire code official is authorized to institute appropriate action to remove vegetation standard violations by an authorized City of Richmond contractors at the cost to the property owner, but only after the property owner has been notified and had the appropriate time to mitigate but has failed to resolve the noted violations.

(40) Section 112.4 is amended to read as follows:

a) **Section 112.4 Failure to Comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform, remove a violation or unsafe condition, shall be liable to a fine of not less than \$250.00 dollars or more than \$2,000.00 dollars.

(41) Section 113.2.1 is amended by adding subsection read as follows:

a) **Section 113.2.1 Local Fees.** The City Council may, by resolution, establish a schedule of non-discriminatory fees to be charged and collected, solely to defray the Richmond Fire Department's reasonable costs for plan review of fire protection equipment and systems, including, but not limited to, the plans set forth in Section 105.1.2; requested or required inspection services; and issuance of permits. Such fees shall become effective only after the City Council has reviewed such and approved the fee schedule. At least one copy of such approved fee schedule shall be filed with the City Clerk's Office. Additional copies shall be kept in the main business office of the Richmond Fire Department for reference by, and distribution to, the public.

(42) Section 113.6 is amended by adding subsection to read as follows:

a) **Section 113.6 Fire Suppression and Emergency Mitigation Fees.** The Richmond Fire Department may charge fees that reasonably constitute the cost of suppression of any fire or emergency mitigation against a property owner or other responsible person when the fire or emergency is a result of that person's violation of any federal, state statute or local ordinance. The Richmond Fire Department may charge fees to recover the reasonable costs of services necessary to protect the public health and safety associated with motor vehicle incidents, hazardous materials spills, discharges or threatened discharge of hazardous (or suspected hazardous) materials, motor vehicle fires, motor vehicle extrications, pipeline or power line incidents, and origin and cause investigations.

B. Amendment of Chapter 2 Definitions is amended as follows:

(1) Section 202-A Definitions is amended by adding the following.

a) **Administrator** shall mean the Fire Chief.

b) **All-weather driving surface.** A roadway/fire apparatus access road with a minimum surface finish of one layer of asphalt or concrete that is designed to carry the imposed weight loads of the heaviest fire apparatus.

(2) Section 202-D is amended by adding the following:

a) **Defensible space** is a concept in landscape design for homes which provides a band of managed vegetation around a home that slows movement of fire by reducing or denying fuel and provides a space for fire fighters to take a stand to protect the house.

b) **Driveway** is a private roadway that provides access to no more than two (2) single-family dwellings.

(3) Section 202-F is amended by adding the following definitions to read as follows:

a) **Firebreak:** An area in which all flammable vegetation or combustible growth is removed and cleared away, thereby eliminating fire hazardous vegetation fuels which can rapidly transmit fire. Ornamental landscaping is permissible within a firebreak as long as it is adequately irrigated, maintained and spaced so as not to provide a means of rapidly transmitting fire. (Compare to **fuel break**).

b) **Fire hazardous vegetation:** Plants which can burn easily because they generate dry undergrowth, contain flammable oils or produce significant quantities of dead or dying material. Hazardous vegetation is fuel which must be removed or strictly maintained so as not to constitute a fire hazard by igniting easily and then contributing to rapid fire spread. Seasonally dry grass, weeds, brush, and trees and ornamental vegetation that are not maintained or irrigated are examples of fire hazardous vegetation. Properly chipped, mulched and disbursed material does not constitute fire hazardous vegetation. Fire hazardous vegetation is also known as **flammable vegetation and combustible growth**.

c) **Fire resistant plants:** A relative term used to describe plants that are more resistant or less resistant than other plants to fire. Given enough heat, all vegetation will burn. Yet plants in fact differ in how fast they burn, how high a flame they produce and their ability to survive fire. Fire resistance is enhanced by higher amounts of moisture within twigs and foliage. Fire-resistant plants can lose this quality altogether if not properly maintained and irrigated.

d) **Firetrail:** A graded firebreak of sufficient width, surface, and design to provide access for personnel and equipment to suppress and to assist in preventing a surface extension of fires.

e) **Fuel break:** An area in which all flammable vegetation or combustible growth is reduced and cleared away according to established standards, thereby limiting the mass and arrangement of fire hazardous vegetation fuels which can rapidly transmit fire. Appropriate ornamental landscaping is permissible within a fuel break. Fuel reduction standards for fuel breaks limit the height of certain vegetation (brush, native shrubs, weeds and grasses), remove from trees any fuels which can ladder into the canopies, and provide adequate spacing between remaining plants.

(4) Section 202-K is amended to add a definition and read as follows:

a) **Knox Box:** (Underwriters Laboratory) UL "Listed" box, size and style, approved by the Fire Code Official or designee that meets the requirements and uses the same security key code adopted by the Fire Department.

(5) Section 202-M is amended to add a definition and read as follows:

a) **Multi-Family Residential Structures:** Multi-family residential structures comprised of four (4) or more units which access to the building or common areas, mechanical or an electrical room within the building is denied through locked doors.

(6) Section 202-N is amended to add a definition and read as follows:

a) **Nuisance Fire Alarm:** The activation of any fire protection or alarm system which results in the response of the Richmond Fire Department and is caused by malfunction, improper maintenance, negligence, or misuse, of the system by an owner, occupant, employee, or agent, or any other activation not caused by excessive heat, smoke, fire, or similar activating event.

(7) Section 202-O is amended by adding the following:

a) **Ornamental landscaping:** Decorative plants growing within a tended garden or yard which are appropriately irrigated, maintained and located to provide aesthetic decoration and functional utility, such as privacy screening, shade, weed suppression and erosion control. The use of fire-resistant plants and the removal of fire hazardous vegetation will enhance fire safety.

(8) Section 202-P is amended by adding the following:

a) **Protected aboveground tank:** A listed tank system consisting of a primary tank provided with protection from physical damage, and fire-resistive protection from a high-intensity liquid pool fire exposure. The tank system is allowed to provide these protection elements as a unit or is allowed to be an assembly of components, or a combination thereof.

(9) Section 202-R is amended by adding the following:

- a) **Responsible Party:** The person(s) charged with the responsibility for the occupancy, building or business owner.
- b) **Residential Group – R-2:** Residential occupancies containing sleeping units or more than two dwellings units where the occupants are primarily permanent in nature, including: Apartments houses, Boarding houses (non-transient) with more than 16 occupants, Condominiums, Congregate residences (non-transient) with more than 16 occupants, Convents, Dormitories, Fraternities and Sororities, Hotels (non-transient), Live/work units, Monasteries, Motels (non-transient), Vacation timeshare properties.

(10) Section 202-S is amended by adding the following:

- a) **Security Padlock:** When a property is protected by a locked fence or gate and where immediate access to the property is necessary for lifesaving and firefighting purposes, it shall be equipped with a Knox security padlock to be installed at a location approved by the Fire Code Official or his designee. It shall then be the responsibility of the responsible party to see that the fence or gate is secured properly so that the security padlock is accessible.
- b) **Security Cap:** A Fire Department Connection (FDC) plug and cap approved for use in the City of Richmond by the Fire Official or designee utilizing 2 1/2" National Standard thread pattern.
- c) **Sprinkler alarm and Supervisory system (SASS):** A Dedicated Function Fire Alarm System located at the protected premise installed specifically to monitor sprinkler water-flow alarm, valve supervisory, and general trouble conditions where a building fire alarm is not required.
- d) **Substantial Addition or Expansion:** Any repair, reconstruction, rehabilitation, addition or other improvement of a building or structure that meet any of the following:
 - 1. An existing building or structure not classified as Group R-3 occupancy, which undergoes any addition of floor area that is equal to or exceeds 25 percent of the existing gross floor area.
 - 2. An existing Group R-3 building or structure, which undergoes any addition of floor area that is equal to or exceeds 50 percent of the existing gross floor area.
 - 3. An existing building or structure, which undergoes any alteration of floor area that is equal to or exceeds 50 percent of the existing gross floor area.
 - 4. A building or structure, which undergoes any combination of repair, reconstruction, rehabilitation, alteration, addition or other improvement that is equal to or exceeds 50 percent of the existing gross floor area.
 - 5. If in the determination of the building official the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed.
 - 6. The cost of which equals to or exceeds 50 percent of the market value of the structure before the improvement or repair is started.
 - 6.1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
 - 6.2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

(11) Section 202-T is amended by adding the following:

- a) **Temporary fire department access road for construction:** An approved temporary roadway for emergency vehicle use during construction of residential subdivision projects.

b) **Temporary fire department access road for construction of one (1) residential (R3) unit.** A temporary roadway for emergency vehicle use during construction of an individual residential (R3) structure where a fire department access road is required as part of the project.

c) **Temporary water supply.** Water stored for firefighting purposes in an approved aboveground tank during combustible construction.

d) **Tree litter.** Any limbs, bark, branches and/or leaves in contact with other vegetation or left to gather on the ground

(12) Section 202-V is amended by adding the following:

a) **Very High Fire Hazard Severity Zones (VHFHSZ):** Any geographic area designated pursuant to California Government Code Section 51178 to contain the type and condition of vegetation, topography, weather and structure density to potentially increase the possibility of wildland conflagration fires. As a community adjacent to extensive wildland areas, the City of Richmond contains several VHFHS zones. A map of these zones is available from the Richmond Fire Department. Fire hazard reduction standards are more extensive for properties located within VHFHS zones.

(13) Section 202-W is amended by adding the following:

a) **WILDLAND-URBAN INTERFACE FIRE AREA.** A geographical area identified by the City of Richmond as a “Fire Hazard Severity Zone” in accordance with the Public Resources Code, Sections 4201 through 4204, and Government Code, Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires, as designated on the map titled Very High Fire Severity Zones.

C. Amendment of Chapter 3 General Requirements is amended as follows:

(1) Section 304.1.2 is added to read as follows:

a) **Section 304.1.2 Vegetation.** A hazard created by the growth of weeds, grass, vines, trees or other growth capable of being ignited and endangering property shall be mitigated.

(2) Section 304.1.4 is added to read as follows:

a) **Section 304.1.4 Clothes Dryers.** Clothes dryers shall be frequently cleaned to maintain the lint trap, mechanical and heating components, vent duct and associated equipment free from accumulation of lint and combustible materials.

(3) Section 308.1.4 is adopted and amended to read as follows:

a) **Section 308.1.4 Open-Flame Cooking Devices.** Charcoal burners and other open-flame cooking devices shall only be operated on combustible balconies, decks, and patios where a sprinkler device is installed according to Section 903.3.1.2.1

b) **Exception 4.** Tenant Improvement of a residential occupancy that doesn't have a fire sprinkler system or is not required by another section of the California Fire Code.

(4) Section 311 Vacant Premises is adopted in its entirety:

(5) Section 321 Automobile Wrecking Yards is added to read as follows:

(6) Section 321.1 is added to read as follows:

a) **Section 321.1 Automobile Wrecking Yard/Dismantling General.** The operation of automobile wrecking yards shall be in accordance with this section.

- (7) Section 321.2 is added to read as follows:
- a) **Section 321.2 Definitions** is added to read as follows:
1. **Automobile Wrecking Yard.** An area that stores or dismantles salvaged vehicles.
 2. **Automobile Dismantling.** The operation of dismantling or removing parts from salvaged vehicles including engines or engine parts.
- (8) Section 321.3 is added to read as follows:
- a) **Section 321.3 Requirements:** The following requirements are establishing the minimum life safety measures for an automobile wrecking and/or dismantling or similar operations.
- (9) Section 321.3.1 is added to read as follows:
- a) **Section 321.3.1 Permits.** An operation permit is required for all automobile wrecking yards, automobile dismantling operations, and similar operations.
- (10) Section 321.3.2 is added to read as follows:
- a) **Section 321.3.2 Fire Apparatus Access Roads.** Fire apparatus access roads shall be constructed throughout the site in accordance with this code and shall be maintained clear of all vehicles and stored items.
- (11) Section 321.3.3 is added to read as follows:
- a) **Section 321.3.3 Welding and cutting.** An operational permit is required for welding and cutting operations, which shall be conducted in an approved location, clear of all flammable liquids and combustible materials, including weeds, tires and all other debris.
- (12) Section 321.4.4 is added to read as follows:
- a) **Section 321.3.4 Housekeeping.** Combustible rubbish accumulated on-site shall be collected and stored in approved containers, rooms or vaults of non-combustible materials. Combustible vegetation, cut or uncut, shall be removed when determined by the fire code official to be a fire hazard.
- (13) Section 321.3.5 is added to read as follows:
- a) **Section 321.3.5 Fire Protection.** Offices, storage buildings and vehicles used for site operations shall each be provided with at least one portable fire extinguisher with not less than a 4-A:40-B-C rating. When required by the fire code official, additional fire extinguishers shall be provided.
- (14) Section 321.3.6 is added to read as follows:
- a) **Section 321.3.6 Tire storage.** Tires shall be stored in racks or in a manner as approved by the fire code official.
- (15) Section 321.3.7 is added to read as follows:
- a) **Section 321.3.7 Distance from Water Supply.** Tire storage shall be located on-site and no further than 500 feet from a fire hydrant or an approved water supply as determined by the fire code official.
- (16) Section 321.3.8 is added to read as follows:

a) **Section 321.3.8 Storage Piles.** Storage piles shall be located a minimum of 20 feet from property lines and shall have an unobstructed access road on all sides of not less than 20 feet.

(17) Section 321.3.9 is added to read as follows:

a) **Section 321.3.9 Burning operations.** The burning of salvaged vehicles and salvaged or waste materials is prohibited.

(18) Section 321.3.10 is added to read as follows:

a) **Section 321.3.10 Motor vehicle fluids.** Motor vehicle fluid shall be drained from salvaged vehicles when such liquids are leaking onto the ground and prior to dismantling or removing engine/motor parts.

(19) Section 321.3.10.1 is added to read as follows:

a) **Section 321.3.10.1 Mitigation of leaking fluids.** Precautions shall be taken to prevent fluids from salvaged vehicles from leaking on to the ground. Supplies or equipment capable of mitigating leaks from fuel tanks, crankcases, brake systems and transmissions shall be kept available on-site. Single-use plugs, diking and absorbent materials shall be disposed of as hazardous waste and removed from the site in a manner in accordance with federal, state and local requirements.

(20) Section 321.3.11 is added to read as follows:

a) **Section 321.3.11 Fuel tanks.** Fuel tanks of salvaged vehicles shall be emptied of all flammable fuels (gasoline, diesel) in an approved manner and stored in approved tanks.

(21) Section 321.3.11.1 is added to read as follows:

a) **Section 321.3.11.1 Repair of vehicle fuel tanks.** The repair of fuel tanks, including cutting, welding or drilling of any kind, is prohibited.

(22) Section 321.3.12 is added to read as follows:

a) **Section 321.3.12 Lead acid batteries.** Lead acid batteries shall be removed from all salvaged vehicles and stored in an approved manner in a location approved by the fire code official.

D. Amendment of Chapter 4 Emergency Planning and Preparedness is amended as follows:

(1) Section 401.5.1 is added to read as follows.

a) **Section 401.5.1 Unwarranted fire alarm notification.** Notification of emergency responders based on an unwarranted alarm may be punishable by a fine. In addition, the responsible party may be liable for the operational and/or administrative costs incurred from the emergency response and/or mitigation procedures resulting from an unwarranted fire alarm notification.

(2) Section 401.10 is added to read as follows.

b) **Section 401.10 Aerial Pre-Plans.** The fire official is authorized to require an approved fire aerial pre-plan and evacuation plan to be prepared and maintained for the occupancies outlined in section 408.2.

(3) Section 402 is amended to add a definition and read as follows.

a) **Section 402 Definitions. Unwarranted fire alarm notification.** The giving, signaling or transmission of an alarm notification to a public fire station or emergency communications center when such alarm is the result of a defective condition of an alarm system, system servicing or testing, construction activities, ordinary household activities or other cause when no such danger exists.

(4) Section 407.8 Facility Hazard Analysis is added to read as follows.

a) **Section 408.1 General.** A fire protection engineer stamped hazard analysis shall be completed every three (3) years or when a facility area(s) has added, removed, or modified the facility or area(s) of operations within the facility as deemed by the code official to update the existing plan.

(5) Section 408 Aerial Pre-Plans is added to read as follows.

a) **Section 408.1 General.** Where required by the fire code official aerial pre-plans, evacuation plans shall comply with the requirements of Sections 408.2 through 408.5.1.

(6) Section 408.2 is added to read as follows.

a) **Section 408.2 Where required.** An approved fire aerial pre-plan and evacuation plan shall be prepared and maintained for the following occupancies and buildings.

1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 1,000.
2. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
3. Group E.
4. Group F buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge. In addition any facility that has plant cultivation, extraction process within the facility regardless of occupant load or portion of the facility deemed as an F occupancy.
5. Group H. including any occupancy that is in the Contra Costa Health Services Hazardous Materials Programs larger than 5,000 square feet.
6. Group I.
7. Group R-1. Residential occupancies containing twenty (20) or more sleeping units in complex.
8. Group R-2. Residential occupancies containing twenty (20) or more sleeping units in complex.
9. Group R-4 Residential occupancies exceeding 3,000 square feet in aggregate floor area.
10. High-rise buildings.
11. Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
12. Covered malls exceeding 50,000 square feet in aggregate floor area.
13. Open mall buildings exceeding 20,000 square feet in aggregate area within perimeter line.
14. Underground buildings.
15. Buildings with an atrium and having an occupancy in Group A, E or M.

(7) Section 408.3 is added to read as follows.

a) **Section 408.3 Contents of aerial pre-plans.** Aerial pre-plans contents shall include but not be limited to the following in accordance with Section 408.1 & and 408.2:

1. Knox Box and/or Haz Mat Knox cabinet location
2. Fire Alarm Control Panel (FACP)
3. Emergency vehicle access
4. Post Indicator Valve (PIV)
5. OS&Y valve
6. Location of hazardous materials
7. Sprinkler riser
8. Gas valve
9. Electrical main valve
10. Fire Department Connection (FDC)
11. Hydrant location
12. Elevator equipment room

E. Amendment of Chapter 5 Fire Service Features is amended as follows:

(1) Section 503.2.1.1 is amended by adding the following:

a) **Section 503.2.1.1 Access to Very High Fire Hazard Severity Zones and Open Space.**

1. Fire apparatus access roads shall have an unobstructed width of not less than 26 feet (7924.8 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

2. It shall be unlawful to block access to any of the fire access roads into open space which are identified on lists or maps contained in the document entitled "Exhibit B - Access Roads in Very High Fire Hazard Severity Zones," copies of which shall be maintained at the City Clerk's Office and at the Richmond Public Library. Any obstruction of an access road identified on said map shall be deemed to be a nuisance and shall be subject to abatement as set forth in Section 8.16.060 (c) of the Municipal Code of the City of Richmond.

3. When access to open land/space or a fire trail system maintained for public or private use is obstructed by new development, the developer shall provide alternate access, approved by the Fire Department, for fire personnel and equipment. Any obstruction of access to open land/space or a fire trail system maintained for public or private use shall be deemed to be a nuisance and shall be subject to abatement as set forth in Section 8.16.060 (c) of the Municipal Code of the City of Richmond.

(2) Section 503.2.6.1 is amended by adding the following:

a) **Section 503.2.6.1 Evaluation and maintenance.** All existing private bridges and elevated surfaces that are a part of the fire department access roadway shall be evaluated by a California licensed civil engineer experienced in structural engineering or a California licensed structural engineer, for safety and weight rating, in accordance with American Association of State Highway and Transportation Officials (AASHTO) Manual: "The Manual for Bridge Evaluation," Second Edition, or other approved standard. Vehicle load limits shall be posted at both entrances to bridges. All bridges and elevated structures providing fire department access shall be routinely maintained in accordance with Section 503.2.6 or when directed by the fire code official or authorized designee.

(3) Section 503.2.6.1 is amended to read as follows:

a) **Section 503.3 Marking.** Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING – FIRE LANE in accordance

with the California Vehicle Code, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(4) Section 505.1 is amended to read as follows:

a) **Section 505.1 Address identification.** New and existing buildings shall be provided with approved illuminated or other approved means of address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numerals or alphabetic letters. Numbers shall not be spelled out. Character size and stroke shall be in accordance with Section 505.1.1 through 505.1.2. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response in accordance with this code and Section 505.1.3. Where access is by means of a private road and the building cannot be viewed from the public way or when determined by the fire code official, a monument, pole, or other approved illuminated sign or other approved means shall be used to identify the structure. Address identification shall be maintained.

(5) Section 505.1.1 is added to read as follows:

a) **505.1.1 One- and two- family dwellings.** Each address identification character shall be not less than four (4) inches high with a minimum stroke width of one-half (0.5) inch.

(6) Section 505.1.2 is added to read as follows:

a) **505.1.2 Other than one and two-family dwellings.** Each address identification character shall be not less than twelve (12) inches high with a minimum stroke width of one (1) inch. Suite and unit directional numbers shall be not less than six (6) inches high with a minimum stroke width of three-quarter (0.75) inch. Numbers shall be not less than four (4) inches high with a minimum stroke width of one-half (0.5) inch.

(7) Section 505.1.3 is added to read as follows:

a) **505.1.3 Complex directory.** Where two or more buildings cannot be viewed from the public way or when determined by the fire code official, an approved illuminated complex directory, monument, pole, or other approved sign or means shall be used to identify the structures at the main entrances to the property.

(8) Section 505.3 is added to read as follows:

a) **Section 505.3 Street names and addressing.** Street names and addressing shall be submitted for review and approval to the fire code official, whose approval will not be unreasonably withheld. The purpose of the review is to verify that new street names and addressing will not duplicate existing street names and addressing.

(9) Section 506.1 is amended by adding Subsection 506.1 items number one (1) through number seven (7) to read as follows:

a) **Section 506.1 Where required.** Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire official is authorized to require a Knox Rapid Entry System to be installed in an approved location. The Knox Rapid Entry System shall be of an approved type listed in accordance with UL 1037, and shall contain keys to gain necessary access as required by the fire code official. If any of the following items listed (1) thru (7) is located at an occupancy, then a Knox Rapid Entry System shall be required.

1. **Fire suppression and standpipe systems.** When a building within the city limits is protected by an automatic fire suppression and/or standpipe system, it shall be equipped with a Knox Rapid Entry System, installed at a location approved by the Fire Code Official or designee.
2. **Automatic Alarm Systems.** When a building within the city limits is protected by an automatic fire suppression and/or standpipe system, it shall be equipped with a Knox Rapid Entry System, installed at a location approved by the Fire Code Official or designee.
3. **Multi-family residential structures.** Multi-family residential structures comprised of four (4) or more units which access to the building or common areas or mechanical or an electrical room within the building is denied through locked doors.
4. **Automatic Gates.** When a property is accessed through a gate or cross arm that impedes ingress through required fire lanes by means of a key or swipe card, it shall be equipped with a key switch to be installed at a location approved by the Fire Code Official or designee.
5. **Security Padlock.** When a property is protected by a locked fence or gate and where immediate access to the property is necessary for life saving and firefighting purposes, it shall be equipped with a security padlock to be installed at a location approved by the Fire Code Official or designee. It shall then be the responsibility of the responsible party to see that the fence or gate is secured properly so that the security padlock is accessible.
6. **Construction Sites.** When a construction site is to be secured by a locked fence or gate, that site will fall under section 2 subsection E, during the duration of construction or until said fence or gate is removed. It shall then be the responsibility of the construction company to see that the fence or gate is secured properly so that the security padlock is accessible.
7. **Security of Fire Department Connections (FDC).** When a building is protected by an automatic sprinkler and/or standpipe system and the fire department connection is exposed to vandalism, the Fire Code Official or designee shall require that a security gate be installed around the standpipe and that a Knox security cap be installed.

Exception: This shall not apply to any owner-occupied one and two family dwellings. Owners of single and two family occupancies are encouraged to participate voluntarily utilizing a residential key box.

(10) Section 506.1.1 is amended to read as follows:

- a) **Section 506.1.1 Locks.** An approved lock(s) shall be installed on gate(s), or similar barrier(s) and security caps for all fire department connections to an automatic sprinkler and/or standpipe system.

(11) Section 506.1.3 is added to read as follows:

- a) **Section 506.1.3 Knox Rapid Entry System storage cabinet contents.** Any facility, firm, or corporation that handles, uses, or stores hazardous material and or total aggregate is more than 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas, shall have a Knox Box Haz Mat Cabinet, model #1100, for Richmond Fire Department use. A weatherproof cabinet, model #1201-WH, shall be installed when appropriate. Exception: not required for Underground Storage Tanks (UST).

The cabinet shall contain the following items:

1. Binder for Haz Mat Knox Box with:
 - a. List of responsible parties' phone numbers (i.e. plant manager, owner, all principal employees, management types, and major chemical manufacturers).
 - b. An aerial pre-plan of the facility, to include room numbering, extinguishing systems (outside stem and yoke (OSY), post indicator valves (PIV), fire

department connections (FDC), drains, secondary containment, ventilation systems, and hydrant locations (See attached aerial pre-plan sample).

- c. Alphabetical list of chemicals, room number location, and approximate quantity and strength (i.e. 50%, 60%, 85%, etc.).
 - d. Safety Data Sheet (SDS) of all chemicals in alphabetical order.
2. Keys for Haz Mat Knox Box:
 - a. Keys to all locked doors with plastic identification tags corresponding to complex aerial pre-plan.
 3. Location of Haz Mat Knox Box:
 - a. The Knox Box shall be located on the exterior of the building near the front entrance as shown by Fire Code Official or designee.

(12) Section 506.1.4 is added to read as follows:

a) **Section 506.1.4 Knox Rapid Entry System key box contents.** The Key boxes shall contain, but not be limited to, the following items as designated by the Fire Code Official or designee.

The Key Box shall contain the following items:

1. Labeled keys to locked points of egress, whether in interior or exterior of such buildings.
2. Labeled Keys to the locked mechanical rooms.
3. Labeled keys to any fence or secured areas not covered in Section 506.1 subsection (4), (5), or (6).
4. Labeled keys to any other areas that may be required by the Fire Code Official or designee.
5. A card containing the emergency contact people and phone numbers for each occupancy.
6. Hazardous Safety Data Sheet (SDS).
7. Aerial pre-plan.

(13) Section 506.1.5 is added to read as follows:

a) **Section 506.1.5 Alert Decals.** Alert decals approved by the Fire Code Official or designee, to alert fire companies of the presence of security features covered by this ordinance, will be displayed on any outside doors or windows as designated by the Fire Code Official or designee.

(14) Section 506.2 is amended to read as follows:

a) **Section 506.2 Knox Rapid Entry System maintenance.** The operator of the building shall immediately notify the Fire Code Official or designee and provide the new key when a lock is changed or re-keyed. The key to such lock shall be secured in the Knox Rapid Entry System.

(15) Section 507.5.1.1 is amended to read as follows:

a) **507.5.1.1 Hydrant for fire department connections.** Buildings equipped with a water-based fire protection system installed in accordance with Section 903 through 905 shall have a fire hydrant within 100 feet of the fire department connections, or as approved by the fire code official. (Also see Section 912.2).

(16) Section 510 is amended to read as follows:

1. Section 510 Emergency Responder Radio Coverage (ERRC) is adopted in its entirety, with the exceptions of the following.

a) **510.1 Emergency responder radio coverage in new buildings, exception #1.** Exception #1 is deleted.

b) **510.3 Permits required.** Permits shall be required as set forth in Sections 105.6 and 105.7. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

F. Amendment of Chapter 9 Fire Protection Systems is amended as follows:

(1) Section 901.6.2.2 is amended by adding to read as follows:

a) **Section 901.6.2.2 Inspection Records.** Records of all Inspections, testing and maintenance for all water-based fire suppression systems shall be completed on the forms found in annex B of NFPA 25, California Edition.

(2) Section 902.1 is amended by adding 902.1-U to read as follows:

a) **Section 902.1 Definitions. Undetermined Occupancy.** In buildings of undeclared use with floor to structure height greater than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Extra Hazard Group I design density. In buildings of undeclared use with floor to structure height less than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Ordinary Group II design density. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.

(3) Section 902.1 is amended by adding 902.1-S to read as follows:

a) **Section 902.1 Definitions. Substantial Addition or Expansion:** Any repair, reconstruction, rehabilitation, addition or other improvement of a building or structure that meet any of the following:

1. An existing building or structure not classified as Group R-3 occupancy, which undergoes any addition of floor area that is equal to or exceeds 25 percent of the existing gross floor area.
2. An existing Group R-3 building or structure, which undergoes any addition of floor area that is equal to or exceeds 50 percent of the existing gross floor area.
3. An existing building or structure, which undergoes any alteration of floor area that is equal to or exceeds 50 percent of the existing gross floor area.
4. A building or structure, which undergoes any combination of repair, reconstruction, rehabilitation, alteration, addition or other improvement that is equal to or exceeds 50 percent of the existing gross floor area.
5. If in the determination of the building official the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed.
 6. The cost of which equals to or exceeds 50 percent of the market value of the structure before the improvement or repair is started.
 - 6.1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the building official and that are the minimum necessary to assure safe living conditions.
 - 6.2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure.

(4) Section 903.1 is amended to read as follows:

a) **Section 903.1 General.** Automatic sprinkler systems shall comply with this section. For the purposes of this section, fire walls shall not be considered as creating separate buildings. An automatic sprinkler system shall be provided for all new buildings with a gross floor area that exceeds 5,000 square feet (464.51 m²), and in the locations set forth in Section 903.

Exception: Group U occupancies.

(5) Section 903.2 is adopted in its entirety except as amended below:

a) **Section 903.2.1.1 Group A-1.** An automatic sprinkler system shall be provided for Group A-1 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.51 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multi-theater complex.

b) **Section 903.2.1.3 Group A-3.** An automatic sprinkler system shall be provided throughout all stories containing Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.51 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The structure exceeds 10,000 square feet, contains more than one fire area containing exhibition and display rooms, and is separated into two or more buildings by fire walls of less than 4-hour fire resistance rating without openings.

c) **Section 903.2.1.4 Group A-4.** An automatic sprinkler system shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet (464.51 m²).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

d) **Section 903.2.3 Group E.** Except as provided for in Section 903.2.19 through 903.2.20 for a new public school campus, an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 5,000 square feet (464.51 M²) in area.
2. Throughout any Group E structure greater than 10,000 square feet (929.03 M²) in area, which contains more than one fire area, and which is separated into two or more buildings by fire walls of less than 4-hour fire resistance rating without openings.

3. **Section 903.2.4 Group F-1.** An automatic sprinkler system shall be provided throughout all buildings containing a Group F occupancy.

4. **Section 903.2.7 Group M & B.** An automatic sprinkler system shall be provided throughout buildings containing a Group M occupancy where the gross floor area exceeds 500 square feet.

5. **Section 903.2.8 Group R.** An automatic sprinkler system installed in accordance with Section 903.3 shall be provided throughout all Group R occupancies. Any tenant improvement of a structure that includes an R Occupancy shall be fully sprinklered.

6. **Section 903.2.8.1.1 Group R-3.** An automatic sprinkler system installed in accordance with Section 903.3.1.3 shall be permitted in Group R-3 occupancies and shall be provided throughout all one- and two-family dwellings regardless of square footage in accordance with the California Residential Code. An automatic sprinkler system shall be installed in all mobile homes, manufactured homes and multi-family manufactured homes with two or more dwelling units in accordance with Title 25 of the California Code of Regulations.

7. **Section 903.2.9 Group S-1.** An automatic sprinkler system shall be provided throughout all buildings containing Group S-1 occupancy.

8. **Section 903.2.9.1 Repair garages.** An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406 of the California Building Code, as shown:

1. Buildings having two or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 5,000 square feet (464.51 m²).
2. Buildings no more than one story above grade plane, with a fire area containing a repair garage exceeding 5,000 square feet (464.51 m²).
3. Buildings with repair garages servicing vehicles parked in basements.
4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 square feet (464.51 M²) or any tenant improvement to the structure exceeds 49% of the S-1 area.

9. **Section 903.2.10 Group S-2 enclosed parking garages.** An automatic sprinkler system shall be provided throughout buildings classified as enclosed parking garages in accordance with Section 406.6 of the California Building Code as follows:

1. Where the fire area of the enclosed parking garage exceeds 5,000 square feet (464.51 m²); or
2. Where the enclosed parking garage is located beneath other occupancy groups.

10. **Section 903.2.11.3 Buildings 35 feet or more in height.** An automatic fire extinguishing system shall be installed in all occupancies regardless of type of construction, floor area, or occupancy load if the building is three stories or more than 35 feet in height measured in accordance with the California Building Code, Chapter 5.

11. **903.2.11.7 High-piled storage.** An automatic sprinkler system shall be provided throughout buildings containing high-pile combustible storage.

12. **Section 903.2.21 Mitigation.** An automatic fire extinguishing system installed in accordance to Section 903.3 shall be provided throughout all new buildings located within the Very High Fire Hazard Severity Zone (VHFHSZ) as identified in RMC Section 8.16.080.

13. **Section 903.2.22 Fire Department Delivery Capability.** An automatic fire sprinkler shall be installed in all new buildings and occupancies or in existing buildings or structures that change occupancy classification or use, when the required fire flow exceeds 2,000 gallons per minute or the total floor area exceeds 5,000 square feet (464.51 m²).

14. **Section 903.2.23 Response Times.** An automatic fire sprinkler system shall be installed in all new buildings or occupancies which exceed a maximum running time of three minutes or a maximum response time of 5 minutes from the first-due station. Times shall be measured by the most direct route on surface streets.

15. **Section 903.2.24 Area Separation.** For the purpose of this section, buildings separated by fire walls without openings, constructed in accordance with the California Building Code, shall not be considered to create separate buildings.

(6) Section 903.1.1.3 is added to read as follows.

a) **Section 903.3.1.1.3 Undeclared Use.** In buildings of undeclared use with floor to structure height greater than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Extra Hazard Group I design density. In buildings of undeclared use with floor to structure height less than 14 feet (356 mm), the fire sprinkler system shall be designed to conform to Ordinary Group II design density. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or the occupant to upgrade the system.

(7) Section 903.3.9 is amended to read as follows.

a) **Section 903.3.9. Floor control valves.** Individual floor control valves and waterflow detection assemblies shall be provided for each floor in multi-floor buildings at an approved location.

Exception: Group R-3 and R-3.1 Occupancies

(8) Section 903.4.2 is amended to read as follows:

a) **Section 903.4.2 Alarms.** One approved audible and visual device shall be connected to every automatic sprinkler system at an approved location. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Audible and visual alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

(9) Section 903.4.2.1 Alarms is added to read as follows.

a) **Section 904.2.1 Multi-Family Residential Alarm.** Any building with three (3) or more residential structure, multi-family structure, that share a common wall(s) or is identified by its own address or separate unit identification shall have at least one exterior approved alarm notification appliance per residential structure that identifies the specific residential structure that has activated the fire alarm and/or sprinkler system.

(10) Section 903.6 is amended by adding subsections 903.6.1 and 903.6.2 to read as follows:

a) **Section 903.6.1 Substantial Addition or Expansion.** An automatic sprinkler system shall be provided throughout all existing buildings where a substantial addition or expansion occurs *and* the total fire area of the structure exceeds 5,000 square feet (464.51 m²). Group R-3 substantial additions or expansions shall comply with Section 903.2.8.1.1.

b) **Section 903.6.2 Change of occupancy classification.** Any existing building that undergoes a change of occupancy classification into a higher hazard category shall comply with the requirements of Section 903.2. Relative hazard categories of occupancy groups shall be established based upon the Heights and Areas Hazard Categories of Table 1011.5 of the 2018 edition of the International Existing Building Code, as published by the International Code Council. The requirements of Section 903.2 shall not be required when a change of occupancy classification is made to an equal or lesser hazard category. Group L occupancies shall be considered a relative hazard of 1 (highest hazard). R-3.1 occupancies shall be considered a relative hazard of 4 (lowest hazard).

(11) Section 905.3.1 subsection (2) is amended in its entirety to read as follows.

a) **Section 905.3.1 Height subsection (2).** Any building three (3) stories in height shall have a Class I standpipe installed that is interconnected with the fire sprinkler system.

(12) Section 907.4.2.3 is adopted in its entirety.

(13) Section 907.4.4 is added to read as follows:

a) **Section 907.4.4 Monitoring of other fire systems.** In buildings equipped with a fire alarm system or sprinkler alarm and supervisory service (SASS) system, where other fire suppression or extinguishing systems are installed in the building (including but not limited to commercial kitchen suppression systems, pre-action fire suppression systems, dry chemical systems, and clean agent systems), these other suppression systems shall be monitored by the SASS dedicated function fire alarm system and transmitted as a specific signal to the Central Station. The system shall be monitored in compliance with Section 907.6.6.

(14) Section 907.5.2.3.1 is amended to read as follows:

a) **Section 907.5.2.3.1 Public and common areas.** Visible alarm notification appliances shall be provided in public use areas and common use areas, including but not limited to:

1. Sanitary facilities including restrooms, bathrooms, shower rooms and locker rooms.
2. Corridors, hallways, aisles with shelving and/or fixtures obstructing the required light intensity for that area.
3. Music practice rooms.
4. Band rooms.
5. Gymnasiums.
6. Multipurpose rooms.
7. Occupational shops.
8. Occupied rooms where ambient noise impairs hearing of the fire alarm.
9. Lobbies
10. Meeting/Conference rooms.
11. Classrooms.
12. Medical exam rooms.
13. Open office areas.
14. Sales floor areas.
15. Break or lunch rooms
16. Copy or work rooms.
17. Computer server rooms exceeding 200 sq. ft.
18. File or storage rooms exceeding 200 sq. ft.

(15) Section 907.6.6 is amended to read as follows:

a) **907.6.6 Monitoring of fire alarm systems.** A fire alarm system required by this chapter, or by the California Building Code, shall be monitored by a UL-listed Central Station service in accordance with NFPA 72, Section 26.3.4 and this code.

Exception: Monitoring by a UL listed central station is not required for:

1. Single and multiple station smoke alarms required by section 907.2.10.
2. Group I-3 occupancies shall be monitored in accordance with section 907.2.6.3.
3. Residential Day Care Facilities (occupancy load of 14 or less).
4. One and two family dwellings.
5. Residential care facilities licensed by the state with an occupant load of 6 or less.
6. Occupancies with a local fire alarm system that will give an audible and visible signal at a constantly attended location, as approved by the Fire Code Official.

(16) Section 907.8.5.1 is added to read as follows:

a) **Section 907.8.5.1 Certification.** New fire alarm systems shall be UL-Certified. A Certificate of Completion and other documentation as listed in NFPA 72 shall be provided for all new fire alarm system installations. It is the responsibility of the building owner or owner's representative to obtain and maintain a current and valid certificate.

(17) Section 907.8.5.1.2 is added to read as follows:

a) **Section 907.8.5.1.2 Posting of Certificate.** The UL certificate shall be posted in a durable transparent cover within 3 feet of the fire alarm control panel within 45 days of the final acceptance test/inspection.

G. Amendment of Chapter 10 Means Of Egress is amended as follows:

(1) Section 1028.6 is amended by adding subsection 1028.6.1 to read as follows:

a) **Section 1028.6.1 Exit discharge surface.** Exterior exit pathway surfaces including permeable materials, shall be suitable for pedestrian use in inclement weather, and shall terminate at a public way as defined in the California Building Code.

(2) Amendment of Section 1030.6 is amended by adding subsection 1030.6 ((a)).

a) **Section 1030.6 ((a) Application.** The regulations herein referenced shall also apply to any Group R occupancy in existence prior to July 1, 1997.

H. Amendment of Chapter 11 Construction Requirements for Existing Buildings is amended as follows:

(1) Section 1103.1 is amended to read as follows:

a) **1103.1 Required construction.** Existing buildings shall comply with not less than the minimum provisions specified in Table 1103.1 and as further enumerated in Sections 1103.2, 1103.7 through 1103.10.

The provisions of this chapter shall not be constructed to allow the elimination of fire protection systems or a reduction in the level of fire safety provided in buildings constructed in accordance with previously adopted codes.

Exceptions:

1. Where a change in fire-resistance rating has been approved in accordance with Section 501.2 or 803.6 of the California Existing Building Code.
2. Group U occupancies.

(2) Sections 1103.3 through 1103.5.4 are deleted.

(3) Section 1105 is deleted.

I. Amendment of Chapter 23 Motor Fuel-Dispensing Facilities & Repair Garages is amended as follows:

(1) Section 2306.2.4.2 is amended to read as follows:

a) **Section 2306.2.4.2 Fleet vehicle motor fuel-dispensing facilities. Aboveground Tanks.** Class I and II and IIIA liquids may be dispensed from approved protected aboveground tanks into the fuel tanks of motor vehicles, watercraft or aircraft when installed and maintained as required by the Fire Chief and in accordance with Richmond Municipal Code Section 8.16.040.

1. **Location.** Upon approval of the Fire Chief, protected aboveground tanks may be located at farms, construction sites, gravel pits, industrial occupancies, corporation yards, other remote locations or in areas where the approved installation of underground tanks is not feasible due to soil conditions, flood plain areas, high water table or environmentally sensitive areas.

2. **Capacity.** Vaulted tanks shall not exceed 2,000 gallon capacity unless approved by the Fire Chief.

3. **Removal.** The Fire Chief shall have the sole discretion to prohibit use of vaulted tanks based on the safety of the public. Removal of vaulted tanks may be required at any time for violation of these requirements, any associated permit requirements or a change in conditions.

J. Amendment of Chapter 33 Fire Safety during Construction & Demolition is amended as follows:

(1) Section 3301.3 is added to read as follows:

a) **3301.3 Permits.** Permits shall be obtained for asbestos removal operations, temporary fire department access roads for construction, and temporary water supplies as set forth in sections 105.6 and 105.7.

(2) Section 3313.3 is amended to read as follows:

a) **3313.3 Detailed requirements.** Standpipes shall be installed in accordance with the provisions of Section 905.

Exception: When approved by the fire code official standpipes shall be either temporary or permanent in nature, and with or without a water supply, provided that such standpipes comply with the requirements of Section 905 as to capacity, outlets and materials.

(3) Section 3314.3 is amended to read as follows:

a) **3314.3 Where required.** In buildings of combustible construction required to have automatic sprinkler system by Section 903, automatic sprinkler system shall be installed prior to construction exceeding 40 feet in height above the lowest level of fire department vehicle access. Such automatic sprinkler system shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring.

(4) Section 3314.4 is amended to read as follows:

a) **3314.4 Buildings being demolished.** Where a building is being demolished and an automatic sprinkler system is existing within such a building, such automatic sprinkler system shall be maintained in an operable condition so as to be available for use by the fire department. Such automatic sprinkler system shall be demolished with the building but shall not be demolished more than one floor below the floor being demolished.

(5) Section 3314.5 is amended to read as follows:

a) **3314.5 Detailed requirements.** Automatic sprinkler systems shall be installed in accordance with the provisions of Section 903.

(6) Section 3318 Asbestos Removal is added to read as follows:

a) **3318.1 General.** Operations involving removal of asbestos or asbestos-containing materials from buildings shall be in accordance with Section 3318.

Exception: Section 3318 does not apply to the removal of asbestos from:

1. Pumps, valves, gaskets and similar equipment.
2. Pipes, ducts, girders or beams that have a length less than 21 linear feet (6400 mm).
3. Wall or ceiling panels that have an area of less than 10 square feet (0.93 m²) or a dimension of less than 10 linear feet (3048 mm).
4. Floor tiles when their removal can be completed in less than four hours.
5. Group R-3 occupancies.

b) **3318.2 Notification.** The fire code official shall be notified 24 hours prior to the commencement and closure of asbestos-removal operations. The permit applicant shall notify the building official when asbestos abatement involves the removal of materials that were used as a feature of the building's fire resistance.

c) **3318.3 Plastic Film.** Plastic film that is installed on building elements shall be flame resistant as required for combustible decorative material, in accordance with Section 807.

d) **3318.4 Signs.** Approved signs shall be posted at the entrance, exit and exit-access door, decontamination areas and waste disposal areas for asbestos-removal operations. The signs shall state that asbestos is being removed from the area, that asbestos is a suspected carcinogen, and that proper respiratory protection is required. Signs shall have a reflective surface. Lettering shall be a minimum of 2 inches (51 mm) high.

K. Amendment of Chapter 39 Plant Processing And Extraction Facilities is amended as follows:

(1) Section 3901.1.1 is added to read as follows:

a) **3901.1.1 Cannabis growing, processing, or extraction facilities.** Cannabis growing, processing and extraction facilities shall be designed and constructed in accordance with this chapter and NFPA 1, Chapter 38 as amended in Chapter 80.

L. Amendment of Chapter 49 Requirements for WUI (Wildland Urban Interface) Fire Areas is amended as follows:

(1) Section 4902.1 is amended to read as the follows:

a) **Section 4902.1 WILDLAND-URBAN INTERFACE FIRE AREA.** A geographical area identified by the City of Richmond as a “Very High Fire Hazard Severity Zone - VHFHSZ” in accordance with the Public Resources Code, Sections 4201 through 4204, and Government Code, Sections 51175 through 51189, or other areas designated by the enforcing agency to be at a significant risk from wildfires, as designated on the map titled Very High Fire Severity Zone.

(2) Section 4903 is added to read as follows:

a) **Section 4903 Fire Protection Plan.** A Fire Protection Plan (FPP), approved by the Fire Chief, shall be required for all new development within declared Very High Fire Hazard Severity Zones (VHFHSZ) and/or Wildland-Urban Interface (WUI) areas.

The FPP shall include mitigation measures consistent with the unique problems resulting from the location, topography, geology, flammable vegetation, and climate of the proposed site.

The FPP shall address access, water supply, building ignition fire resistance, fire protection systems and equipment, defensible space and vegetation management.

(3) Section 4905.2 is amended to read as follows:

a) **Section 4905.2 Construction methods and requirements within established limits.** Within the limits established by law, construction methods intended to mitigate wildfire exposure shall comply with the wildfire protection building construction requirements contained in the California Building Standards Code including the following:

1. California Building Code Chapter 7A,
2. California Residential Code Section R327,
3. California Reference Standards Code Chapter 12-7A
4. City of Richmond Local Amendments
5. Any other applicable amendments

(4) Section 4906.1.1 is added to read as follows:

a) **Section 4906.1.1 Permit required.** Permits shall be required as set forth in Section 105.7.

(3) Section 4906.2 is amended to read as follows:

a) **Section 4906.2 Application.** Buildings and structures located in the following areas shall maintain the required hazardous vegetation and fuel management:

1. All unincorporated lands designated by the State Board of Forestry and Fire Protection as State Responsibility Area (SR(A) including:
 - 1.1. Moderate Fire Hazard Severity Zones.
 - 1.2. High Fire Severity Zones.
 - 1.3. Very-high Fire Severity Zones.
2. Land designated as Very-high Fire Hazard Severity Zone by cities and other local agencies.
3. Land designated as Wildland-Urban Interface Fire Areas by cities and other local agencies.

(4) Section 4906.3 is amended to read as follows:

a) **Section 4906.3 Requirements.** Hazardous vegetation and fuels around all applicable buildings and structures shall be maintained in accordance with this section and the following laws and regulations:

1. Public Resources Code, Section 4291.
2. California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 3, Section 1299 (see guidance for implementation “General Guidelines to Create Defensible Space”).
3. California Government Code, Section 51182.
4. California Code of Regulations Title 19, Division 1, Chapter 7, Subchapter 1, Section 3.07.
5. City of Richmond Hazardous Vegetation and Fuels Management Ordinance.

(5) Section 4906.3.1 is amended to add the following exception:

a) **Section 4906.3.1 Ignition free zone.** Ignition free zones shall be provided for buildings or structures as follows:

1. Buildings or structures protected throughout by an automatic fire sprinkler system shall provide a minimum 3-foot ignition free zone as follows:
 - 1.1. Free of combustible storage material.
 - 1.2. Free of vegetation.
 - 1.3. Free of tree limbs.
 - 1.4. Use only inorganic, non-combustible ground covers, mulch, etc.(i.e. stone or gravel).
 - 1.5. Maintain free of leaves, needles, or other dead vegetative growth, regularly.
2. Buildings or structures not protected throughout by an automatic fire sprinkler system shall provide a minimum 5-foot ignition free zone as follows Storage of combustible material is prohibited.
 - 2.1. Free of combustible storage material.
 - 2.2. Free of vegetation.
 - 2.3. Free of tree limbs
 - 2.4. Use only inorganic, non-combustible ground covers, mulch, etc.(i.e. stone or gravel).
 - 2.5. Maintain free of leaves, needles, or other dead vegetative growth, regularly.

(6) Section 4907.1 is amended to read as follows:

a) **Section 4907.1 General.** Defensible space will be maintained around all buildings and structures in State Responsibility Area (SR(A) as required in Public Resources Code 4290 and “SRA Fire Safe Regulations” California Code of Regulations Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270.

b) Buildings and structures within the Very-high Fire Hazard Severity Zones of a Local Responsibility Area (LR(A) shall maintain defensible space as outlined in Government Code 51175-51189 and any local ordinance of the authority having jurisdiction.

c) Buildings and structures within the Wildland-Urban Interface Fire Area of a Local Responsibility Area (LR(A) shall maintain defensible space as outlined in the Government Code Sections 51175-51189 and local standards of the authority having jurisdiction.

(7) Section 4908.5 is added to read as follows:

a) **Section 4908.5 Water Supply.** All water systems, specifically fire hydrants and storage tanks, must be approved by the Fire department. Fire hydrants within the Very High Fire Hazard Severity Zones or wildland Urban Interface Areas shall be spaced every 300 feet and shall have a fire flow of 2500 gallons per minute or a fire flow approved by the Fire Chief. Developments that require new or “stand alone” water storage facilities may also be required to provide secondary or back-up systems, such as independently powered pumps that will ensure adequate water supply for firefighting operations.

M. Amendment of Chapter 50 Hazardous Materials – General Provisions is amended as follows:

(1) Section 5001.1.2 is added to read as follows:

a) **Section 5001.1.2 Research & Development Laboratory.** The design, installation, and operation of Research and Development Laboratory systems including reaction set-ups are exempt from the design and installation requirements for equipment provided that the Laboratory is constructed and managed in accordance with nationally recognized standards including but not limited to:

1. Is under the supervision of a technically competent individual approved by the fire code official.
2. Adheres to prudent or good laboratory practices; and
3. Uses volumes of chemicals that are usually associated with Research and Development operations.

(2) Section 5001.5.1 item number ten (10) & (11) is added to read as follows:

a) **Section 5001.5.1 Hazardous Material Management Plan (HMMP).** Where required by the fire code official, an application for permit shall include an HMMP and aerial pre-plan. The HMMP shall include, an aerial pre-plan of the facility to include, but not be limited by the following:

10. Fire Department related safety equipment
 1. Fire alarm control panel (FACP)
 2. Sprinkler riser
 3. Fire department connection (FDC)
 4. Knox Box location
 5. Gas valve shutoff
 6. Electrical main shutoff
 7. Water shutoff
 8. Elevator equipment room

11. A Site Fire/Explosion/Hazardous Material Release Analysis Assessment. A Fire Protection Engineer (FPE) stamped risk assessment is required for each possible hazard risk associated with fire, explosion, smoke, and toxicity associated with the possible incident at a facility that is identified as a bulk transfer/process/storage facility. Refer to

NFPA 550 & 551 for references.

(3) Section 5003.9.1 is amended by adding subsection 5003.9.1.2 to read as follows:

a) **5003.9.1.2 Documentation.** Evidence of compliance with provisions of this chapter as well as with state and federal hazardous material regulations shall be maintained on-site and available for inspection by fire department personnel including any documents referenced by Section 5001.5.1 of the California Fire Code 2019 edition.

N. Amendment of Chapter 53 Compressed Gases is amended as follows:

(1) Section 5307.2 is amended to delete exception #1.

(2) Section 5307.3.2 is amended to read as follows:

a) **5307.2.1 Gas detection system.** Indoor storage and use areas and storage buildings shall be provided with a gas detection system complying with Section 916.

(3) Section 5307.3.2 is amended to read as follows:

a) **5307.3.2 Gas detection system.** Where ventilation is not provided in accordance with Section 5307.3.1, a gas detection system shall be provided in rooms or indoor areas and in below-grade outdoor locations with insulated carbon dioxide systems. Carbon dioxide sensors shall be provided within 12 inches of the floor in the area where the gas is expected to accumulate or other approved locations. The system shall be designed as follows:

1. Activates all audible and visible supervisory alarm at a normally attended location upon detection of a carbon dioxide concentration of 5,000 ppm.
2. Activates an audible and visible alarm within the room or immediate area where the system is installed upon detection of a carbon dioxide concentration of 10,000 ppm.

O. Amendment of Chapter 56 Explosives & Fireworks is amended as follows:

(1) Section 5601 is amending Sections 5601.1.3, 5601.2.2, and 5601.2.4 to read as follows:

a) **Section 5601.1.3 Fireworks.** The possession, manufacture, storage, sale, handling and use of fireworks are prohibited. The possession, manufacture, storage, sale, handling and use of fireworks or pyrotechnic materials within the jurisdiction of the City of Richmond are prohibited.

Exceptions:

1. Fireworks may be temporarily stored only if they are aerial or theatrical piece fireworks stored in conjunction with an approved and permitted aerial or set display.
2. Snap Caps and Party Poppers classified by the State Fire Marshal as pyrotechnic devices.

b) **Section 5601.2.2 Sale and retail display.** The possession, manufacture, storage, sale, handling and use of fireworks or pyrotechnic materials are prohibited within the jurisdiction of the City of Richmond.

Exception: Fireworks in accordance with California Code of Regulations, Title 19, Division 1, Chapter 6, see Section 5608.

c) **Section 5601.2.4 Financial responsibility.** Before a permit is issued pursuant to Section 5608.2, the applicant shall file with the jurisdiction a corporate surety bond in the principal sum of \$1,000,000 or a public liability insurance policy for the same amount, for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The fire code official is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the

location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.

(2) Section 5608 is adding Sections 5608.2 to read as follows:

a) **Section 5608.2 Permit required.** A permit is required to conduct an aerial display in accordance with California Code of Regulations, Title 19, Chapter 6. (See Chapter 1, Section 105.6.56).

Exception: Fireworks in accordance with California Code of Regulations, Title 19, Division 1, Chapter 6, see Section 5608.

P. Amendment of Chapter 57 Flammable & Combustible Liquids is amended as follows:

1) Section 5703.3.1 is added to read as follows:

a) **Section 5703.3.1 Facility site Fire/Explosion/Hazardous Material Release Analysis Assessment.** A Fire Protection Engineer (FPE) stamped risk assessment is required for each possible hazard risk associated with fire, explosion, smoke, and toxicity associated with the possible incident at a facility that is identified as a bulk transfer/process/storage facility. Refer to NFPA 550 & 551 for references.

(2) Section 5704.2.9.6.1 is amended to read as follows:

a) **Section 5704.2.9.6.1 Locations where above-ground tanks are prohibited.** The storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited in all zoning districts except districts zoned for commercial, industrial, or agricultural uses.

Exception: Protected above-ground tanks for the purpose of emergency power generator installations in areas zoned commercial, industrial, agricultural, business district, rural or rural residential, and for facilities on an individual basis consistent with the intent of this provision. Tank size shall not exceed 500 gallons (1892.706L) for Class I or II liquids, or 1,000 gallons (3785.412L) for Class III liquids.

(3) Section 5704.2.13.1.3 is amended to read as follows:

a) **Section 5704.2.13.1.3. Out of service for one (1) year.** Underground tanks that have been out of service for a period of one year shall be removed from the ground in accordance with Section 5702.14 or as required by the Fire Code Official or designee.

(4) Section 5706.2.4.4 is amended to read:

a) **Section 5706.2.4.4 Locations where above-ground tanks are prohibited.** Storage of Class I and II liquids in above-ground tanks is prohibited in all zoning districts except district zoned for commercial, industrial, or agricultural uses.

Q. Amendment of Chapter 58 Flammable Gases & Flammable Cryogenic Fluids is amended as follows:

(1) Section 5806.2 is amended to read as follows:

a) **Section 5806.2 Limitation.** The storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited in any area which is zoned for other than industrial use.

Exception: Liquid hydrogen fuel systems in compliance with section 5806.3 or 5806.4

R. Amendment of Chapter 61 Liquefied Petroleum Gases is amended to read as follows:

(1) Section 6103.2.1.7. Section 6103.2.1.7 is amended in its entirety to read:

a) **Section 6103.2.1.7 Use for food preparation.** Individual portable containers used, stored, or handled inside of buildings used for assembly or business for the purposes of cooking, display, or similar use shall be limited in size to one quart capacity and shall be of an approved type. The number of portable containers permitted will be at the discretion of the Fire Chief or said Fire Chief's authorized representative, but shall not exceed 15 total pounds per NFPA 58.

(2) Section 6104.2 is amended to read as follows:

a) **Section 6104.2 Maximum capacity within established limits.** The storage of liquefied petroleum gas is prohibited in any business district and in all zoning districts except districts zoned for commercial, industrial, rural, or agricultural uses. The aggregate capacity of any one installation used for the storage of liquefied petroleum gas shall not exceed a water capacity of 2,000 gallons (7570 L).

(3) Section 6104.3.2 is amended by adding the following after the last sentence:

a) **Section 6104.3.2 Special Hazards.** LP-gas shall not be stored or used inside of any occupancy, tent or air-supported structure unless approved by the Fire Code Official or designee.

S. Amendment of Chapter 80 Reference Standards are amended to read as follows:

1) **NFPA 1 2018, Chapter 38 Cannabis Growing, Processing, or Extraction Facilities is added in its entirety with amended sections as follows:**

a) **Section 38.1.1.1 is added to read as follows:** Where NFPA 1, Chapter 38 references "this code", it is amended to reference the applicable provisions or requirements of the California Fire Code. Where NFPA 1, Chapter 38 references "the building code", it is amended to reference the applicable provisions of the California Building Code.

b) **Section 38.1.2 is amended to read as follows:** The use, storage and handling of hazardous materials shall comply with this chapter, and other applicable provisions of the California Building and Fire Codes.

c) **Delete language to Sections 38.1.5 through 38.4 and reserve section numbers.**

d) **Section 38.5.3.1 is amended to read as follows:** Interior finish, including the use of any plastic, mylar, or other thin film sheeting to enclose rooms or cover any walls or ceilings shall be in accordance with the California Building Code.

e) **Section 38.6.1.1.2 is amended to read as follows:** For other than CO₂ and nonhazardous extraction process, the marijuana extraction equipment and process shall be located in a room or enclosure of noncombustible construction dedicated to the extraction process and the room or enclosure shall not be used for any other purpose.

f) **Delete language to Sections 38.6.1.1.3 and reserve section number.**

g) **Section 38.6.1.5.1.3 is amended to read as follows:** In addition to the requirements in 38.6.1.5, systems, equipment, and processes shall also comply with Chapter 50 of the California Fire Code, the California Building Code, and NFPA 90A.

h) **Section 38.6.1.5.2.2 is amended to read as follows:** Refrigerators, freezers, and other cooling equipment used to store or cool flammable liquids shall be listed for the storage of flammable/combustible liquids or be listed for Class I Division I locations, as described in Article 501 of the California Electrical Code.

i) **Section 38.6.1.5.2.3 is amended to read as follows:** LPG tanks shall comply with Chapter 61 of the California Fire Code.

j) **Delete language to Sections 38.6.1.5.3 through 38.6.1.5.6 and reserve section numbers.**

k) **Section 38.6.2.3.5 is amended to read as follows:** An automatic emergency power system shall be provided for the following items, when installed:

- (1) Extraction room lighting
- (2) Extraction room ventilation system
- (3) Solvent gas detection system

Exception: Extraction room ventilation systems in existing facilities are not required to have a secondary power source, such as emergency power or standby power until such time that the medium of extraction or solvent is changed.

l) **Delete language to Sections 38.6.3.2.1 through 38.6.3.2.2 and reserve section numbers.**

m) **Section 38.6.3.3 is amended to read as follows: Storage and Handling.** The storage, use, and handling of flammable liquids shall be in compliance with this chapter and the California Fire Code.

n) **Delete language to Sections 38.6.4.3.1 through 38.6.4.3.3 and reserve section numbers.**

o) **Delete language to Sections 38.7 and reserve section number.**

2) **NFPA 13 2016, Chapter 16 Standard for the installation of Sprinkler Systems is amended to read as follows:**

a) **Section 25.5.1 is amended to read as follows:** The installing contractor shall identify a hydraulically designed sprinkler system with permanently raised, stamped or etched marked weatherproof metal or ridged plastic sign secured with corrosion resistant wire, chain, or other approved means. Such signs shall be placed at the alarm valve, dry pipe valve, preaction valve, or deluge valve supplying the corresponding hydraulically designed area. Pipe schedule systems shall be provided with a sign indicating that the system was designed and installed as a pipe schedule system and the hazard classification(s) included in the design.

(3) **NFPA 13D-2016, Standard for the installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes is amended to read as follows:**

a) **Section 5.1.1.2 is amended to read as follows:** A supply of at least three sprinklers shall be maintained on the premises so that any sprinklers that have operated or been damaged in any way can be promptly replaced.

b) **Section 5.1.1.2.1 is added to read as follows:** The sprinklers shall correspond to the types and temperature ratings of the sprinklers in the property. The stock sprinklers shall include not less than one sprinkler of all types and ratings installed.

c) **Section 5.1.1.2.2 is added to read as follows:** The sprinklers shall be kept in a mounted and accessible cabinet located where the temperature to which they are subjected will at no time exceed the maximum ceiling temperatures specified in Table 5.1.1.6.1 for each of the sprinklers within the cabinet.

d) **Section 5.1.1.2.3 is added to read as follows:** One sprinkler wrench as specified by the sprinkler manufacture shall be provided in the cabinet for each type of sprinkler installed to be used for the removal and installation of sprinklers in the system.

e) **Section 6.2.1 is amended to read as follows:** Where a pump is the source of pressure for the water supply for a fire sprinkler system but is not a portion of the domestic water system, the following shall be met:

- (1) A test connection shall be provided downstream of the pump that creates a flow of water equal to the smallest sprinkler K-factor on the system.
- (2) Pump motors using ac power shall be rated for 240 V and wired in accordance with the NEC (NFPA 70).
- (3) Any disconnecting means for the pump shall be approved.
- (4) The pump shall be located not less than 1 ½ inch off the floor.
- (5) Exterior pumps shall be installed in a well ventilated, weather protected area or shelter.

f) **Section 6.2.2 is amended to read as follows:** Where a well, pump, tank or combination thereof is the source of supply for a fire sprinkler system, the configuration for the system shall be one of the following:

- (1) The water supply shall serve both domestic and fire sprinkler systems.
 - a) A test connection shall be provided downstream of the pump that creates a flow of water equal to the smallest sprinkler on the system. The connection shall return water to the tank.
 - b) Any disconnecting means for the pump shall be approved.
 - c) A method for refilling the tank shall be piped to the tank.
 - d) A method of seeing the water level in the tank shall be provided without having to open the tank.
 - e) The pump shall be located not less than 1 ½ inch off the floor.
 - f) Exterior pumps shall be installed in a well ventilated, weather protected area or shelter.
- (2) A stand-alone water supply for fire sprinkler system is permitted if the following conditions are met:
 - a) The pump shall be connected to a 220-volt circuit breaker shared with a common household appliance (e.g., range, oven, dryer), or have a power failure alarm installed acceptable to the Authority Having Jurisdiction that provides an audible and visual signal within the residence at an approved location. The alarm and components shall be listed by an approved agency.
 - b) The pump shall be a stainless steel 240-volt pump,
 - c) A valve shall be provided to exercise the pump. The discharge of the exercise valve shall drain to the tank, and
 - d) A sign shall be provided stating: "Valve must be opened monthly for 5 minutes."
 - e) A means for automatically refilling the tank level, so that the tank capacity will meet the required water supply duration in minutes, shall be provided.
 - f) A test connection shall be provided downstream of the pump that creates a flow of water equal to the smallest sprinkler on the system. The connection shall return water to the tank.
 - g) Any disconnecting means for the pump shall be approved.
 - h) A method for refilling the tank shall be piped to the tank.
 - i) A method of seeing the water level in the tank shall be provided without having to open the tank.
 - j) The pump shall be located not less than 1 ½ inch off the floor.
 - k) Exterior pumps shall be installed in a well ventilated, weather protected area or shelter.

g) **Section 7.6 is amended to read as follows:** A local waterflow alarm shall be provided on all sprinkler systems on the exterior of the home within 10 feet of the riser location, or as approved by the fire code official.

h) **Section 8.3.4 is amended to read as follows:** Sprinklers shall not be required in detached garages, open attached porches, detached carports with no habitable space above, and similar structures unless otherwise required by the California Building, Residential or Fire Codes.

i) **Section 8.3.5.2 is added to read as follows:** At least one quick-response intermediate temperature residential sprinkler shall be installed within 5 feet and above attic access openings.

(4) **NFPA 13R, 2016 Standard for the installation of Sprinkler Systems in Residential Occupancies up to and including Four Stories in Height** is amended or added to read as follows:

a) **Section 6.6.6.1 is amended to read as follows:** At least one quick-response intermediate temperature residential sprinkler shall be installed within 5 feet and above attic access openings.

(5) **NFPA 72, 2016 National Fire Alarm and Signaling Code is amended to read as follows:**

a) **Section 7.5.6.1 is amended to read as follows:** The record of completion shall be documented in accordance with 7.5.6 using the record of completion forms, Figure 7.8.2((a) through Figure 7.8.2(f).

b) **Section 7.6.6 is amended to read as follows:** The record of all inspection, testing and maintenance as required by 14.6.2.4 shall be documented using the record of inspection and testing forms, Figure 7.8.2(g) through Figure 7.8.2(l).

c) **Section 14.7.1 through 14.7.9 is added to read as follows:** Labels and Tags.

1. **Section 14.7.1 is added to read as follows:** Labels or tags shall be used on fire alarm systems and shall be placed on the outside of the fire alarm control unit.

2. **Section 14.7.2 is added to read as follows:** Tags shall be of the hanging or self-adhesive type used on fire alarm systems.

3. **Section 14.7.3 is added to read as follows:** The following information shall be printed on the labels and tags approved by the fire code official:

1. The words "DO NOT REMOVE BY ORDER OF THE FIRE CODE OFFICIAL"
2. Concern Name/Company Name
3. Concern Physical Address
4. Concern Phone Number
5. License Number (State of California Contractor State License Board License)
6. Date of service or testing and maintenance
7. Space or line for signature of person performing or supervising the servicing shall be placed on the tag or label

4. **Section 14.7.4 is added to read as follows:** When service or testing and maintenance is performed, the initial date of service or testing and maintenance, the printed name and signature of the person performing or supervising the service shall be placed on the tag or label.

5. **Section 14.7.5 is added to read as follows:** No person shall remove a tag or label from or place a tag or label on a fire alarm system except when servicing or testing and maintenance is performed.

6. **Section 14.7.6 is added to read as follows:** No person shall deface, modify, or alter any tag or label attached to or required to be attached to any fire alarm system.

7. **Section 14.7.7 is added to read as follows:** The Label or tag conforming to this section shall be securely attached to each fire alarm system at the time of servicing or testing and maintenance.

8. **Section 14.7.8 is added to read as follows:** The label or tag approved by the fire code official shall be affixed to a system only after all deficiencies have been corrected.

9. **Section 14.7.9 is added to read as follows:** Adhesive labels and tags shall be manufactured in accordance with ANSI/UL 969, Standard for Marking and Labeling Systems, 4th edition, 1995, which is hereby incorporated by reference.

T. Amendment of Appendices are amended to read as follows:

(1) Appendix B. Fire-Flow Requirements for Buildings.

a) **Section B105.3, exception 1,** is amended to read as follows:

Exception 1: A reduction in required fire-flow of 50 percent, as approved by the fire code official, when the building is provided with an approved automatic sprinkler system and installed in accordance with Section 903.3.1.1. The resulting fire-flow shall be not less than 1,500 gallons per minute (5678L/min) for the prescribed duration as specified in Table B105.1 (2).

(1) Appendix C. Fire Hydrant Locations and Distribution.

a) **Table C105.1 footnotes h and i** are added to read as follows:

h. A fire hydrant shall be provided within 250 feet of a fire trail access point off a public or private street.

i. For infill projects within existing single-family residential developments, Section 507.5.1 applies.

(2) Appendix D. Fire Apparatus Access Roads.

a) **Section D102.1** is amended to read as follows:

(1) **D102.1 Access and loading.** Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an *approved* fire apparatus access road with an asphalt, concrete or other approved *all-weather driving surface* capable of supporting the imposed load of fire apparatus weighing at least 74,000 pounds (33 566 kg) in accordance with Caltrans Design Standard HS-20-44.

Exception: *Driveways* serving one or two single-family *dwellings* may be constructed of an alternate surface material, providing the imposed weight load design minimums are met and the grade does not exceed 10 percent.

(2) **Section D103.1** is deleted in its entirety.

(3) **Section D103.2** is deleted in its entirety and replaced by the following, to read as follows:

a) **D103.2 Grade.** Fire department access roadways having a grade of between 16 percent and 20 percent shall be designed to have a finished surface of grooved concrete sufficient to hold a 45,000 pound (19 958 kg) traction load. The grooves in the concrete surface shall be ½ inch (13 mm) wide by ½ inch (13 mm) deep and 1 ½ inch (38 mm) on center and set at a 30 to 45 degree angle across the width of the roadway surface. No grade shall exceed 20 percent, nor shall the cross slope exceed 8%, unless authorized in writing by the fire code official.

- (4) **Section D103.2.1** is added to read as follows:
 - a) **D103.2.1 Angles of approach and departure.** The angles of approach and departure for any means of access shall not exceed 10 percent at 10 feet of the grade break.
- (5) **Section D103.3** is deleted in its entirety and replaced by the following, to read:
 - a) **D103.3 Turning radius.** Based on a minimum unobstructed width of 20 feet, a fire apparatus access roadway shall be capable of providing a minimum standard turning radius of 25 feet (7620 mm) inside and 45 feet (13 716 mm) outside.
 - b) **D103.3.1 Turning radius with Very High Fire Hazard Severity Zone (VHFHSZ).** Based on a minimum unobstructed width of 26 feet, a fire apparatus access roadway shall be capable of providing a minimum standard turning radius of 25 feet (7620 mm) inside and 45 feet (13 716 mm) outside.
- (3) Appendix J. Building Information Sign.
 - a) **Section J101.1.2.** is amended to read as follows:
 - (1) **J101.1.2 Sign features.** Either temporary or permanently affixed to the building or structure in an approved manner specified by fire code official.
 - b) **Section J101.1.3.1.** is amended to read as follows:
 - (1) **J101.1.3.1 Sign shape.** Buildings that require a fire department inspection shall have an approved fire code official sign designating a completed fire inspection in the shape of a rectangle.
 - c) **Section J101.1.3.2.** is added to read as follows:
 - (1) **J101.1.3.2 Apartment Sign shape.** Residential buildings including apartments, condominiums, and multi-family units that require a fire department inspection shall have an approved fire code sign indicating the length required to reach the furthest unit from the closest designated starting point in front of the structure. The sign shall also include each associated floor and its furthest unit.
 - d) **Section J101.1.3.2.1** is added to read as follows:
 - (1) **J101.1.3.2.1 Apartment Sign color.** Residential buildings including apartments, condominiums, and multi-family units that require a fire department inspection shall have an approved fire code sign with designated colors associated with the specific hose length to reach the furthest unit from the closest designated starting point in front of the structure. The sign shall also include each associated floor and its furthest unit.

Color	Associated length
Red	100'
Blue	150'
Orange	200'
Purple	250'
Green	300'
Black	350'

e) **Section J101.1.4.1.** is amended to read as follows:

(1) **J101.1.4.1. Fire inspection sign size and lettering.** The minimum size of the fire inspection information sign and lettering shall be designated by the fire code official on an annual basis.

8.16.050 **New materials, processes or occupancies which may require permits.**

The Fire Prevention Division shall determine and specify, after giving affected persons an opportunity to be heard, any new materials, processes or occupancies, which shall require permits, in addition to those now enumerated in this Code. The Fire Code Official shall post such list in a conspicuous place in his office, and distribute copies thereof to interested persons.

8.16.060 **Fire hazards and nuisances -- Abatement.**

A. All violations of this chapter are fire hazards and public nuisances and shall be abated.

B. General Abatement.

1. When a fire hazard and nuisance as generally described in Section 8.16.010 through 8.16.050 above; as described in Section 8.16.070 and 8.16.090 below; or as in Section 109 of the California Fire Code exists, it shall be the duty of the Fire Chief or designee to notify in writing the owner or occupant of such premises to abolish and abate such nuisance and, if necessary, remove said matter provided that such notification shall not be required in a situation which, in the Fire Chief or designee judgment, constitutes an emergency requiring immediate abatement of such nuisance. In such an emergency situation, the Fire Chief or designee may order the owner or occupant, orally or in writing, to abate the nuisance immediately or may proceed to cause the nuisance to be abated without any such notice if, in the Fire Chief or designee's judgment, the situation warrants such action in the interest of the public health, safety or welfare.

2. The required notice shall provide a specified time in which such nuisance must be abated or removed.

3. Before complying with the requirements of the required notice, the owner may request a hearing before the Fire Chief or designee at a time and place fixed by the Fire Chief or designee. The hearing request must be made in writing and must be made within the time limit specified in the required notice.

4. The Fire Chief or designee shall:

(a) Conduct the hearing;

(b) Re-determine whether or not a nuisance as described in subsection (a) hereof exists and whether or not the owner or occupant shall abate the nuisance; and

(c) Specify the time within which the work shall be completed.

5. In the event the nuisance is not abated within the time specified in the original required notice and/or the time specified at the hearing, the City may abate such a nuisance.

6. The person whose duty it was to abate or abolish a nuisance as ordered by the Fire Chief or designee pursuant to this chapter, in addition to incurring penalties as provided in these regulations, shall become indebted to the City of Richmond for the damages; costs and charges incurred by the City by reason of the existence of said nuisance or removal of said matter. This cost may become a lien upon the property upon which the nuisance existed.

7. Those properties which are deemed public nuisances because of the presence of weeds (as *weeds* are defined in Chapter 9.50 of this Municipal Code), dry grass, stubble, brush, rubbish, litter or other combustible or flammable material which creates a fire hazard, a menace to the public health or which is otherwise noxious or dangerous shall be subject to the abatement

procedures set forth in Sections 9.22.100, 9.22.110 and 9.22.120 of the City of Richmond Municipal Code.

8. Firebreaks. In lieu of ordering the abatement of fire hazards as provided in this Section, the Fire Chief or designee may order the preparation of firebreaks around parcels of property when combustible weeds, crops, or brush are present. In determining the proper width for firebreaks, the Fire Chief or designee shall consider the height of the growth, weather conditions, topography, and the accessibility to the property of fire protection equipment. The procedure set forth in subsection (b) above shall also apply to the preparation of firebreaks.

9. Alternate Procedures. The procedures provided for by this section are an alternative to any other procedure adopted by the City Council for the abatement of public nuisances, or any procedure which may be authorized by the laws of the State of California.

8.16.065. Emergency response cost recovery fees

1. The City Council finds and determines that the Richmond Fire Department is authorized to provide any service relating to the protection of lives and preservation of property including, but not limited to, fire protections services, rescue services, emergency medical services, hazardous material emergency response services, and other emergency response services.

2. The City Council finds and determines that these emergency responses by the Richmond Fire Department sometimes generate additional unanticipated operational services provided by the department are an increased cost to the City of Richmond.

3. The City Council finds that the Richmond Fire Department may charge a fee to recover the reasonable costs of services necessary to protect the public health and safety associated with motor vehicle incidents, hazardous materials spills, discharges or threatened discharge of hazardous (or suspected hazardous) materials, motor vehicle fires, motor vehicle extrications, pipeline or power line incidents (Pacific Gas & Electric), and origin and cause investigations.

(1) Fees for recovery of emergency response.

a) The City of Richmond shall charge reasonable fees for the cost of services necessary to protect the public health that the Richmond Fire Department provides related to motor vehicle incidents, hazardous materials spills, discharges or threatened discharge of hazardous (or suspected hazardous) materials, motor vehicle fires, motor vehicle extrications, pipeline or power line incidents (Pacific Gas & Electric), and origin and cause investigations. The fees shall not exceed the reasonable cost to provide such services and shall be charged according to the fees set in the Fire Prevention Services Division fee schedule. A motor vehicle incident, for the purposes of this section, means any matter involving an emergency response to a motor vehicle, including, but not limited to, collisions, accidents, fire, extrication and investigation.

(2) Adoption of fee schedule for recovery of emergency response costs.

a) The City of Richmond adopts the fee schedule set forth in Exhibit A. The City Council may amend, as needed, the schedule of fees in Exhibit A by resolution.

b) The fees shall be billed, as determined by the Fire Chief, his or her designee or third party billing service, to any person or persons whose negligent or willful act is a cause of any motor vehicle incidents, motor vehicle fires, motor vehicle extrications, hazardous materials spills or discharges, pipeline or power line incidents (Pacific Gas & Electric), and origin & cause investigations. Fees for motor vehicle incidents shall not be billed to residents of the City of Richmond. Fees shall be billed to the responsible party regardless of fault or residency (with the exception of Richmond residents), as determined by the Fire Chief, his designee or third party billing service.

8.16.070 **Smoke and carbon monoxide detectors.**

a) **Requirements.**

(1) Every floor of every dwelling unit in an apartment house, motel, hotel, or lodging house shall be provided with smoke and carbon monoxide detectors (when fossil fuel appliances are located inside or duct system enters inside the dwelling unit).

(2) Every dwelling unit in a single family dwelling, duplex, or residential occupancy not listed in subsection (1) above shall be provided with smoke and carbon monoxide detectors. Each smoke and carbon monoxide detector provided or installed pursuant to this section shall conform to the requirements of the 2019 California Building Code. Each smoke and carbon monoxide detector shall also be maintained as set forth herein.

b) **Fixtures.** Every smoke and carbon monoxide detector required under this section shall be deemed to be a fixture for purposes of transfer of title.

c) **Maintenance.**

(1) Every smoke and carbon monoxide detector required under this section shall be maintained in operable condition.

(2) Nothing in this section shall preclude a rental or lease agreement from providing that a tenant has the responsibility for repair or maintenance of the smoke and carbon monoxide detector(s). However, such provision notwithstanding, the owner shall be responsible for ensuring compliance with this section.

d) **Holder of Certificate of Occupancy.** Where the holder of a Certificate of occupancy, as provided in Chapter 6.02.40 of the Richmond Municipal Code and Section 15.04.210 of this Municipal Code, is some person other than the owner of the real property, such person shall be deemed to be an owner for purposes of this section.

e) **Notice.** Every property owner or owner's authorized agent offering to rent, lease or let residential property shall give notice of the requirements of this section to the tenant prior to occupancy. The giving of such notice shall not relieve the property owner from compliance with the requirements of this Section.

f) **Liability.** Nothing in the provisions of this section shall be construed to require the City, its officers, employees or representatives to conduct any inspection of the smoke detectors herein required nor shall any actual inspections made imply a duty to inspect other detectors. Furthermore, this section shall not be construed to hold the City or any officer, employee or representative of the City responsible for any damage to persons or property by reason of making or not making inspection or by reason of any failure to make an inspection or re-inspection.

g) **Penalty.** Any person who violates any provision of this section shall be guilty of a misdemeanor.

8.16.080 **Very High Fire Hazard Severity Zones**

A. **Very High Fire Hazard Severity Zone Regulations**

1. **Purpose.** The purpose of the very high fire hazard severity zone ("VHFHSZ") regulations is to minimize danger to public health and safety caused by building in an area with a high risk of grass and brush fire.

2. **Applicability.** The VHFHSZ regulations apply to any area of the city which is designated as a very high fire hazard severity zone. For purposes of this subsection, VHFHSZ shall be those shown on that certain map entitled *Exhibit A - Very High Fire Hazard Severity Zones* and dated

September 1995 which has been prepared by, and is on file in the office of, the Fire Chief. Exhibit A also constitutes the official designation of the hazardous fire areas within the City of Richmond.

3. Regulations. Within the very high fire hazard severity zones established by this Section, all new roads, new buildings, other new structural improvements, and existing structures shall be subject to the following regulations:

(a) All buildings shall be designed and sighted so that the roof and other areas may be kept free of leaves, needles and other dead vegetative growth.

(b) All new buildings shall have a Class B roofing tested in accordance with ASTM E108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D2898, as adopted in the California Building Code. Every existing building, when 50 percent or more of the total roof area is re-roofed within any one year period, shall have a fire retardant roof covering that is at least Class B as defined in the California Building Code. The installer of the roof covering shall provide certification of the roof covering classification to the building owner and, when requested, to the City Building Official.

(c) Wood shingles or wood shakes shall not be used for exterior wall covering.

(d) All buildings shall have the underside of balconies, unenclosed roofs and floors, and other similar horizontal surfaces protected by at least one-hour fire-resistive construction as required by the Fire Chief. Combustible eaves shall be protected as approved by the Fire Chief.

(e) Unprotected vertical or horizontal wood supports for stilt type or cantilevered buildings shall be of not less than five and one-half inches in the least dimension.

(f) All openings into the interior of a building for ventilation purposes shall be protected by non-corrosive metallic screening having a mesh no larger than 1/16 inch (1.6 mm) and shall not exceed 1/8 inch (3.2 mm).

(g) Access openings to under-floor areas shall be protected by either non-corrosive metallic screening having a mesh no larger than no larger than 1/16 inch (1.6 mm) and shall not exceed 1/8 inch (3.2 mm) inch solid wood door or equivalent.

(h) When difficulty of access or topography occurs, or structures do not meet fire flow requirements, or the fire department response time is six minutes or more, the Fire Chief may require other fire mitigation measures as for all occupancies.

B. Vegetation management standards in Very High Fire Hazard Severity Zones

Any person who owns, leases, controls, operates, or maintains any property in a very high fire hazard severity zone shall maintain such property in conformance with the most current vegetation maintenance standards established by the City Council by Resolution 192-95, or said resolution's successor. Copies of Resolution 192-95 and any successor resolution shall be maintained by and be available in the City Clerk's Office.

C. Violations and penalties

Any violation of this section shall constitute an infraction punishable by the policies, enforcement procedures and fines established by RMC Chapter 2.62 Administrative Citations.

D. Public nuisance

Any violation of this section shall constitute a public nuisance which may be abated, and abatement costs shall be recovered in the manner provided in RMC Sections 9.22.100, 9.22.110, and 9.22.120.

E. Firebreaks

In lieu of ordering the abatement of fire hazards as provided in this Section, the Fire Chief may order the preparation of firebreaks around parcels of property when combustible weeds, crops, or brush are present. In determining the proper width for firebreaks, the Fire Chief or designee shall consider the height of the growth, weather conditions, topography, and the accessibility to the property of fire protection equipment. The procedure set forth in subsection (d) above shall also apply to the preparation of firebreaks.

F. Alternate Procedures

The procedures provided for by this section are an alternative to any other procedure adopted by the City Council for the abatement of public nuisances, or any procedure which may be authorized by the laws of the State of California. Including a third party contractor to mitigate any identified public nuisance.

8.16.090 False Fire Alarms.

1. Purpose

The purpose of this section is to promote the responsible use of fire alarm systems, to set forth additional standards to improve the reliability of these systems, and to establish procedures for assessing fee penalties for excessive false fire alarm responses in violation of this ordinance.

2. Findings

The City Council finds and determines that fire alarm systems not properly installed, maintained and/or operated create a nuisance to the peace and safety of the community. Such alarm systems cause excessive and unnecessary use of fire services in responding to assumed emergencies which results in a significant expenditure and increased costs to the public. \

3. Definitions

Alarm business is defined as any business which is engaged in the selling, leasing, maintaining, servicing, repairing, altering, replacing, moving or installing any alarm system in or on any building, place or premises.

Alarm user is defined as any person using an alarm system at such person's residence or place of business.

Audible alarm system is defined as an alarm system which when activated generates sound perceptible from the exterior of the building structure or facility in which the alarm system is located. Audible alarm systems may or may not be monitored by a central alarm system.

Central Station is defined as a supervising station that is listed for central station service.

Central Station Service is defined as the use of a system or a group of systems in which the operations of circuits and devices at a protected property are signaled to, recorded in, and supervised from a listed central station having competent and experienced operators who, upon receipt of a signal, take appropriate action as required. Central station service is controlled and operated by a person, firm, or corporation whose business is the furnishing of such contracted services or whose properties are the protected premises.

Central Station Fire Alarm System is defined as a system or group of systems in which the operations of circuits and devices are transmitted automatically to, recorded in, maintained by, and supervised from a listed central station having competent and experienced servers and operators who, upon receipt of a signal, take such action as required by NFPA 72.

Certificate of Completion is defined as a document that acknowledges the features of installation, operation (performance), service, and equipment with representation by the property owner, system installer, system supplier, service organization, and the authority having

jurisdiction.

Certification is defined as a systematic program using randomly selected follow-up inspections of the certified systems installed under the UL Fire Alarm Certificate Program, which allows the listing organization (Underwriters Laboratories) to verify that a fire alarm system complies with all of the requirements of NFPA 72. A system installed under such a program is identified by the issuance of a UL certificate and is designated as a UL certified system.

City is defined as the City of Richmond

Emergency is defined as an occasion that reasonably calls for a response by the fire department. A response due to failure of the alarm system, personnel error in transmission or reporting of an alarm, or repair or maintenance of an alarm system is not an emergency.

False Alarm is defined as the activation of an alarm system necessitating a response by the Richmond Fire Department where an emergency does not exist; provided however, that activation of alarms by natural disaster will not be considered false alarms.

Fire Alarm System is defined as a system or a portion of a combination system consisting of components and circuits arranged to monitor and annunciate the status of fire alarm or supervisory signal initiating devices and to initiate the appropriate response to those signals.

Fire Chief, wherever the words "Fire Chief" are used in this section, they mean Fire Chief of the City of Richmond, or said Fire Chief's authorized representative. The term "Chief" also means Fire Chief.

Local alarm system is defined as an alarm system which is annunciated only on the premises and not intended to cause a request for emergency response.

Monitored is defined as an alarm system that is both designed to communicate with a UL central alarm station protection system and is currently being provided with that service.

Nuisance Alarm System Is the activation of any fire protection or alarm system which results in the response of the Richmond Fire Department and is caused by malfunction, improper maintenance, negligence, or misuse, of the system by an owner, occupant, employee, or agent, or any other activation not caused by excessive heat, smoke, fire, or similar activating event.

Subscriber is defined as a person who has contracted with an alarm business for the monitoring services for a central alarm station protection system.

4. Fire Alarm Standards

a. All fire alarm systems and appurtenant equipment installed or used within the city of Richmond shall meet or exceed industry standards and those standards established under the Richmond Fire Prevention Code.

b. **Certification Required:** All fire alarm system installations shall have UL certification and a UL certificate of completion issued indicating that the system meets the standards of the laboratory and that it was installed in accordance with the approved plans and specifications. The certificate shall be requested and obtained by a company that is on a list of UL approved vendors maintained by the Fire Department. The property owner shall continue the UL certificate at all times.

5. Testing Fire Alarms

Persons shall notify the Richmond Fire Department through the Fire Dispatch Communications Center prior to any service, test, repair, maintenance, adjustment, alterations, or installations of automatic fire sprinkler or fire alarm, which might normally result in an emergency response. Any alarm activated where such prior notice has been given shall not constitute a false alarm for the purpose of this section.

6. False Fire Alarms

- a. Multiple Occurrences Unrelated to Testing. The maximum number of allowable false alarms shall be no more than one (1) in a six month period from January 1st through June 30th and no more than one (1) in the six-month period from July 1st through December 31st, before an alarm subscriber/owner is assessed false alarm service assessment fees in accordance with item 7 (False Fire Alarm Fees).
- b. Occurrences Related to Improperly Noticed Testing. Persons or businesses engaged in servicing, testing, repairing, maintaining, adjusting, altering or installing an automatic fire sprinkler system or fire alarm system shall be subject to such assessment as may be established by ordinance for false alarms on any occurrence of a false alarm resulting from the failure to provide notice of testing as required by section 5 above.

7. False Fire Alarm Fees

1. The initial false alarm in the six-month period from January 1st through June 30th and the initial false alarm in the six-month period from July 1st through December 31st: **No Fee.**
2. After receiving notice of initial false alarm (no fee), the subsequent first false alarm in the six-month period from January 1st through June 30th and first false alarm in the six-month period from July 1st through December 31st: **\$280**
3. After receiving notice of first false alarm (\$261 fee), the second false alarm in the six-month period from January 1st through June 30th and the second false alarm in the six-month period from July 1st through December 31st: **\$562.00**
4. After receiving notice of second false alarm (\$522 fee), the third or more false alarm in the six-month period from January 1st through June 30th and the third or more false alarm in the six-month period from July 1st through December 21st: **\$1,124.00**

8. Nuisance Fire Alarm Systems

- a. An alarm system may be declared a nuisance alarm system by the Fire Chief under any one of the following:
 - (1) More than five (5) false alarms not exempt under section 9 were generated and not canceled in a false alarm period (six months).
- b. The Fire Chief or designee shall notify the alarm user, in the same manner as for the imposition of false alarm fees, of the determination that the alarm system is a nuisance alarm system.
- c. Nuisance fire alarm systems shall be referred to Underwriters Laboratory Inc. (UL) or representing alarm business for a re-qualification audit or be retroactively placed in a UL Fire Alarm Certification program as required by the Fire Chief or designee.
- d. The determination that an alarm system is a nuisance may be revoked by the Fire Chief upon finding proof that the cause of the excessive false alarm or audible disturbance has been remedied.

9. Exempt From False Alarm Fees

False alarms reported to the Richmond Fire Department shall not be counted for the imposition of false alarm fees under the following conditions:

- a. The Fire Chief has granted an exemption, based upon verifiable proof that the alarm user is taking all reasonable measures to eliminate the cause of false alarms. A request for exemption must be made in writing and will be determined on a case-by case-basis.
- b. False alarms reported to the Richmond Fire Department, but subsequently cancelled prior to department units starting actual response. If at the discretion of the department, a response is continued after a valid cancellation is received prior to commencement of a response, the response will not be counted as a false alarm for the purpose of imposing a false alarm fee.

10. Procedure For Imposition Of False Alarm Fees

a. Notice of Imposition. The Fire Chief or designee shall deliver to the alarm user at the address where the false alarms originate a notice of the imposition of false alarm fees. The notice shall specify the date, time and nature of the events which are the basis for the imposition of false alarm fees. The notice shall state that the alarm user has the right to request a hearing before a Hearing Officer as established pursuant to Administrative Citations, Section 2.62 of the Richmond Municipal Code by submitting a written request to the Fire Chief within 14 days of notification. The appeal must be in writing and set forth the basis of the appeal.

b. Collection of fees. Collection of fees shall be as described in 2.62.120 or 9.22.110, including a lien against the real property on which the false alarm occurred. In the event of the failure of any person to pay the fees assessed pursuant to the provisions of this section, the city of Richmond may institute an action in any court of competent jurisdiction to collect any charges, together with interest, which may be due and payable and all administrative costs of collection in the same manner as any other debt owing to the city may be collected.

SECTION 2. SEVERABILITY CLAUSE

If any section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional or invalid, such a decision shall not affect the validity of the remaining portions of this Ordinance. The City council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase of this Ordinance irrespective of the unconstitutionality or invalidity of any section, subsection, subdivision, paragraph, sentence, clause or phrase.

SECTION 3.

This ordinance shall be effective thirty days after passage and adoption, but doesn't go into effect until January 1, 2020.

First introduced at a regular meeting of the City Council of the City of Richmond held November 5, 2019, and finally passed and adopted at a regular meeting held November 19, 2019, by the following vote:

AYES: Councilmembers Bates, Johnson III, Martinez, Myrick, Vice Mayor Choi, and Mayor Butt.
NOES: None.
ABSTENTIONS: None.
ABSENT: Councilmember Willis.

PAMELA CHRISTIAN
CLERK OF THE CITY OF RICHMOND
(SEAL)

Approved:
TOM BUTT
Mayor

Approved as to form:
BRUCE GOODMILLER
City Attorney

State of California }
County of Contra Costa } : ss.
City of Richmond }

I certify that the foregoing is a true copy of **Ordinance No. 17-19 N.S.** passed and adopted by the City Council of the City of Richmond at a regular meeting held on November 19, 2019.



Pamela Christian, City Clerk of the City of Richmond