

ORDINANCE NO. 28167

AN ORDINANCE OF THE CITY OF SAN JOSE AMENDING CHAPTER 17.12 OF THE SAN JOSE MUNICIPAL CODE TO ADOPT THE 2007 CALIFORNIA FIRE CODE WITH LOCAL AMENDMENTS RELATING TO FIRE FLOW, SPRINKLER AND FIRE ALARM SYSTEMS AND STANDARDS, ACCESS CONTROL DEVICES, BREATHING AIR REPLENISHMENT AND PUBLIC RADIO COVERAGE, LARGE BATTERY CHARGING SYSTEMS AND CONTINUOUS GAS DETECTION SYSTEMS AND TO MAINTAIN EXISTING OF FIRE PROTECTION AND REGULATORY AUTHORITY

WHEREAS, the Fire Marshal of the State of California has adopted that certain fire code, entitled "2007 California Fire Code", which, with certain deletions, amendments, exceptions and additions, and including certain appendices has been copyrighted and published by the California Building Standards Commission; and

WHEREAS, pursuant to Sections 13143.5 and 18941.5 of the California Health and Safety Code, certain amendments to the building standards contained in the 2007 California Fire Code, as set forth in this Ordinance, are reasonably necessary to protect the health, welfare and safety of the citizens of San José because of local climatic, geological and topographical conditions; and

WHEREAS, the City Council hereby makes the following findings with respect to local geological, topographical and climatic conditions relating to the amendments to the 2007 California Fire Code for which such findings are required:

- A. San José is within a very active seismic area (Seismic Zone 4). Severe seismic action could disrupt communications, damage gas mains, cause extensive electrical hazards, and place extreme demands on both private fire protection systems and equipment and the limited and widely dispersed resources of the Fire Department resulting in failure to meet the fire and life safety needs of the community.

- B. The local geographic, topographic and climatic conditions pose an increased hazard in the acceleration, spread, magnitude, and severity of potential fires in the City of San José, and may cause disruptions in operation of private fire protection systems and equipment and delayed fire response time, allowing further growth of the fire.

- C. The provisions of this Ordinance establishing certain more restrictive standards than the California Fire Code will better prevent fire damage which can result from local conditions; and

WHEREAS, Chapter 17.12 of the San José Municipal Code must be amended to adopt the 2007 California Fire Code with local amendments and to maintain the existing level of fire protection and regulatory authority within the City of San José; and

WHEREAS, this Ordinance was found to be categorically exempt from environmental review, per the provisions of Section 15061(b)(3) of the California Environmental Quality Act of 1970, as amended, and Section 21.08.500 of the San José Municipal Code, under PP-07-239;

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SAN JOSE:

SECTION 1. Section 17.12.010 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

17.12.010 San José Fire Code

The San José Fire Code shall consist of the 2007 California Fire Code as copyrighted and published by the California Building Standards Commission which is hereby adopted and incorporated by reference into this Chapter, subject to the deletions, amendments, exceptions, and additions, which are specified in this Chapter.

SECTION 2. Section 17.12.020 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

17.12.020 Compliance Required

It shall be unlawful for any person to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, occupy or maintain any building, structure or equipment, or maintain any use, or cause or permit or suffer the same to be done, in a manner which does not conform to the requirements of this Chapter, any provision of the 2007 California Fire Code as adopted under this Chapter, or any permit issued under this Chapter.

SECTION 3. Section 17.12.060 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

17.12.060 Alternate Means or Methods

- A. The Chief of the Bureau of Fire Prevention shall have the authority to allow alternate materials or methods of construction to those specified in this Chapter.
- B. Any such Alternate Means or Methods shall only be allowed if the Chief finds that the proposed design is satisfactory and complies with the intent of the provisions of this Code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this Code in quality, strength, effectiveness, fire resistance, durability and safety.
- C. The Chief is authorized to require tests to establish that issuance of any such variance is appropriate. Such tests shall be made by person or testing organization approved by the Chief, at the expense of the applicant for the Alternate Means or Methods.

- D. Applications for such Alternate Means or Methods shall be filed in the Office of the Bureau of Fire Prevention, and the filing fee provided in the schedule of fees established by resolution of the City Council shall be paid to the Bureau at the time of filing the application.

- E. Any such Alternate Means or Method that involves matters regulated by the San José Building Code shall also be subject to the approval of the Building Official.

SECTION 4. Section 17.12.090 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

17.12.090 Exemption for Pending Applications

- A. The provisions of the 2007 California Fire Code related to construction, as adopted and amended herein, shall not apply to any building or structure for which application for a building permit was made prior to January 1, 2008, except as may be found by the Chief to constitute a distinct hazard to life or property. Such buildings or structure shall be erected, constructed, enlarged, altered or repaired in accordance with the provisions of this Chapter in effect at the date of the application.

- B. All other applications shall be processed in accordance with the provisions of the 2007 California Fire Code, as adopted and amended herein.

SECTION 5. Section 17.12.110 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

17.12.110 Cross - References to 2007 California Fire Code

The provisions of this Chapter contain cross-references to the provisions of the 2007 California Fire Code in order to facilitate reference and comparison to those provisions.

SECTION 6. Section 17.12.120 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

17.12.120 Local Amendments to 2007 California Fire Code

The provisions of this Chapter shall constitute local amendments to the cross-referenced provisions of the 2007 California Fire Code and shall be deemed to replace the cross-referenced sections of the 2007 California Fire Code with the respective provisions set forth in this Chapter.

SECTION 7. Part 2 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

Part 2

Adoption of Administrative Provisions of 2007 California Fire Code

17.12.200 Adoption of Chapter I and Appendix Chapter 1 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapter I and Appendix Chapter 1 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.210 Provisions of Chapter 1 of 2007 California Fire Code Which are not Adopted or Incorporated By Reference

The following provisions, including all subparts thereof, of Chapter 1 of the 2007 California Fire Code, are not adopted or incorporated in this Chapter by reference, and shall not be deemed to be a part of this Chapter nor a part of the Fire Code of the City of San José: Sections 101.1, 101.8, 101.9, 101.10 and 101.11.

17.12.220 Provisions of Appendix Chapter 1 of 2007 California Fire Code Which are not Adopted or Incorporated By Reference

The following provisions, including all subparts thereof, of Appendix Chapter 1 of the 2007 California Fire Code, are not adopted or incorporated in this Chapter by reference, and shall not be deemed to be a part of this Chapter nor a part of the Fire Code of the City of San José: Sections 101.1, 103, 104.6, 104.8, 104.9, 104.10 and 108.

17.12.230 Authority to Inspect (2007 CFC Appendix Chapter 1 Section 106.1)

Appendix Chapter 1 Section 106.1 of the California Fire Code is amended to read as follows:

106.1 Inspection Authority. The fire prevention bureau shall have authority to inspect buildings and premises as often as necessary, for the purpose of ascertaining and causing to be corrected, any conditions which could tend to cause fire or contribute to its spread, result in an unauthorized discharge of hazardous materials, or any violation of this code or any other law or standard affecting fire safety, life safety, or environmental safety.

17.12.240 Types of Permits (2007 CFC Appendix Chapter 1 Section 105.1.2)

Appendix Chapter 1 Section 105.1.2 of the California Fire Code is amended to read as follows:

105.1.2 Types of permits. There shall be two types of permits as follows:

1. Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Appendix Chapter 1, Section 105.6 for either:

1.1. A prescribed period. If no period is prescribed, the permit shall be for one year.

- 1.2. Until renewed or revoked.
2. Construction permit. A construction permit allows the applicant to install or modify systems and equipment for which a permit is required by Appendix Chapter 1, Section 105.7.

17.12. 250 Amended Operational Permit Requirements (2007 CFC Appendix Chapter 1 Section 105.6)

The following subparts of Appendix Chapter 1 Section 105.6 of the 2007 California Fire Code are amended to read as follows:

- 105.6.9 Covered mall buildings:** An operational permit is required for:
1. The placement of kiosks, retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.
 2. The display of liquid-or gas-fired equipment in the mall.
 3. The use of open-flame or flame-producing equipment in the mall.
 4. The use of a covered mall as a place of assembly.
- 105.6.25 Lumberyards, woodworking and firewood storage:** An operational permit is required to store lumber in excess of 100,000 board feet (8,333 ft³/236 m³); or to store fire wood in excess of ten (10) cords; or to conduct woodworking operations involving mass production or involving more than one of each type of machine, or where machines are used continuously (as opposed to intermittently) or substantial products of sawdust may be a problem. See Chapter 19.
- 105.6.39 Repair garages and motor fuel-dispensing facilities:** An operational permit is required for operation of repair garages and automotive, marine and fleet motor fuel-dispensing facilities, including fueling with flammable or combustible liquids, liquefied petroleum gases, compressed natural gas, liquefied natural gas, or hydrogen.

105.6.42 Storage of tires, scrap tires and tire byproducts: An operational permit is required to establish, conduct or maintain outdoor storage of tires, scrap tires and tire byproducts that exceeds 1,000 cubic feet (92 m³) of total volume of scrap tires and for indoor storage of tires and tire byproducts.

105.6.43 Temporary membrane structures, tents and canopies: An operational permit is required to operate an air-supported temporary membrane structure or a tent having an area in excess of 200 square feet (19 m²), or a canopy in excess of 400 square feet (37 m²).

Exceptions:

1. Tents used exclusively for recreational camping purposes.

17.20.260 Additional Operational Permit Requirements (2007 CFC Appendix Chapter 1 Section 105.6.47)

Appendix Chapter 1 Section 105.6.47 of the 2007 California Fire Code is amended to add the following to the list of activities, operations, practices, or functions for which an operational permit is required:

105.6.47.5 Battery System: An operational permit is required to operate stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L).

105.6.47.6 Day Care Facility: An operational permit is required to operate any day care home or facility which provides day care for adults or children.

105.6.47.7 High-Rise Buildings: An operational permit is required to operate any high-rise building.

- 105.6.47.8** **Institutions:** An operational permit is required to operate any health facility as defined in Section 1250 of the California Health and Safety Code, with an occupant load of more than six (6) persons, or to operate any jail or facility where personal liberties of the occupants are restrained. See California Code of Regulation Title 24 Part 2.
- 105.6.47.9** **Multi-story building:** An operational permit is required to operate any building which is not a high-rise building, but has four or more floors. See Section 3.09 of Title 19 of the California Code of Regulations.
- 105.6.47.10** **Residential care facility:** An operational permit is required to operate any residential care or service facility, as described in the Building Code, accommodating more than six (6) persons.
- 17.20.270** **Failure to Comply with Stop Work Order (2007 CFC Appendix Chapter 1 Section 111.4)**

Section 111.4 of 2007 California Fire Code is amended to read as follows:

111.4 Failure to comply. No person shall fail to comply after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition.

SECTION 8. Part 3 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

Part 3
Definitions

17.12.300 Adoption of Chapter 2 of 2007 California Fire Uniform Code

Except as otherwise provided for in this Chapter, Chapter 2 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.310 Definitions (2007 CFC 202)

Section 202 of the 2007 California Fire Code is amended to add the following defined terms:

WORKSTATION is a defined space or independent principal piece of equipment using hazardous materials where a specific function, laboratory procedure or research activity occurs. Approved or listed hazardous materials storage cabinets, flammable liquid storage cabinets or gas cabinets serving a workstation are included as part of the workstation. A workstation is allowed to contain ventilation equipment, fire protection devices, electrical devices, and other processing and scientific equipment.

SECTION 9. Part 4 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

Part 4

General Precautions Against Fire, Emergency Planning and Fire Service Features

17.12.400 Adoption of Chapter 3, 4 and 5 and Appendix Chapter 4 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapters 3, 4 and 5 and Appendix Chapter 4 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.410 Provisions of Chapter 3 of 2007 California Fire Code Which are not Adopted or Incorporated By Reference

The following provisions of Chapter 3 of the 2007 California Fire Code are not adopted or incorporated in this Chapter by reference, and shall not be deemed to be a part of this Chapter nor a part of the Fire Code of the City of San José: Sections 311.5.2, 311.5.3, 311.5.4 and 311.5.5.

17.12.420 Amendment to Section 404.3.1 of 2007 California Fire Code Related to Fire Evacuation Plans

Section 404.3.1 of the 2007 California Fire Code is amended to read as follows:

404.3.1 Fire Evacuation Plans. Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete or, where approved, by selected floors or areas only.
2. Procedures for employees who must remain to operate critical equipment before evacuating.
3. Procedures for accounting for employees and occupants after evacuation has

been completed.

4. Identification and assignment of personnel responsible for rescue or emergency medical aid.
5. The preferred and any alternative means of notifying occupants of a fire or emergency.
6. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
7. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
8. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages and visual warning devices, where provided.

17.12.430 Amendment to Section 404 of the 2007 California Fire Code to Add Provision Related to Emergency Plan and Hazardous Materials Management Plan Cabinets

Section 404 of the California Code is amended to add the following new subsection to be numbered and entitled as follows:

404.6 Emergency Plan and Hazardous Materials Management Plan Cabinets. In large commercial, industrial or residential complexes, the Chief may require the fire safety and evacuation plans and/or the Hazardous Materials Management plan to be locked in approved cabinets in approved locations that are accessible to the Fire Department in the event of an emergency.

17.12.440 Amendment of Sections 503.1.1, 503.1.2, 503.2, 503.2.3, 503.7 of 2007 California Fire Code Related to Fire Apparatus Access Road

Sections 503.1.1, 503.1.2, 503.2, 503.2.3 and 503.7 of the 2007 California Fire Code are amended to read as follows:

503.1.1 Buildings and Facilities, Exception: The Chief is authorized to increase the dimension of 150 feet (45 720 mm) where:

1. The building is equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.3.
2. Fire apparatus access roads cannot be installed because of location on property, topography, waterways, non-negotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
3. There are not more than two Group R-3 or Group U occupancies.

503.1.2 Additional Access. The Chief is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access. A second point of access is required when a fire apparatus access road exceeds 1,000 feet.

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.7. At the discretion of the Chief, if alternative standards for fire apparatus access roads have been approved by the Fire Chief and the Directors of Planning, Building & Code Enforcements, Transportation and Public Works, such alternative standards may be applied.

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support the imposed loads of fire apparatus (75,000 pounds) and shall be surfaced so as to provide all weather driving capabilities.

503.2.7 Grade. The grade of the fire apparatus access road shall not exceed fifteen percent (15%).

17.12.450 Amendment of Section 504 of 2007 California Fire Code to Add Provision Related to Access Control Devices

Section 504 of the 2007 California Fire Code is amended to add a new subsection to be entitled and read as follows:

504.4 Access Control Devices. When access control devices including bars, grates, gates, electric or magnetic locks or similar devices which would inhibit rapid fire department emergency access to the building are installed, such devices shall be approved by the Chief. All access control devices shall be provided with an approved means for deactivation or unlocking by the Fire Department. Access control devices shall also comply with Chapter 10 for exiting.

17.12.460 Amendment of Section 505.1 of 2007 California Fire Code Related to Address Numbers

Section 505.1 of the 2007 California Fire Code is amended to be entitled and read as follows:

505.1 Address Numbers: Approved numbers or addresses shall be placed on all new and existing buildings in such a position as to be plainly visible and legible from the street or road fronting the property. Numbers shall contrast with their background. Subunits of any building or complex, not having individual addresses, shall be identified in a consistent manner, either numerically or alphabetically, using a logical sequence. Unit numbers or letters shall be affixed near the main entrance of each occupancy in such a position as to be plainly visible and legible. Lighted directory maps may be required at building complex entrances or other locations, as specified by the Chief.

17.12.470 Amendment of Section 508.5.1 of 2007 California Fire Code Related to Fire Hydrants

Section 508.5.1 of the 2007 California Fire Code is amended to be entitled and read as follows:

508.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the Chief.

Exceptions:

1. For Group R-3 and Group U occupancies fully sprinkler throughout, the distance requirements may be modified by the Chief.

SECTION 10. Part 5 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

Part 5

Building Services and Systems, Fire Resistance Rated Construction and Interior Finish, Decorative Materials and Furnishings

17.12.500 Adoption of Chapters 6, 7 and 8 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapters 6, 7 and 8 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.510 Amendment of Section 603.4 Related to Portable Unvented Heaters

Section 603.4 of the 2007 California Fire Code is amended to read in its entirety as follows:

603.4 Portable unvented heaters. Portable unvented fuel-fired heating equipment shall be prohibited in occupancies in Groups A, E, I, R-1, R-2, R-3 and R-4. Use in other occupancies shall require approval from the Chief.

Exception: Listed and approved unvented fuel-fired heaters in one-and two-family dwellings.

603.4.1 Prohibited locations. Unvented fuel-fired heating equipment shall not be located in, or obtain combustion air from, any of the following rooms or spaces: sleeping rooms, bathrooms, toilet rooms or storage closets.

17.12.520 Amendment of Section 608.6.1 of the 2007 California Fire Code Related to Ventilation of Stationary Storage Battery Rooms

Section 608.6.1 of the 2007 California Fire Code, shall be amended to read as follows:

608.6.1 Room Ventilation. Ventilation shall be provided in accordance with the California Mechanical Code and the following:

1. For flooded lead acid, flooded nickel-cadmium, and VRLA batteries, the ventilation system shall be designed to limit the maximum concentration of hydrogen to 1 percent (1%) of the total volume of the room; or
2. Continuous ventilation shall be provided at a rate of not less than 1 cubic foot per minute per square foot [(1 ft³/min/ft² or 0.0051 m³/(s-m²)] of the floor area of the room.

3. Failure of the ventilation system shall initiate a local alarm and transmit a signal to a constantly attended station and automatically disengage the charging system.

SECTION 11. Part 6 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

Part 6

Fire Protection, Sprinkler, Alarm Detection and Smoke Control Systems

17.12.610 Adoption of Chapter 9 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapter 9 of the 2007 California Fire Code, including the Tables therein, is adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.620 Provisions of Chapter 9 of 2007 California Fire Code Which are not Adopted or Incorporated By Reference

The following provisions, including all subparts thereof, of Chapter 9 of the 2007 California Fire Code are not adopted or incorporated in this Chapter by reference, and shall not be deemed to be a part of this Chapter nor a part of the Fire Code of the City of San José: Section 903. See San José Municipal Code Chapter 24.03 for requirements related to automatic sprinkler systems.

17.12.630 Amendment of Section 901.4.3 Relating to Additional Fire Protection System Requirements, Additional Safety Requirements for Multi Story Building and Other Buildings Presenting Unique Firefighting Challenges

Section 901.4.3 of the 2007 California Fire Code is amended to add the following subparts to be numbered, entitled and read as follows:

901.4.3.1 Firefighter Breathing Air Replenishment Systems

901.4.3.1.1 The following buildings shall be equipped with an air rescue replenishment system, approved by the Fire Chief or designee. The system shall provide an adequate pressurized air supply through a permanent piping system with access stations for replenishment of portable breathing air equipment used by Fire Department personnel:

1. Any building having floors used for human occupancy located more than seventy five feet (75') above the lowest level of the fire department vehicular or personnel access, whichever access is more restrictive, as determined by the Fire Chief;
2. Any building with two (2) or more stories underground;
3. Any tunnel over five hundred feet (500') in length;
4. Any building where the fire apparatus access point is located more than one hundred fifty feet (150') from the nearest entrance to the building.

901.4.3.1.2 Breathing air replenishment access stations shall be located no more than one hundred fifty feet (150') apart, and on at least every third floor in multi-story buildings and structures.

901.4.3.1.3 Where a breathing air replenishment system is required, an annual test shall be performed as described in the administrative regulations issued by the Fire Chief, and a copy of such test shall be kept on record by the property owner and available for inspection at any time by Fire Department representatives.

901.4.3.2 Public Safety Radio Coverage

901.4.3.2.1 The following buildings and structures shall be required to meet the radio coverage requirements specified in Section 1001.10.2.2:

1. Buildings greater than fifty thousand (50,000) square feet or additions and/or modifications which cause a building to be greater than fifty thousand (50,000) square feet (for purposes of this section, area separation walls cannot be used to define separate buildings);
2. Basements over ten thousand (10,000) square feet, regardless of the occupancy;
3. Any building having floors used for human occupancy located more than seventy five feet (75') above the lowest level of the fire department vehicular or personnel access, whichever access is more restrictive, as determined by the Fire Chief;
4. Any building with two (2) or more stories underground; and
5. Any tunnel over five hundred feet (500') in length.

901.4.3.2.2 Radio coverage requirements are as follows:

1. Inbound into the building:

A minimum average in-building field strength of $8\mu\text{V}$ (-88 dBm) throughout 90% of the area of each floor of the building when transmitted from the nearest police/fire radio site.

If the field strength outside the building where the receiving antenna system for the in-building system is located is less than the -88 dBm, then the minimum required in-building field strength shall equal the field strength being delivered to the receiving antenna of the building.

2. Outbound from the building:

Minimum average signal strength of $4\mu\text{V}$ (-95 dBm) measured at the nearest police/fire receiver site. (Voting receiver or Repeater.)

No existing or future wireless communications facilities shall interfere with any public safety radio communications systems.

Wireless communications facilities, as referred to herein, include,

but are not limited to, satellite dish, antenna, cellular phone facility and similar wireless communication structure or system.

901.4.3.2.3 Any building or structure that cannot meet the required level of radio coverage shall be equipped with a Radio Signal Booster System consisting of an exterior antenna, a FCC Type Accepted Bi-Directional amplifier system with a backup power supply mounted in a suitable location in the building and an in-building antenna or radiating cable system. The Signal Booster System shall be designed to operate in the VHF, UHF, 700 and 800 megahertz (MHz) bands and shall be capable of operating on an independent battery and/or generator system for a period of at least twelve (12) hours without external power input. The battery system shall automatically charge in the presence of external power input. There shall be no connectivity between the amplification system and fire alarm system. Where signal booster equipment is located in an equipment room that may become water soaked or sprayed with fire retardants during a fire, the installations will require the use of a watertight case, typically "NEMA-4", which is an industry standard specification for a sealed wall mounted cabinet.

Exception: Elevator coverage is exempt.

901.4.3.2.4 Acceptance testing shall be as follows:

1. When an in-building radio system is required, upon completion of installation, the radio system, and prior to issuance of certificate of occupancy, the property owner shall provide for testing to ensure that two-way coverage on each floor of the building is a minimum of ninety (90%) percent. Each floor of the building shall be divided into a grid of approximately twenty (20) equal areas. A maximum of two (2) of the areas will be allowed to fail the test.
2. In the event that three (3) of the areas fail the test, in order to be more statistically accurate, the floor may be divided into forty

(40) equal areas. A maximum of four (4) areas will be allowed to fail the test. After the forty (40) area test, if the system continues to fail, it will be the building owner's responsibility to have the system altered to meet the ninety (90%) percent coverage requirement.

3. The voice test shall be conducted using a portable radio with specifications equivalent to the San José fire/police personnel portable radios, talking through the City public safety communication system.

4. The data system test shall be conducted using a laptop computer communicating with the computer aided dispatch system. A spot approximately in the center of the grid area will be selected for the test, then the radio will be keyed to verify two-way communications to and from the outside of the building through the City public safety communications system. Once the spot has been selected prospecting for a better spot in the grid area will not be permitted.

5. The gain values of all amplifiers shall be measured and the test measurement results shall be kept on file with the building owner so that the measurements can be verified each year during the annual tests. In the event that the measurement results become lost, the building owner will be required to rerun the acceptance test to reestablish the gain values. Copies of all tests shall be forwarded to the attention of the 911 communications supervisor of the City.

901.4.3.2.5 Where radio retransmission equipment is required, an annual test shall be performed as described in the administrative regulations issued by the Fire Chief to ensure that the building continues to meet the radio coverage requirements of this Section, and a copy of such test shall be kept on record by the property owner and

available for inspection at any time by Fire Department representatives.

- 901.4.3.2.6** Personnel conducting acceptance and annual radio system tests shall be qualified to perform the work. All tests shall be documented and signed by a person in possession of a current FCC license, a current technician certification issued by the Associated Public Safety Communications Officials International (APCO), or the Personal Communications Industry Association (PCIA).
- 901.4.3.2.7** Public safety personnel shall have the right to enter onto the property to inspect and to conduct field-testing at all reasonable times to be certain that the required level of radio coverage is present.
- 901.4.3.2.8 Administrative Regulations:** The Fire Chief is authorized to, from time to time as necessary, issue, review and revise administrative regulations to implement this Section, including but not limited to the specification of standards for installation and maintenance of firefighter breathing air replenishment systems and operation and maintenance of radio retransmission equipment.
- 901.4.3.4 Effect on Pending Applications, Repairs and Alterations:** The provisions of this Section shall apply to any new building or structure for which application for a building permit application is completed on or after March 11, 2005. The provisions of this Section shall further apply to alterations, additions or repairs to existing buildings for which a permit application is completed on or after March 11, 2005 to the same extent that the building or structure is required to comply with then current requirements or other technical codes as specified in Title 24 of this Code.

SECTION 12. Part 7 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

Part 7
Means of Egress

17.12.700 Adoption of Chapter 10 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapter 10 of the 2007 California Fire Code, including the Tables therein, is adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

SECTION 13. Part 8 of Chapter 17.12 of the San José Municipal Code is amended to read as follows:

Part 8
Special Occupancy Provisions

17.12.800 Adoption of Chapters 11 Through 26 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapters 11 through 26 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.810 Amendment of Section 1401.1 of 2007 California Fire Code Relating to Fire Safety During Construction

Section 1401.1 of the 2007 California Fire Code is amended to read as follows:

1401.1 Scope. This Chapter shall apply to structures in the course of construction, alteration, or demolition, including those in underground locations. Compliance with NFPA 241 is required for items not specifically addressed herein. Additional safeguards are required by local Chapter 17.82 of this Code.

17.12.820 Amendment of Section 1802 of 2007 California Fire Code Relating to Continuous Gas Detection Systems

Section 1802 of the 2007 California Fire Code is amended to amend the following definition:

CONTINUOUS GAS DETECTION SYSTEM. A gas detection system where the analytical instrument is maintained in continuous operation and sampling is performed without interruption. Analysis is allowed to be performed on a cyclical basis at intervals not to exceed 5 minutes.

SECTION 14. Chapter 17.12 of the San José Municipal Code is amended to add a new Part 9, to be entitled, numbered and read as follows:

Part 9

Provisions Related to Storage, Handling and Use of Regulated Materials

17.12.900 Adoption of Chapters 27 through 44 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapters 27 through 44 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.910 Amendment of Section 2703.3.1 of 2007 California Fire Code Relating to Unauthorized Discharge of Hazardous Materials

Section 2703.3.1 of the 2007 California Fire Code is amended to read as follows:

2703.3.1 Unauthorized discharges. The Fire Department shall be notified in an approved manner when an unauthorized release of hazardous materials escapes containment, or is contained, but presents a threat to health or property or the environment, or becomes reportable under state, federal or local regulations. The Fire

Department shall be notified immediately in an approved manner when there is a threatened release of hazardous materials that could cause immediate harm to life or property or the environment. In any of these events, the following procedures are required in accordance with Sections 2703.3.1.1 and 2703.3.1.4.

17.12.920 Amendment of Section 3301 of 2007 California Fire Code Relating to Explosive Materials

Section 3301 of the 2007 California Fire Code is amended to add a new subsection 3301.2, to be entitled and read as follows:

3301.2 Bond for permit to use explosive materials. In addition to all other requirements, the applicant for a permit to use explosive material shall furnish a bond or certificate of insurance in the amount deemed adequate by the Chief and the City Risk Manager for payment of damages which could be caused either to a person or persons or to property by reason of the permitted activity and arising from acts of the permittee, agents, employees, or subcontractors.

17.12.930 Amendment of Section 3308 of 2007 California Fire Code Relating to Fireworks, including Pyrotechnic Special Effects

Section 3308 of the 2007 California Fire Code is amended to add a new subsection 3308.2, to be entitled and read as follows:

3308.2 Bond for public display of fireworks. In addition to all other requirements, the applicant for a permit to use fireworks, including proximate audience displays and pyrotechnic special effects, shall furnish a bond or certification of insurance in the amount deemed adequate by the Chief and the City Risk Manager for payment of damages which could be caused either to a person or persons or to property by reason of the permitted activity and arising from acts of the permittee, agents, employees, or subcontractors.

17.12.940 Sale and Use of Fireworks

Except where otherwise expressly provided in this Code, it shall be unlawful for any person to possess, store, offer for sale, expose for sale, sell at retail, or use or explode any fireworks.

**17.12.950 Amendment of Section 3404.2.4 of 2007 California Fire Code
Related to Smoking in Hazardous Materials Areas**

Section 3404.2.4 of the 2007 California Fire Code is amended to read as follows:

3404.2.4 Sources of ignition, Exception. Areas designated as hot work areas, and areas where hot work permits have been issued in accordance with this Code.

**17.12.960 Amendment of Section 3404.2.5.8 of 2007 California Fire Code
Related to Overfill Protection for Above Ground Tanks**

Section 3404.2.5.8 of the 2007 California Fire Code is amended to read as follows:

3404.2.5.8 Overfill prevention, Exception: Outside above ground tanks with a capacity of 500 gallons or less.

**17.12.970 Amendment of Section 3404.2.11 of 2007 California Fire Code
Related to Installation of Underground Storage Tanks**

Section 3404.2.11 of the 2007 California Fire Code is amended to read as follows:

3404.2.11 Underground tanks. Underground storage tanks shall be installed according to manufacturer's recommendations. Underground storage of flammable and combustible liquids in tanks shall comply with Section 3404.2 and Sections 3404.2.11.1 through 3404.2.11.5.2.

**17.12.980 Amendment of Section 3404.2.13.1.4 of 2007 California Fire Code
Related to Tank Abandonment**

Section 3404.2.13.1.4 of the 2007 California Fire Code is amended to read as follows

3404.2.13.1.4 Tanks abandoned in place. Tanks abandoned in place shall be as follows:

1. Flammable and combustible liquids shall be removed from the tank and connected piping.
2. The suction, inlet, gauge, vapor return and vapor lines shall be disconnected.
3. The tank shall be filled completely with an approved inert solid material.
4. Remaining underground piping shall be capped or plugged.
5. A record of tank size, location and date of abandonment shall be retained.
6. All exterior above-grade fill piping shall be permanently removed when tanks are abandoned or removed.

**17.12.990 Amendment of Section 3405.3.2 of 2007 California Fire Code
Related to Bonding of Vessels**

Section 3405.3.2 of the 2007 California Fire Code is amended to read as follows

3405.3.2 Bonding of vessels. Where differences of potential could be created, vessels containing Class I or Class II liquids or liquids handled at or above their flash points shall be electrically connected by bond wires, ground cables, piping or similar means to a static grounding system to maintain equipment at the same electrical potential to prevent sparking.

SECTION 15. Chapter 17.12 of the San José Municipal Code is amended to add a new Part 10, to be entitled, numbered and read as follows:

Part 10
Referenced Standards

17.12.1000 Adoption of Chapter 45 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapter 45 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

17.12.1010 Provisions of Chapter 45 of 2007 California Fire Code Which are not Adopted or Incorporated By Reference

The following standards referenced in Chapter 45 of the 2007 California Fire Code are not adopted or incorporated in this Chapter by reference, and shall not be deemed to be a part of this Chapter nor a part of the Fire Code of the City of San José: NFPA 13R.

17.12. 1020 Amendment to Chapter 45 to Add Reference to Standards for Hood and Duct Systems and Fire Protection in Clean Rooms

The following standards are added to those referenced in Chapter 45 of the California Fire Code: NFPA 96-01 "Standard for Hood and Duct Systems" and NFPA 318-02 "Standard for Fire Protection Systems in Clean Rooms."

17.12.1030 Amendment of Chapter 45 Sprinkler System Standard for One and Two Family Dwellings (NFPA 13D-2002)

NFPA 13D-2002 edition, Sprinkler Standards for one and two family dwellings is amended as follows:

Section 1.1: Amend to add the following:

If the installation is voluntary, the installation shall comply with NFPA 13D-2002 without the amendments. If the installation is required by applicable code, or in lieu of site access, or to satisfy an equivalency approved by the fire marshal, the building shall be fully sprinklered and the following amendments to each section shall apply.

Section 6.3: Amend to add the following:

(8) No valve shall be allowed which shuts off the automatic sprinkler system without turning off the domestic water supply.

Section 7.5: Amend to add the following:

7.5.9 Spare sprinklers shall be provided as required by NFPA 13-2002 Section 6.2.9.

Section 8.1.3: Amend to add the following:

8.1.3.1.5 Pilot sprinklers shall be provided in the attics and between floors where floor/ceiling assemblies consist of open web wood joists or trusses. Pilot sprinklers shall be two hundred twelve degrees Fahrenheit, 7/16 inch orifice. Pilot sprinklers shall be located within twelve inches of the structure and/or at the apex of each ridgeline when applicable. A sprinkler is required where the ridgeline and hips converge. Sprinklers shall be spaced at maximum thirty feet centers (maximum fifteen feet from outside walls) and shall be located at all heat and fire sources including furnaces, hot water heaters, above kitchen ranges, etc.

Section 8.6: Amend to delete: 8.6.4, 8.6.5 and 8.6.6.

17.12.1040 Amendment of Chapter 45 Sprinkler System Installation Standards (NFPA 13-2002).

NFPA 13-2002 edition, Sprinkler System Installation Standards, is amended as follows:

Section 6.3: Amend to add the following:

6.3.9: All abandoned pipes shall be removed from the premises. If abandoned pipes cannot be removed, they shall be permanently marked as "abandoned in place" to the satisfaction of the San José Fire Department.

Section 7.3.2: Amend to add the following:

7.3.2.6 Where steel pipe is used in preaction and dry pipe systems, piping shall be limited to internally galvanized steel.

Exception: Non-galvanized fittings shall be permitted.

Section 8.4.3: Amend to delete all exceptions and add the following:

Extended coverage heads shall not be used. Only ½-inch standard spray sprinklers shall be used.

Section 8.14.10: Amend to add the following:

8.14.10.4 Fire sprinkler system risers or other controls shall not be located in electrical rooms.

Section 8.15.1.1.1.1: Amend to add the following:

Each floor and basement level of a building shall be provided with a floor control valve in an approved location.

Section A-9.1.3.9.3: Delete.

Section A-9.1.3.9.4: Delete.

Section 9.3.5.9: Amend to delete 9.3.5.9.4 and add the following:

A lock washer shall be located between the flat washer and nut.

Figure 9.3.5.9.1: Delete lag screws and lag bolts in wood table.

Section 9.3.7.8: Delete "unless part".

Section 9.3.7.9: Delete.

Section 11.2.3.2: Amend to add the following:

11.2.3.2.10 For light hazard areas designated for office use, one-inch plugged, threaded outlets shall be provided at each head. The minimum flow shall be 22.5 gpm. The outlet K-factor shall be 5.07 (one-5.6 K-factor head with 10 feet of one-inch pipe, two 90 degree elbows connected to a common branch line outlet by one foot of one inch pipe).

Extended coverage sprinkler heads shall not be used. Only standard one-half-inch standard spray sprinklers shall be used.

11.2.3.2.11 When a fire sprinkler system is required in buildings of undetermined use with ceilings of fourteen feet or less, they shall be installed for an ordinary hazard occupancy with a minimum design density of not less than 0.2 gpm/square feet, with a minimum design

area of 3,000 square feet. The system demand, including 250 gpm for hoses, shall be designed at a minimum of ten percent below the available water supply. One-inch plugged, threaded outlets shall be provided at each head. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or occupant to upgrade the system.

11.2.3.2.12 Buildings of undetermined use with floor to structure height greater than fourteen feet (14'), a fire sprinkler system shall be installed for an extra hazard occupancy with a minimum design density of 0.33 gpm/square feet with a minimum design area of three thousand (3,000) square feet. The system demand including 500 gpm for hoses shall be designed at a minimum of ten percent below the available water supply. One-inch plugged, threaded outlets shall be provided at each head. In addition, a four-inch grooved capped outlet shall be provided on the riser prior to any system control valve. Where a subsequent occupancy requires a system with greater capability, it shall be the responsibility of the owner and/or occupant to upgrade the system.

Section 11.2.3.2.3: Delete.

Section 14.4.1: Amend to add the following:

14.4.1.5: Water supply data shall be reduced by ten percent prior to applying hydraulic calculations.

Section 14.4.4: Amend to add the following:

14.4.4.10: The maximum velocity of water flowing through hydraulically calculated system shall be twenty feet per second.

Section 106.5.2: Amend to add the following:

(6) A key plan indicating the location of each area controlled by each control valve, inspector's test valves, all auxiliary control valves and all auxiliary drain valves.

(7) Any special design criteria used to determine the system design, i.e., rack storage limitations, high-piled storage limitations, etc. These criteria shall be shown on the key plan.

17.12.1050 Amendment of Chapter 45 Standard for Installation of Standpipe and Hosepipe Systems (NFPA 14-2002)

NFPA 14-2003 edition, Standard for Installation of standpipe and hosepipe system is amended as follows:

Section 4.1: Amend to add the following:

4.1.4 Installations and materials shall comply with NFPA 13 as adopted herein.

Sections 4.2, 4.3: Delete

Section 5.2.5: Amend to add the following:

The water supply shall be made prior to the sprinkler system water flow indicator. The connection shall be equipped with a monitored valve, flow switch and shall be restricted to a three-eighth inch (3/8") orifice.

Section 7.8.3: Amend to read as follows:

Each hose outlet shall be provided with a gauge configured as depicted in 2002 NFPA 13, Figure 8.15.2.4 for system riser drain connections, regardless of the type of standpipe system installed.

17.12.1060 Amendment of Chapter 45 Standard for Installation of Centrifugal Fire Pumps (NFPA 20-2003)

NFPA 20-2003 edition is amended as follows:

Section 5.12.1: Amend to add the following:

All exterior fire pumps shall be installed in a dedicated building (pump house).

Section 5.14.4: Amend to read as follows:

All fire pumps shall be installed with a bypass. The size of the bypass shall be at least as large as the pipe size required for discharge pipe as specified in Table 5.25b.

Section 5.14.4: Amend to add the following:

(6) Positive supply pressure shall be maintained through alarms that shall be arranged for audio and visual annunciation at the FACP and in the fire pump room if the water supply drops below 5 psi.

Section 5.16: Amend to read as follows:

Where provided, the suction valve, discharge valve, jockey pump valves controller valves, and isolation valves on the backflow prevention device or assembly shall be supervised open by the following methods:

(1) Central station, proprietary or remote station signaling services through the FACP.

(2) Locking valves open.

Exception: The test outlet control valves shall be supervised closed.

Section 5.19.1.1: Amend to add the following:

To facilitate flow testing, all fire pumps shall be equipped with both of the following:

1. Test Header. This device is connected to the discharge side of the pump and has a number of hose outlets (equal to the number required at 15 percent capacity ÷ 250 gpm). When testing the pump, the hose is connected to the outlets with water discharged in a safe location. Flow readings are usually taken from the end of the hose with a Pitot gauge.
2. Flowmeter. A special pipe is run from the discharge side of the pump back to the water supply (or to some other acceptable discharge point) with a flowmeter, control valve and check valve in the line. When testing the pump, the control valve is opened partially (with the pump already running) to achieve the 100 percent flow condition. The valve is opened more to achieve the 150 percent flow condition.

Section 10.2.4: Amend to add the following:

Provide sufficient space in pump room so that there is adequate workspace on all sides of the pump and associated equipment.

Section 10.5.2.1.1: Delete Exception 10.5.2.1.6 (B).

17.12.1070 Amendment of Chapter 45 Standard for private fire service mains (NFPA 24-2002)

NFPA 24-2002 edition is amended as follows

Section 7.3.8: Amend to add the following:

7.3.9 Fire hydrants shall not be under the control of valves controlling fire sprinkler and/or standpipe systems.

7.3.10 Fire hydrants shall not be subject to pressure supplied by way of a FDC.

17.12.1080 Amendment of Chapter 45 Standard for fire alarm systems (NFPA 72-2002)

NFPA 72-2002 edition is amended as follows

Section 1.5.2.10.5: Amend to add the following:

Where the engine-driven generator is not constantly attended, audible and visible alarms powered by a source other than the engine starting batteries and not exceeding 125 volts shall be provided at a point of constant attendance. These alarms shall indicate the following:

- (a) Engine running (separate signal).
- (b) The controller main switch has been turned to “off” or “manual” position (separate signal).
- (c) Low fuel and trouble on the controller or engine (separate or common signals).

17.12.1090 Amendment of Chapter 45 Installation Standard for Clean Agent Extinguishing Systems (NFPA 2001-2004)

NFPA 2001-2004 edition is amended as follows:

Section 1-4: Amend to add the following:

1.4.2.5 Clean agent systems shall not be used in lieu of required fire sprinkler systems.

17.12.1100 Amendment of Chapter 45 Installation Standard for Fire Protection Systems in Clean Rooms (NFPA 318-2002)

NFPA 318-2002 edition, including appendices is hereby added to the list of recognized standards, as contained in Chapter 45 of the 2007 California Fire Code, with the following amendments:

Section 4.1.2.1: Amend to add the following:

The extent of the calculated area shall be 3,000 square feet or the entire clean zone encompassed by a minimum of one-hour rated construction, whichever is less.

Section 4.1.2.6.10: Amend to add the following:

Approved inspection ports shall be provided in all internally fire sprinklered ducts for periodic inspection and maintenance.

Section 4.1.2.7: Amend to add the following:

Corridor fire sprinkler protection shall be designed in accordance with the Building Code as required for ordinary hazard Group 2. (See NFPA 13.) When the design area of the sprinkler system consists of one row of sprinklers in the corridor, the maximum number of sprinklers to be calculated need not exceed 13.

SECTION 16. Chapter 17.12 of the San José Municipal Code is amended to add a new Part 11 to be entitled, numbered and read as follows:

Part 11

Media Production Facilities and Locations and Wildland - Urban Interface Areas

17.12.1110 Adoption of Chapters 46 and 47 of 2007 California Fire Code

Except as otherwise provided for in this Chapter, Chapters 46 and 47 of the 2007 California Fire Code, including the Tables therein, are adopted and incorporated in this Chapter by reference and made a part hereof as if fully set forth herein.

SECTION 17. Chapter 17.12 of the San José Municipal Code is amended to add a new Part 12 to be entitled, numbered and read as follows:

Part 12

Adoption of Appendices 2007 California Fire Code Appendices A Through H

17.12.1200 Adoption of Specified Appendices

Except as otherwise provided in this Chapter, the following appendices to the 2007 California Fire Code are adopted and incorporated by reference and made a part hereof as if fully set forth herein: Appendix C and Appendix H.

17.12.1210 Appendices to 2007 California Fire Code Which Are Not Adopted or Incorporated By Reference

The following Appendices to the 2007 California Fire Code are not adopted or incorporated in this Chapter by reference, and shall not be deemed to be a part of this Chapter nor a part of the Fire Code of the City of San José: Appendices A, D, E, F and G.

17.12.1220 Adoption of Appendix B to 2007 California Fire Code as Amended

Appendix B is adopted with the following amendments to the exceptions in Section B105.1 and B105.2 to read as follows:

B105.1 One- and two-family dwellings, Exception: A reduction in fire flow of 50 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system. The resulting fire flow shall not be less than 1,000 gallons per minute.

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

Draft

PASSED FOR PUBLICATION of title this 6th day of November, 2007, by the following vote:

AYES: CAMPOS, CHIRCO, CHU, LICCARDO, NGUYEN,
OLIVERIO, PYLE, WILLIAMS; REED

NOES: NONE

ABSENT: CONSTANT, CORTESE

DISQUALIFIED: NONE

CHUCK REED
Mayor

ATTEST:

LEE PRICE, MMC
City Clerk