ORDINANCE NO. 2018-01-___

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MCKINNEY, TEXAS, AMENDING CHAPTER 42, "FIRE PREVENTION AND PROTECTION," OF THE CODE OF ORDINANCES OF THE CITY OF MCKINNEY, TEXAS, BY REPEALING ARTICLE II, "FIRE PREVENTION CODE," IN ITS ENTIRETY AND ADOPTING A NEW ARTICLE II, ALSO ENTITLED "FIRE PREVENTION CODE," TO ADOPT THE 2015 EDITION OF THE *INTERNATIONAL FIRE CODE* AND LOCAL AMENDMENTS THERETO INCLUDING, BUT NOT LIMITED TO, CERTAIN AMENDMENTS RECOMMENDED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND PROVIDING FOR ENFORCEMENT; REPEALING ALL CONFLICTING ORDINANCES; PROVIDING A SAVINGS CLAUSE; PROVIDING A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY; AND PROVIDING AN EFFECTIVE DATE

WHEREAS, the City of McKinney, Texas (the "City") is a Home Rule City possessing the full power of local self-government pursuant to Article 11, Section 5 of the Texas Constitution, Section 51.072 of the Texas Local Government Code, and the City's Home Rule Charter; and

WHEREAS, a new edition of the *International Fire Code* ("IFC") is produced every three years, and the 2015 Edition of the IFC has recently been issued by the International Code Council; and

WHEREAS, the current edition of the IFC adopted for the City of McKinney is the 2012 Edition of the IFC; and

WHEREAS, a committee of fire code professionals works through the North Central Texas Council of Governments ("NCTCOG") to recommend local amendments specific to the needs of North Central Texas, and the City of McKinney has consistently adopted these recommended amendments, with some minor modifications, in the past so that most municipalities in the region use the same or similar fire code standards; and

WHEREAS, the adoption of the 2015 Edition of the IFC, including the local amendments, will provide the most current life safety applications with respect to construction, occupancy, use and maintenance of buildings and structures in the City of McKinney; and

WHEREAS, the creation of the 2015 International Codes by the International Code Council was in conjunction with the International Conference of Building Officials ("ICBO"), the organization whose codes the City of McKinney has adopted since the 1970's; and

WHEREAS, IFC certifications will be based on examinations conducted under the 2015 International Codes, so that adoption of the 2015 Edition of the IFC will facilitate such examinations; and

WHEREAS, the City Council of the City of McKinney, Texas, deems it to be in the best interest of the citizens of the City of McKinney to update its fire code standards and adopt the 2015 Edition of the IFC, as amended, as the minimum standard for the continued construction, occupancy, use and maintenance of buildings and structures within the City's jurisdictional authority.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MCKINNEY, TEXAS, THAT:

Section 1. All of the above premises are found to be true and correct legislative determinations and are incorporated into the body of this Ordinance as if copied in their entirety.

Section 2. Article II, entitled “Fire Prevention Code,” of Chapter 42 of the Code of Ordinances of the City of McKinney, together with Sections 42-23 through 42-26, is hereby deleted and repealed in its entirety and replaced with a new Article II, also entitled “Fire Prevention Code,” as set forth in Section 3 of this Ordinance, below.

Section 3. From and after the date of this Ordinance, a new Article II entitled “Fire Prevention Code” of Chapter 42, “Fire Prevention and Protection,” of the Code of Ordinances of the City of McKinney, is hereby adopted to read as follows:

“ARTICLE II. FIRE PREVENTION CODE

Sec. 42-23. Adoption of *International Fire Code*.

The *International Fire Code*, 2015 Edition, together with such other amendments as are set forth herein, including appendix chapters B, C, D, E, F, G, H, I, J, K, L and M (*see International Fire Code* Section 101.2.1, 2015 edition), as published by the International Code Council is hereby adopted and designated as the Fire Code of the City to serve as a general standard for purposes of regulating and governing the safeguarding of life and property from fire and explosion hazards arising from the storage, handling and use of hazardous substances, materials and devices, and from conditions hazardous to life or property in the occupancy of buildings and premises as herein provided; providing for the issuance of permits and collection of fees therefore; and each and all of the regulations, provisions, penalties, conditions and terms of said Fire Code on file in the office of the City Secretary are hereby referred to, adopted, and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions and changes, if any, of this ordinance. Unless deleted, omitted, expanded or otherwise changed herein, all provisions of such *International Fire Code*, 2015 Edition, as amended, shall be fully applicable and binding and in full force and effect. A copy of the *International Fire Code*, 2015 Edition, together with such other amendments as are set forth herein, referred to herein shall be kept on file in the office of the City Secretary.

Sec. 42-24. Enforcement.

The Fire Chief, or his designee, is hereby authorized and directed to enforce all provisions of the Fire Code within the City’s corporate limits and the City’s extraterritorial jurisdiction and in accordance with Section 122-4 of the Code of Ordinances of the City of McKinney, Texas.

Sec. 42-25. Definitions.

The following words, terms and phrases, when used in the Fire Code adopted in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

(a) Whenever the word “jurisdiction” is used in the *International Fire Code*, 2015 Edition, it shall mean the corporate limits of the City of McKinney, Texas.

(b) Whenever the phrase “Code Official” or “Fire Code Official” is used in the *International Fire Code*, 2015 Edition, it shall mean the Fire Chief of the McKinney Fire Department or his designee.

Sec. 42-26. Fire Code Amendments.

The regional amendments to the *International Fire Code*, 2015 Edition, recommended by the North Central Texas Council of Governments (“NCTCOG Amendments”) to repeal and reenact or add sections to the *International Fire Code*, 2015 Edition, which amendments are attached hereto as Attachment A are hereby adopted by the City of McKinney, Texas, and incorporated herein by reference just as though such amendments were set forth herein in their entirety, to amend the *International Fire Code*,

2015 Edition. In addition, the following amendments further repeal and reenact or add sections to the *International Fire Code*, 2015 Edition, adopted in this article for the purpose of consistency with specific past practices and the recommendations of the North Central Texas Council of Governments, and all sections not expressly amended remain in full force and effect as adopted:

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

101.1 Title. These regulations shall be known as the Fire Code of the City of McKinney, hereinafter referred to as "this Code."

(2) **Section 102.4** is hereby amended to read as follows:

102.4 Application of other codes. The design and construction of new structures shall comply with this Code, and other codes as applicable, and any alterations, additions, changes in use or changes in structures required by this Code, which are within the scope of the *International Building Code*, shall be made in accordance therewith.

(4) **Section 102.7** is hereby amended to read as follows:

102.7 Referenced codes and standards. The codes and standards referenced in this Code shall be those that are listed in Chapter 80 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this Code to the prescribed extent of each such reference and as further regulated in Sections 102.7.1 and 102.7.2.

102.7.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

102.7.2 Provisions in referenced codes and standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code and any adopted amendments, the provisions of this code and any adopted amendments, as applicable, shall take precedence over the provisions in the referenced code or standard.

(5) **Section 102.7.3** is hereby added to read as follows:

102.7.3 Specifically referenced editions of codes and standards. The most currently published editions shall be specifically adopted for referenced NFPA standards.

(6) **Section 103.1** is hereby amended to read as follows:

103.1 General. The Fire Code shall be enforced by the Division of Fire Prevention. The Division of Fire Prevention is hereby established as a division of the Fire Department of the City of McKinney and shall be operated under the supervision of the Chief of the Fire Department. The function of the department shall be the implementation, administration and enforcement of the provisions of this code.

(7) **Section 103.2** is hereby amended to read as follows:

103.2 Appointment. The Fire Marshal in charge of the Division of Fire Prevention shall be appointed by the Fire Chief on the basis of proper qualification.

(8) **Section 103.1** is hereby amended to read as follows:

103.3 Deputies. The Chief of the Fire Department may detail such members of the Fire Department as deputies, inspectors and other

technical officers as shall from time to time be necessary and each member so assigned shall be authorized to enforce the provisions of the International Fire Code.

(9) **Section 105.3.3** is hereby amended to read as follows:

105.3.3. Occupancy prohibited before approval. The building or structure shall not be occupied prior to the *Fire Code Official* issuing a permit when required and conducting associated inspections indicating the applicable provisions of this Code have been met.

(10) **Section 105.6.28** is hereby amended to read as follows:

105.6.28 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas.

   Exception: A permit is not required for individual containers with a 20-pound (9.0 kg) water capacity or less serving occupancies in Group R-3.

2. Operation of cargo tankers that transport LP-gas.

(11) **Section 105.6** is hereby amended by adding the following new provisions:

105.6.49 Model Rocketry. An operational permit is required for the demonstration and use of model rockets, in accordance with NFPA 1122.

105.6.50 Food Booth. An operational permit is required for the operation of a food booth.

105.6.51 Mobile Food Vending Unit. An operational permit is required for the operation of a mobile food vending unit.

105.6.52 Parade Floats. An operational permit is required for the operation of a parade float.

(12) **Section 105.7** is hereby amended by adding new Sections 105.7.19 through 105.7.21 to read as follows:

105.7.19 Access Gates and Barriers. Construction permits are required for the installation or modification of an access gate or barricade across a fire department access roadway, as specified in Section 503.

105.7.20 Electronic access control systems. Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.21 Emergency and Standby Generators. Construction permits are required for the installation or modification of an emergency or standby generator, as specified in Section 604.

(13) **Section 106.2** is hereby amended by adding a new Section 106.2.3 to read as follows:

106.2.3 Inspection fees applicability. The Fire Chief or his designated representative shall inspect all buildings, premises, or portions thereof as often as may be necessary. Inspection fees shall

be in accordance with Section 113. If the Fire Chief or his designee is required to make follow-up inspections after the initial inspection and re-inspection to determine whether a violation or violations observed during the previous inspection have been corrected, a fee shall be charged. The occupant, lessee, or person making use of the building or premises shall pay said fee or fees within thirty (30) days of being billed as a condition to continued lawful occupancy of the building or premises.

(14) **Section 108.1** is hereby amended to read as follows:

108.1 Appeals. Whenever the Fire Code Official shall disapprove an application or refuse to grant a permit applied for, or when it is claimed that the provisions of this Code do not apply or that the true intent and meaning of this Code have been misconstrued or wrongly interpreted, the applicant may appeal from the decision of the code official to the Fire Chief within thirty (30) days from the date of the decision appealed.

(15) **Section 109.3** is hereby amended by adding a new Section 109.3.5 to read as follows:

109.3.5 Citations. It is the intent of this department to achieve compliance by the traditional means of inspection, notification, granting of reasonable time to comply and re-inspection. After all reasonable means to gain compliance have failed, or when a condition exists that causes an immediate and/or extreme threat to life, property or safety from fire or explosion, the Fire Chief or his designee who have the discretionary duty to enforce a code or ordinance may issue a notice to appear (citation) for the violation. Citations shall be issued only by qualified personnel as designated by the Fire Chief.

Notwithstanding any other provision of this Code or of the *International Fire Code* a citation may be issued without prior notice and the opportunity to correct the condition or violation.

(16) **Section 109.4** is hereby amended to read as follows:

109.4 Violation penalties. Any person, firm, partnership, corporation, association, or other entity violating any provision of this article or of any Code provision adopted herein shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in the sum of not more than $2,000.00, and each day such violation continues shall constitute a separate and distinct violation.

(17) **Section 109.4.** is hereby amended by adding a new Section 109.4.2 to read as follows:

109.4.2 Applicability A person, firm, partnership, corporation, association, or other entity shall be presumed to be the violator if the person, firm, partnership, corporation, association, or other entity is the owner or occupant of the subject property, exercises actual or apparent control over the subject property, or is listed as the water customer of the city for the subject property.

(18) **Section 111.4** is hereby amended to read as follows:

111.4 Failure to comply. Any person, firm, partnership, corporation, association, or other entity who shall continue any work after having been served with a stop work order, except any work as that person is directed to perform to remove a violation or unsafe condition, shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in a sum of not more than $2,000.00, and each day such action continues shall constitute a separate and distinct violation.

(19) **Section 113** is hereby amended to read as follows:

113.1 Permit Fees. A permit shall not be issued until the fees have been paid, nor shall an amendment to a permit be released until the additional fee, if any, in Appendix A, "Schedule of Fees," to the Code of Ordinances, City of McKinney, Texas, has been paid.

113.2 Inspection Fees. An inspection or re-inspection shall not be scheduled until the applicable fee in Appendix A, "Schedule of Fees," to the Code of Ordinances, City of McKinney, Texas, has been paid.

113.3 Schedule of fees. Fees shall be assessed in accordance with Appendix A, "Schedule of Fees," to the Code of Ordinances, City of McKinney, Texas.

113.4 Work commencing before permit issuance. Any person, firm, partnership, corporation, association, or other entity who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in the sum of not more than $2,000.00, and each day work continues shall constitute a separate and distinct violation.

113.5 Related fees. The payment of the fee for the construction, *alteration*, removal or demolition of work done in connection to or concurrently with the work or activity authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law.

Section 113.6 Refunds. The applicable governing authority is authorized to establish a refund policy.

(20) **Section 202** is hereby amended to add certain new definitions to be inserted in the existing list of definitions in alphabetical order and to amend certain of the current definitions, in whole or in part, to read as follows:

ADDRESSABLE FIRE DETECTION SYSTEM. Any system capable of providing identification of each individual alarm-initiating device. The identification shall be in plain English and as descriptive as possible to specifically identify the location of the device in alarm. The system shall have the capability of alarm verification.

***AMBULATORY HEALTH CARE FACILITY*.** Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation. This group may include, but not be limited to the following:

Dialysis centers
Sedation dentistry
Surgery center
Colonic centers
Psychiatric centers

ANALOG INTELLIGENT ADDRESSABLE FIRE DETECTION SYSTEM. Any system capable of calculating a change in value by directly measurable quantities (voltage, resistance, etc.) at the sensing point. The physical analog may be conducted at the sensing point or at the main control panel. The system shall be capable of compensating for long-term changes in sensor response while maintaining a constant sensitivity. The compensation shall have a preset point at which a detector maintenance signal shall be transmitted to the control panel. The sensor shall remain capable of detecting and transmitting an alarm while in maintenance alert.

ATRIUM. An opening connecting three or more stories . . . *{remaining text unchanged}.*

DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the Fire Code Official, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, detonation, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein. *… {remainder of text unchanged}.*

HIGH-PILED COMBUSTIBLE STORAGE. Storage of combustible materials in closely packed piles or combustible materials on pallets, in racks or on shelves where the top of storage is greater than 12 feet (3658 mm) in height. When required by the Fire Code Official, high-piled combustible storage also includes certain high-hazard commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities, where the top of storage is greater than 6 feet (1829 mm) in height.

Any building exceeding 6,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building with an occupied floor located more than 55 feet above the lowest level of fire department vehicle access.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

STANDBY PERSONNEL*.* Qualified fire service personnel, approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be as normally calculated by the jurisdiction.

UPGRADED OR REPLACED FIRE ALARM SYSTEM. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware

(21) **Section 202** is hereby amended by adding the following sentence to the end of the current definition of "Manual Dry" under the heading "STANDPIPE, TYPES OF":

The system must be supervised as specified in Section 905.2.

(22) **Section 307** is hereby amended by deleting the current section and replacing it with a new Section 307 to read as follows:

Section 307, Open Burning. Please refer to Article III, entitled "Open Burning," of Chapter 42, "Fire Prevention and Protection," of the Code of Ordinances City of McKinney, Texas, as amended, for the Open Burning provisions of the Fire Code.

(23) **Section 308.1.4** is hereby amended to read as follows:

Section 308.1.4 Open-flame cooking devices. Open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be located or used on combustible balconies, decks, or within 10 feet (3048 mm) of any combustible construction.

Exceptions:

1. One- and two-family dwellings, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20-pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 pounds (5 containers).

2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20-pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 40 pounds (2 containers).

3. LP-gas cooking devices having LP-gas containers with a water capacity not greater than 2-½ pounds [nominal 1-pound (0.454 kg) LP-gas capacity].

(24) **Section 308.1.6.2, Exception 3** is hereby amended to read as follows:

3. Torches or flame-producing devices in accordance with Section 308.1.3.

(24) **Section 308.1.6.3** is hereby amended to read as follows:

308.1.6.3 Sky Lanterns. A person shall not release or cause to be released any untethered unmanned free-floating devices containing an open flame or other heat source such as, but not limited to, a sky lantern.

(25) **Section 311.5** is hereby amended to read as follows:

311.5 Placards. The Fire Code Official is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this Code relating to structural or interior hazards, as required by Sections 311.5.1 through 311.5.5.

(26) A new **Section 319** entitled Parade Floats is hereby adopted to read as follows:

SECTION 319
PARADE FLOATS

319.1 Scope. Parades and parade floats shall be constructed and operate in accordance with this section.

319.2 Permits. A permit shall be required as set forth in Sections 105.6 and 105.7.

319.3 Definitions. The following definitions shall apply to this section.

319.1.1 Large Parade. Expected attendance between 2,000 and 20,000.

319.1.2 Small Parade. Under an expected attendance of 2,000.

319.1.3 Parade Float. A decorated platform, either built on a vehicle or towed, which is a component of a parade.

319.4 Decorative materials. Decorative materials on parade floats shall be non-combustible or flame retardant.

319.5 Construction Materials. All materials used for construction of parade floats must be flame retardant and in compliance with City ordinance, Fire Code and applicable codes and standards.

319.6 Combustible Clearance. A 12″ minimum clearance of decorative materials shall be maintained around vehicle and/or generator exhaust pipe(s).

319.7 Fire Protection. Each parade floats and towing apparatus shall be provided with a minimum 2A-10B:C rated portable fire extinguisher that is readily accessible and displayed in an approved manner.

319.7.1 Inspection. Portable fire extinguishers shall be service, tagged and inspected in accordance with Section 906.

319.8 Portable Generators. Portable generators shall be secured from tipping and subject to approval by the Fire Code Official. Refueling operations shall not take place while the generator is located on the parade float.

319.8.1 Location. Portable generators are not permitted to be located within the parade float, and shall be located on the towing apparatus a minimum of 3 feet from the float body.

319.8.2 Authorization. Written approval from the *Fire Code Official* is required to use a portable generator.

319.9 Electrical. The use of extension cords and power strips shall comply with Section 605.

319.10 Open flames. The use of open flames shall be prohibited.

319.11 Flammable and Combustible Liquids. The use and storage of flammable and combustible liquids shall be prohibited on both the parade float and towing apparatus.

319.12 Ammunition, Small Arms, Dangerous Weapons. The use and storage of ammunition, small arms and dangerous weapons shall be prohibited.

319.13 Smoking. No smoking shall be permitted on the parade float prior to and around a parade float while in motion.

319.14 Lighting. Parade float and towing apparatus lighting shall be kept to a minimum. If provided lighting shall be located in such a manner as to not come in contact with decorative features of the parade float.

319.15 Fireworks. No fireworks or pyrotechnic devices shall be permitted on a parade float or towing apparatus.

319.16 Inspections. Parade floats and towing apparatus shall be inspected by the *Fire Code Official* prior to the event.

319.16.1 Red Tag. If there are no fire extinguishers on the parade float, or if the parade float is construction of flammable non-approved materials, or there is some other violation the float will be red tagged and not allowed to participate in the parade until these items are corrected.

319.17 Special Event Approval. The Parade Marshal, and/or event organizer, shall obtain approval of the proposed parade route and/or obtain a Special Event Permit from the City of McKinney Special Event Committee.

319.18 Operational Parameters. The following operational parameters shall apply:

1. The Parade Marshall must ensure an adequate number of volunteers/assistants along the route who are easily identifiable.

2. The Parade Marshall should complete information contained in the special event application at least 45 days prior to the event date.

3. The Parade Marshall should meet with participants prior to the parade to discuss all requirements and restrictions.

4. The Parade Marshall should ensure that the presence of media organizations on the parade route should not interfere with, slow, or stop the routine progress of a parade.

5. An Event Plan must be created and submitted to the Special Events Committee. This plan will be distributed through the members of Special Events committee to the appropriate city departments for review.

6. The Event Plan must contain a Crowd Management/Emergency Contingency plan provided and approved by the office of Emergency Management, Police Department and Fire Department.

7. For all large and small parades, planners should provide (through established media vehicles) an awareness program to include broadcast of event schedule, parade route, first aid locations, public transport locations, restroom facilities, handicap areas and parade ‘rules’ no less than 24 hours prior to the parade.

8. If there is school age appeal, the parade organizer must involve area school districts in the planning process to alleviate school absences and encourage on-campus participation.

9. The parade participants will not have squirt guns, silly string and other items that could lead to crowd control issues.

10. No candy or materials may be thrown from parade participants to spectators along the parade route. The distribution of gifts, merchandise, literature or other materials along the parade route is prohibited.

11. Parade participants will not jump from or onto a float or motorized vehicle.

12. All owners and drivers of parade-related vehicles, and all other parade participants must sign ‘hold harmless’ agreements protecting the City of McKinney and/or the parade organization.

13. No tandem trailers or other trailers, where the wheels are in the center of the trailer, are allowed for units that have people on them.

14. The use of flatbeds, trucks, buses, or floats are recommended for any mega or large parades where crowd attendance is anticipated to be such that visibility and security are a reasonable concern.

15. Metal interlocking barricades when required by permit along the parade route, should be positioned at street level and not on public sidewalks.

16. The hitch used to attach the float to the pulling vehicle shall be a factory receiver type or welded pickup style bumper. No "bolt-on" type hitches will be allowed. When using a large truck, a drop-hitch must be used and should be at least 12 inches from hitch to the ground.

17. If horses are entrants in the parade, the parade organizer must assign pooper-scooper to clean up behind the horses.

18. The parade route should be planned to spread spectators over a larger number of blocks to reduce any over-crowding situation along the route.

19. Trash maintenance service must be provided by the parade organizer during and immediately following the hours of the parade.

20. Portable restrooms and trash containers to meet the anticipated attendance at parade must be provided by

parade organizer or an agreement in place to utilize facilities at local establishments.

21. All drivers of floats or motorized vehicles must provide proof of vehicle liability insurance and a valid Texas Driver's license to the Parade Marshall at least 48 hours before the parade.

22. A float can be no wider than 12 feet while in the parade or 8 feet while being towed without permit and police escort anywhere else in the City of McKinney. In height, the tallest part of the deck people can stand on is to be no taller than 4 feet from the ground. No prop or item added to the deck can be taller than 12 feet from the top of the highest point to the ground

23. All float participants standing on floats or any other motorized vehicles must wear safety belts, have hand holds or vertical stanchions, mounted to the float chassis, with a u-shaped piece welded to the top bracket, or back supports securing them in place while the float or vehicles are in motion.

24. Color coded credentials that are large enough to view from 10 feet away are to be worn by all event staff, dignitaries, parade participants, and media to gain access to any restricted areas.

25. No ticker tape or confetti is to be used on the actual parade route by parade participants during the parade due to the creation of fire hazards, engine air-intake problems and clean-up costs.

26. The McKinney Fire and Police Department may exercise the authority to 'veto' any aspect of the parade that they feel poses an unreasonable risk of injury or danger to the public. While exercise of this veto should be prudent, and certainly permit event producers to revise any objectionable part of a plan, public safety must ultimately be the responsibility of the police department and fire department, and related agencies.

27. The Command Post must be established for all mega parades. This Command Post may contain the following staff and equipment:

    a. Two- way communications on all MFD and MPD and local police safety channels.
    b. A designated communications dispatcher.
    c. A clear channel to parade (or event) producers.
    d. Copies of parade line-by-line scripts or other production documents.
    e. Lists of local emergency contact numbers including hospitals, FCC, FAA, EPA, airport control towers, any area military bases, all Federal law enforcement officials, home and work numbers of key MFD and MPD officials, and key utility officials.
    f. A least one command level MPD and MFD official.
    g. A representative of other involved public safety agencies.
    h. A list of appropriate building managers and security department telephone numbers when a large event is to take place well within the defined event area.

28. If PD believes that the environment predicates, aerial spotters on buildings shall be provided and in communication with the Command Post.

29. A sufficient number of police motorcycle officers must be hired to continuously 'ride the barricades' to enforce keeping the parade route clear of spectators.
30. Most medium and large parades should have a McKinney Fire Department engine as the last unit in the parade, followed only by a police car, if it is found such a follow-car is necessary.

31. The McKinney Police Department and Office of Emergency Management officials as part of its planning for large events, will review a crowd disbursement plan in addition to routine security anticipation.

(27) A new **Section 320** entitled Food Booths is hereby adopted to read as follows:

SECTION 320
FOOD BOOTHS

320.1 General. The requirements of this section shall apply to the installation and use of food booths and tents not regulated by Chapter 31.

320.2 Permits. It shall be unlawful to operate a food booth without a permit as set forth in Section 105.6.

Exceptions:

1. When a special event permit is associated with the event, the permit issued by the City of McKinney will be acceptable.

2. When the food booth tent exceeds a total singular area in excess of 400 sq. ft., they shall comply with the requirements of Chapter 31.

320.3 Fire Extinguishers. One (1) 2A-10B:C fire extinguisher shall be required for all food booths. Booths with cooking operations that create grease laden vapors, including deep far fryers, griddles, etc., shall have a Class K fire extinguisher.

320.4 Location. Food booths utilized for cooking shall have a minimum of 10 feet clearance on two sides.

Exception: When allowed by the *Fire Code Official*, food booths shall be permitted to be grouped together, not to exceed three (3) 10 foot by 10-foot tents/canopies, or as otherwise permitted in writing.

320.5 Cooking equipment location. Cooking equipment shall not be located within 10 feet of combustible materials. Open flame cooking, or cooking that produces grease laden vapor shall not be performed under the food booth.

320.6 Acceptable Cooking Sources. The following are the only approved cooking sources for food booths:

1. Solid fuel, such as wood or charcoal
2. LPG
3. Natural Gas
4. Electricity

320.7 Generators. Fuel tanks shall be of adequate capacity to permit uninterrupted operation during normal operating hours. Generators

shall be isolated from contact with the public. Storage of gasoline is not permitted in or near generators or food booths.

320.8 Decorations. All decorative material shall be at least 10 feet away from any open flame, cooking element, or heat source or be flame resistant.

320.9 Escape route. All concession stands shall have a minimum of a 3-foot aisle for emergency escape.

320.10 LPG. All equipment used in conjunction with LPG tanks shall be UL Listed. Tanks shall be secured to prevent tipping or falling. Only one spare tank will be allowed in a food booth. Emptied propane tanks are to be removed from the site immediately after use. Tank shutoff valves and/or additional shutoff valves shall be accessible and away from the cooking appliance(s). Propane tanks shall not be within five feet of an ignition source. Propane tanks shall not be located within 10 feet of a building door or window.

(28) A new **Section 321** entitled EMS Elevator is hereby adopted to read as follows:

SECTION 321
EMS ELEVATOR

Where elevators are provided in buildings, not fewer than one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such size and arrangement to accommodate an ambulance stretcher 24 inches by 84 inches with not less than 5-inch radius corners, in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches in height and shall be placed inside on both sides of the hoist way door frame.

> **Exception:** When allowed by the *Fire Code Official*, an EMS elevator shall not be required for buildings less than 4 stories.

(29) A new **Section 401.9** is hereby added to read as follows:

401.9 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(30) A new **Section 401.9.1** shall be added to read as follows:

Section 401.9.1 Violations. Within a 12-month period, should 3 or more false or nuisance fire alarms be received, transmitted or notified, the owner, operator or representative of the property, building or facility shall be subject to a fine as set forth in Section 109.4 for each subsequent false or nuisance fire alarm.

(31) **Section 403.5** is hereby amended to read as follows:

403.5 Group E Occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with Sections 403.5.1 through 403.5.3.

(32) **Section 405.4** shall be added to read as follows:

405.4 Time. The Fire Code Official may require an evacuation drill at any time. Drills shall be held at unexpected times and under

varying conditions to simulate the unusual conditions that occur in case of fire.

(33) **Section 403.12.3** is hereby amended to read as follows:

403.12.3 Crowd managers. Trained crowd managers shall be provided for facilities or events where 250 or more persons congregate. Crowd managers shall be provided in accordance with Sections 402.12.3.1 through 402.12.3.3.

(34) A new Exception is hereby added to **Section 403.12.3.1** such that the existing Exception shall be numbered as 1., and the new **Exception 2** shall be and read as follows:

Exceptions:

1. {Text of original Exception to be inserted here.}
2. Assembly occupancies used exclusively for religious worship with an occupant load not exceeding 1,000.

(35) **Section 501.4** is hereby amended to read as follows:

501.4 Timing of installation. When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they shall be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

(36) **Section 503.1.1** is hereby amended to insert the following language beginning in a new paragraph situated between the end of the current provision and the list of Exceptions:

Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a ten foot (10') wide unobstructed level pathway around the external walls of the structure and all barriers. Pathway shall be a level and traversable surface, and shall not exceed 3% grade. A continuous row of parking between the fire lane and the structure shall be considered a barrier. Landscaping may also be considered a barrier based upon the location of type.

The provisions of this section notwithstanding, fire lanes may be required to be located within thirty feet (30') of a building if deemed to be reasonably necessary by the Fire Chief to enable proper protection of the building.

Fire lane and access easements shall be provided to serve all buildings through parking areas, to service entrances of buildings, loading areas and trash collection areas, and other areas deemed necessary to be available to fire and emergency vehicles. The Fire Chief is authorized to designate additional requirements for fire lanes where the same is reasonably necessary so as to provide access for fire and rescue personnel.

Fire lanes provided during the platting process shall be so indicated on the plat as a fire lane easement. Where fire lanes are provided and a plat is not required, the limits of the fire lane shall be shown on a site plan and placed on permanent file with the Fire Marshal and Planning Department.

No owner or person in charge of any premises served by a fire lane or access easement shall abandon, restrict or close any fire lane or easement without first securing from the City of McKinney approval of an amended plat or other acceptable legal instrument showing the removal of the fire lane easement.

(37) **Section 503.1** is hereby amended to add a new **Section 503.1.4** to read as follows:

503.1.4 Two points of access. A minimum two points of approved fire apparatus access shall be provided for each building, structure and subdivision. The two points of access shall be a minimum of 140 feet (140') apart as measured edge of pavement to edge of pavement.

(38) **Section 503.1** is hereby amended to add a new **Section 503.1.5** to read as follows:

Section 503.1.5 Residential subdivisions. The maximum dead-end cul-de-sac length shall not exceed six hundred feet (600') as measured from the centerline of the intersection street to the center point of the radius.

> **Exception:** Where an approved automatic fire suppression system installed per Section 903 is provided.

(39) **Section 503.2.1** is hereby amended to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 24 feet (7,315 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet (4,267 mm).

Fire lane dimensions established by Appendix D, or other sections of this Code, shall be superseded by the criteria established by this section.

The requirements of Section D105 shall remain unchanged.

> **Exception:** Vertical clearance may be reduced provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved.

(40) **Section 503.2.2** is hereby amended to read as follows:

503.2.2 Authority. The code official shall have the authority to require an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations.

(41) **Section 503.2.3** is hereby amended to read as follows:

503.2.3 Surface. Construction of all fire lanes shall be in accordance with McKinney Street Design Manual and this section.

Fire lanes shall be constructed of an asphalt or concrete surface capable of supporting the imposed loads of a 2-axle, 85,000 lb. fire apparatus. The design shall be based on the geotechnical investigation of the site, but shall meet the stated minimums.

The fire lane shall be constructed with a minimum 6 in. thick, 4000 PSI concrete with steel reinforcing of No. 4 bars spaced 24 in. on centers in each direction.

The base course thickness shall be a minimum of 6 in. in thickness and shall consist of lime or cement stabilization as recommended in the Geotechnical Report.

Where stabilization is not practical, the standard pavement thickness may be increased by 1 in. and a minimum of 6 in. flexible base course in lieu of treating the sub-grade with lime or cement. The base course shall consist of a minimum 6 in. flexible base course over a

compacted sub-base to 95% Standard Proctor density, or 6 in. of asphalt base as approved by the City.

Whenever forty percent (40%) of existing, non-conforming fire lanes are replaced within a twelve-month period, the entire fire lane shall be replaced according to current standards.

All fire lanes shall be maintained and kept in a good state of repair at all times by the owner and the City of McKinney shall not be responsible for the maintenance thereof. It shall further be the responsibility of the owner to ensure that all fire lane markings required by Section 503.3 be kept so that they are easily distinguishable by the public.

(42) **Section 503.2.4** is hereby amended as follows:

503.2.4 Turning radius. The required turning radius of a fire apparatus access road shall be in accordance with this section.

Any such fire lane shall either connect both ends to a dedicated public street or fire lane or be provided with an approved turnaround having a minimum outer radius of fifty feet (50'). If two or more interconnecting lanes are provided, interior radius for that connection shall be required in accordance with the following:

24-foot fire lane – minimum radius 30 feet
26-foot fire lane – minimum radius 30 feet
30-foot fire lane – minimum radius 20 feet

Fire lane dimensions established by Appendix D, or other sections of this Code, shall be superseded by the criteria established by this section.

The requirements of Section D105 shall remain unchanged.

(43) **Section 503.2.7** is hereby amended to read as follows:

503.2.7 Grade. The grade of the fire apparatus access road shall be within the limits established by the Fire Code Official. In no case shall the grades along a fire apparatus access road exceed the following:

Along the Fire Apparatus Access Road – 6%
Cross Slope – 5%

Exception. The code official shall have the authority to adjust the grade along the fire lane when necessary for fire or rescue operations or based upon the hazard being protected or general topography of the lot. In no case shall the grade exceed nine percent (9%). Written approval from the Fire Code Official shall be required.

(44) **Section 503.2.8** is hereby amended to read as follows:

503.2.8 Angles of approach and departure. The angles of approach and departure for a fire apparatus access road shall be within the limits established by the Fire Code Official. In no case shall the grades exceed the following:

1. Maximum Angle of Approach – 5%
2. Maximum Angle of Departure – 5%

Exception. The code official shall have the authority to adjust the grade along the fire lane when necessary for fire or rescue operations or based upon the hazard being protected or

general topography of the lot. Written approval from the Fire Code Official shall be required.

(45) **Section 503.3** is hereby amended to read as follows:

503.3 Marking. Striping, signs, or other markings, when approved by the Fire Code Official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility.

1. **Striping** – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6”) in width to show the boundaries of the lane. The words “NO PARKING FIRE LANE” or "FIRE LANE NO PARKING” shall appear in four-inch (4”) white letters at 25-foot (25’) intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on both the horizontal and vertical faces of the curb.

2. **Signs** – Signs shall read “NO PARKING FIRE LANE” or "FIRE LANE NO PARKING” and shall be twelve inches (12”) wide and eighteen inches (18”) high. Signs shall be painted on a white background with letters and borders in red, using not less than two-inch (2”) lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6’ 6”) above finished grade. Signs shall be spaced not more than fifty feet (50’) apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

(46) **Section 503.4** is hereby amended to read as follows:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles, whether attended or unattended for any period of time. The minimum widths and clearances established in Section 503.2.1 through 503.2.8 and any area marked as a fire lane as described in Section 503.3 shall be maintained clear at all times. Unoccupied vehicles or other obstructions in the fire lane may be removed or towed at the expense of the registered owner.

503.4.1 Fire Lane Violations

1. The registered owner of a vehicle parked or standing in a fire apparatus access road shall be presumed to be the violator and may be held jointly and severally liable for the violation.

2. A person, firm, partnership, corporation, association, or other entity shall be presumed to be the violator and may be held jointly and severally liable for the violation if the person, firm, partnership, corporation, association, or other entity is the owner of, custodian of, or otherwise exercises actual or apparent control over equipment, materials, or other objects obstructing a fire apparatus access road.

3. The owner, occupant, or leaseholder of the property or business directly adjacent to the portion of the fire apparatus access road obstructed shall be presumed to be the violator and may be held jointly and severally liable.

(47) **Section 503.7** is hereby added to read as follows:

503.7. Preemption device. When mechanically operated gates or barriers are provided, or required, across a fire apparatus access

road, an approved emergency vehicle traffic preemption device shall be provided compatible with the fire department's apparatus.

(48) **Section 505.1** is hereby amended to read as follows:

505.1 Address Identification. Approved numerals of a minimum six inches (6") height and of a color contrasting with the background designating the address shall be placed on all new and existing buildings or structures in a position as to be plainly visible and legible from the street or road fronting the property and from all rear alleyways/access.

Where buildings do not immediately front a street, approved six-inch (6") height building numerals or addresses and 3-inch (3") height suite/apartment numerals of a color contrasting with the background of the building shall be placed on all new and existing buildings or structures. Numerals or addresses shall be posted on a minimum twenty-inch by thirty-inch (20" X 30") background on border.

Where access is provided by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign with approved 6-inch (152.4 mm) height building numerals or addresses and 4-inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20-inch (508 mm) by 30-inch (762 mm) background on border. Address identification shall be maintained.

Address numbers shall be Arabic numerals or alphabet letters. The minimum stroke width shall be 0.5 inches.

Where access is provided by means of a private road and the building cannot be viewed from the public way, a monument, pole or other sign of means shall be used to identify the structure.

> **Exception.** R-3 Single Family occupancies shall have approved numerals of a minimum three and one-half inches (3- ½") in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

(49) **Section 505.3** is hereby added to read as follows:

505.3 Wayfaring Sign. A wayfaring sign shall be provided for all new and existing multi building developments in which multiple buildings are addressed off a single address, such as in an apartment complex, or when the nature and arrangement of the buildings, such signage would be conducive to navigation. Such signs shall be placed at all points of entry into the development, or as required by the *Fire Code Official*.

The wayfaring sign shall meet the below minimum requirements:

1. Provide a simplified Site Plan layout of the development or property.
2. Shall indicate all entry and exit points.
3. Shall be a minimum 36-inch by 36-inch.
4. Shall be provided with lighting or reflective sheeting.
5. Shall be permanently mounted.
6. Shall indicate major building and/or address numbers.
7. Shall indicate the developments name and address.

(50) **Section 505.4** is hereby added to read as follows:

505.4 Address Marking in Parking Garages. An approved sign displaying the building name and address with a minimum 1-inch high letters and numerals on a contrasting background in new and existing parking garages. The signs shall be located in each elevator lobby and at the entrance to each stairwell.

(51) **Section 506.1.3** is hereby added to read as follows:

506.1.3 Knox Box Locations. The key box shall be provided at the entrance to the sprinkler riser room and fire pump room. Additional key boxes shall be placed at the main entrance to a large building when determined by the fire code official it is necessary due to the size and remoteness from the fire sprinkler riser room and/or fire pump room.

(52) **Section 507.4** is hereby amended to read as follows:

507.4 Water supply test date and information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 “Recommended Practice for Fire Flow Testing and Marking of Hydrants” and within one year of sprinkler plan submittal. The Fire Code Official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the Fire Code Official as required. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the Fire Code Official. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements.

(53) **Section 507.5.1** is hereby amended to read as follows:

507.5.1 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 or a fire 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 Fire Code Official. Notwithstanding the foregoing, fire hydrants shall be required as follows:

1. **Spacing:** As properties develop, fire hydrants shall be located at all intersecting streets and at the maximum spacing indicated in Table C105.1. Distances between hydrants shall be measured along the route that fire hose is laid by a fire apparatus from hydrant to hydrant, not as the “crow flies.”

2. **Protected Properties:** Fire hydrants required to provide a supplemental water supply for automatic fire protection systems shall be located adjacent to the remote fire department connection, when provided. When permitted by the *Fire Code Official*, a fire hydrant shall be located within an unobstructed 50-foot (50’) hose lay of the fire department connection for such systems.

3. **Fire Hydrant Locations:** Fire hydrants shall be located between 2 feet (2’) to 6 feet (6’) back from the curb or fire lane and shall not be located in the bulb of a cul-de-sac.

4. **Minimum Number of Fire Hydrants:** There shall be a minimum of two (2) fire hydrants serving each property within the prescribed distances listed above. A minimum of one fire hydrant shall be located on each lot.

5. **Group R-3 and Group U Occupancies:** For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).

6. **Buildings Equipped with Approved Automatic Sprinkler:** For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.2.1, the distance requirement shall be 600 feet (183 m).

7. **Non-Sprinklered Properties:** For non-sprinklered properties, the spacing shall not be more than 300 feet.

(54) **Section 507.5.4** is hereby amended to read as follows:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections of fire protection system control valves in a manner that would prevent such equipment of fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

(55) **Section 509.1.2** is hereby added to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches (50.8 mm) when located inside a building and 4 inches (101.6 mm) when located outside, or as approved by the Fire Code Official. The letters shall be of a color that contrasts with the background.

(56) **Section 510.1** is hereby amended to read as follows, while the Exceptions thereto remain unchanged**:**

In all new and existing buildings in which the type of construction or distance from an operational emergency services antenna or dispatch site does not provide adequate frequency or signal strength at the exterior and all portions of the interior of the building, as determined by the code official, the building owner shall be responsible for providing the equipment, installation and maintenance of said equipment in a manner to strengthen the radio signal. The radio signal shall meet the minimum input/output strengths set forth in this section, or according to the emergency radio system's provider and system manager.

(57) A new **Section 511** entitled "Fire Protection & Building Signage" is hereby adopted to read as follows:

SECTION 511
FIRE PROTECTION & BUILDING SIGNAGE

511.1 Scope. The provisions of this chapter shall apply to the installation of directional, equipment and fire protection signage.

511.2 Requirements. All buildings and structures provided with an *approved* fire protection system, hazardous materials, high piled storage, fire department access or required by other provisions of this code or the *Fire Code Official*, shall be provided with signage in

the locations set forth in Sections 512.4 through 512.12 and shall be approved by the *Fire Code Official* prior to installation.

Exception. This section shall not require existing buildings to be provided with the required signage unless the building is renovated, altered or as otherwise required by the *Fire Code Official* or other provisions of this code.

511.3 Sign Specifications. All signs required by this section shall be in accordance with the following specifications, unless otherwise noted:

1. Minimum size of 12 in. x 12 in.
2. Constructed of a minimum 0.080 aluminum sheet with a minimum 0.75 radius corners.
3. Font style shall be Arial, with all letters capitalized, minimum 3 in. lettering and ½ in. width.
4. Sign face shall be traffic red.
5. Lettering and/or graphics shall be white and reflective.

Exceptions: The Fire Code Official may approve alternate methods and material.

511.4 Fire Department Connection. All buildings provided with an *approved* automatic fire sprinkler system or standpipe requiring a Fire Department Connection (FDC), shall indicate the location of the FDC with appropriate signage as follows:

1. Building and structures in which multiple FDC's will be located within the same subdivision, shall also indicate numerical address, suite numbers served or other description as approved by the *Fire Code Official*.
2. When multiple FDC's are provided at a common location to serve different types of fire protection systems, the sign shall further indicate the type of fire protection system served.
3. Where the FDC does not serve the entire building, a sign shall be provided indicating the portions of the building served.

511.4.1 Wall Mounted FDC. Wall mounted FDC's shall have a sign mounted 7 feet above grade directly over the FDC.

Exception. If the FDC is located such that it may be difficult to readily locate, the inclusion of a directional arrow or additional signage may be required.

511.4.2 Remote Mounted FDC. For fire protection systems supplied by a remotely located FDC, a sign shall be permanently mounted as following:

1. Sign shall be located directly adjacent to the FDC.
2. Shall be mounted on a sign post that extends a minimum of 6 feet above grade.
3. The numerical street number shall be included.

511.4.3 FDC Protection. All FDC's shall have an 8-in. x 12 in. sign that reads "DO NOT BLOCK – BY ORDER OF THE FIRE MARSHAL" placed directly over the FDC.

511.5 Fire Protection Equipment Rooms. Room containing fire sprinkler riser assemblies and control equipment shall be identified with a 12-in. x 12 in. sign that reads "RISER ROOM STORAGE PROHIBITED". In the fire alarm system control panel and/or other fire protection equipment is located within the same room, the sign shall include lettering identifying all equipment located therein.

511.5.1. Multiple Riser Identification. When multiple risers are located within the same room, or in different locations within the same building, signs shall be provided to indicate the zone or floor served by the riser assembly, or the type of system serving the zone or floor. Signs shall be 8 in. X 8 in. with 2 in. lettering.

511.6 Fire Pump Test Header. When a fire pump is provided as part of the fire protection system, a sign shall be provided to differentiate the test header from other equipment. Signs shall be a minimum 8 in. x 6 in. with 2 in. lettering that reads “FIRE PUMP TEST HEADER”

511.7 Roof Access. For buildings and structures were roof access is not provided from the exterior of the building, a sign shall be provided on the door or room containing the access point. Sign shall be 8 in. x 6 in. with 2 in. lettering that reads “ROOF ACCESS”.

511.8 Wall & Post Indicator Valves. When a Wall or Post Indicator Valve (PIV) is provided as part of the fire protection system, signs shall be provided to indicate the riser and/or zone controlled by the valve. Signs shall be located directly adjacent to the control valve and shall be either mounted on a sign post or affixed to the exterior of the building.

511.9 Fire Department Access. In the event that fire department access is so located in an area that is not readily identifiable, or as required by the *Fire Code Official*, signs shall be provided and located as directed by this section or the *Fire Code Official*.

511.9.1 Access Gates. When pedestrian access gates are provided, or otherwise required, in order to provide access to a building or facility, a minimum 8 in. x 6 in. sign shall be provided on the gate that reads “F.D. ACCESS”.

511.9.2 Automatic Access Gates. When automatic or manual access gates are provided across a fire lane or entry/egress points to a residential subdivision, or otherwise required, in order to provide access to a building, facility or residential subdivision, a minimum 8 in. x 6 in. sign shall be provided on the gate that reads “F.D. ACCESS”.

511.9.3 Emergency Access Easements. When automatic or manual access gates are provided across an emergency access easement or fire lane to a residential subdivision, or otherwise required a minimum 8 in. x 6 in. sign shall be provided on the gate that reads “F.D. ACCESS”.

511.10 Hazardous Materials. When required by other sections of the *Fire Code*, or the *Fire Code Official*, an NFPA 704 diamond shall be posted at a location on the premise as approved by the *Fire Code Official*. The entire sign shall be made of a reflective material

Exception. Construction requirements of this section shall not apply, with the exception the sign must be reflective and a minimum of 12 in. x 12 in.

511.11 High-Piled Storage. When high piled combustible storage, in accordance with Chapter 23, is present within a building or structure, marking shall be provided as set forth in Section 511.11.1 through 511.11.3.

511.11.1 Striping. A 6-in. wide traffic red strip with 4 in. white lettering, OR 6 in. yellow strip with black lettering shall be provided in all areas in which storage exceeds 12 ft., or as required by the *Fire Code Official*, around the perimeter of the

designed storage area. The top of the strip shall indicate the maximum storage height, and shall read as follows “NO STORAGE PERMITTED ABOVE THIS LINE” at 25 ft. intervals.

Exception. When permitted by the *Fire Code Official*, 6 in. wide red or yellow striping with no text may allowed on the rack structures for non-publicly accessible areas where permanent signs are provided along the walls and racks per Section 511.11.2.

511.11.2 Signs. Permanent signs shall be placed on the ends of alternative racks to indicate “MAX. STORAGE HEIGHT XX FEET” and “NO STORAGE ABOVE THIS SIGN”, for racks and areas in which a wall is not adjacent to the storage array. Signs shall be 12 in. x 12 in. with 2 in. lettering.

511.12 Flammable and Combustible Liquids. When required by this section or other sections of the *Fire Code*, signs shall be provided as follows to identify the content of the material stored or used. Signs shall be 8 in. x 8 in. with 2 in. lettering.

511.13 Fire Command Room. When a fire command room is provided, an 8-in. x 8 in. sign with 2 in. lettering shall be provided to read “FIRE COMMAND ROOM”.

511.14 Electrical Room. When an interior electrical room is provided, an 8 in. X 8 in. sign with 2 in. lettering shall be provided to read “ELECTRICAL ROOM”.

511.15 Fire Alarm Control Panel. When the main fire alarm control panel is not located within the riser room, fire command room, or at the main entrance, an 8-in. x 8 in. sign with 2 in. lettering shall be provided to read “FIRE ALARM PANEL LOCATED IN _____”.

511.15.1 Supplementary Signs. When supplementary fire alarm system control panels, such as power supplies, special hazards or similar is provided, 8 in. x 8 in. sign with 2 in. lettering shall be provided to read “FIRE ALARM PANEL WITHIN” shall be provided on the entry door.

511.16 Mechanical Room. When an interior mechanical room is provided, an 8 in. X 8 in. sign with 2 in. lettering shall be provided to read “MECHANICAL ROOM”.

511.17 Miscellaneous Signs. Whenever a sign not specifically outlined in this section is required by the *Fire Code Official*, it shall be constructed in accordance with this section.

511.18. Utility Identification. Approved numerals of minimum one-inch (1”) height and of a color contrasting with the background shall be placed on gas and electrical meters serving all new and existing buildings or structures except R-3 occupancies.

511.19 Stairwell Identification. Stairwell identification signs shall be provided in buildings that are four (4) or more stories in height, or as required by this section. The signs shall be installed in stairways to identify each stair landing and indicate the upper and lower termination of the stairway. Signs within the stairways shall be located above the floor landing in a position that is readily visible when the door is in the open or closed position.

Stairway identification signs shall indicate the numerical and/or location of the stair in a minimum 2-inch lettering and shall be constructed in accordance with Section 511.3.

Exception. For signs located within a high-rise installed in accordance with Section 1024 of the *International Building Code*.

511.19.1 Occupancy side of doors. Signs shall be located at each level on the occupancy (tenant) side of all enclosed stairways, regardless of the height of the building.

511.19.2 Floor Level. The floor level number shall be displayed on the stairwell identification sign.

511.19.3 Reentry. Where stairway doors are locked from the stairway side to prohibit entry to a floor, "NO REENTRY" shall be placed at the bottom of the sign in a minimum 1-inch lettering.

(58) The Exception to **Section 603.3.2.1** is hereby amended to read as follows:

Exception. The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11,356 L) in accordance with all requirements of Chapter 574.

(59) **Section 603.3.2.2** is hereby amended to read as follows:

603.3.2.2 Restricted use and connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.

(60) **Sections 604.1.1 and 604.1.2** are hereby amended to read as follows**:**

604.1.1 Stationary generators. Stationary emergency and standby power generators required by this code shall be listed in accordance with UL 2200.

604.1.2 Installation. Emergency power systems and standby power systems shall be installed in accordance with the *International Building Code*, NFPA 70, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

(61) **Section 604.1** is hereby amended by adding a new **Section 604.1.9** to read as follows**:**

604.1.9 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.

(62) **Section 604.2** is hereby amended to read as follows**:**

604.2 Where required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through 604.2.24 or elsewhere identified in this code or any other referenced code.

(63) **Section 604.2.4** is hereby amended to read as follows**:**

604.2.4 Emergency voice/alarm communications systems. Emergency power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as

specified elsewhere in this code, in accordance with Section 907.5.2.2.5. The system shall be capable of powering the required load or a duration of not less than 24 hours, as required in NFPA 72.

1. Covered and Open Malls, Section 901.2.20 and 914.2.3
2. Group A occupancies, Sections 907.2.1 and 907.5.2.2.4.
3. Special Amusement buildings, Section 907.2.12.3
4. High rise buildings, Section 907.2.13
5. Atriums, Section 907.2.14
6. Deep Underground buildings, Section 907.2.19

(64) **Sections 604.2.12 and 604.2.13** are hereby amended to read as follows**:**

604.2.12 Means of Egress Illumination. Emergency power shall be provided for means of egress illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)

604.2.13 Membrane Structures. Emergency power shall be provided for exit signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1. (90 minutes). Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the International Building Code. (4 hours). Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.

(65) **Section 604.2.15** is hereby amended to read as follows**:**

604.2.15 Smoke control systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, in accordance with Section 909.11:

1. Covered mall building, International Building Code, Section 402.7
2. Atriums, International Building Code, Section 404.7
3. Underground buildings, International Building Code, Section 405.8
4. Group I-3, International Building Code, Section 408.4.2
5. Stages, International Building Code, Section 410.3.7.2
6. Special Amusement buildings (as applicable to Group A's), International Building Code, Section 411.1
7. Smoke protected seating, Section 1029.6.2.1

(66) **Section 604.2** is hereby amended by adding **Sections 604.2.17 through 604.2.24** to read as follows**:**

604.2.17 Covered and Open Mall Buildings. Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.3.

604.2.18 Airport Traffic Control Towers. A standby power system shall be provided in airport traffic control towers more than 65 ft. in height. Power shall be provided to the following equipment:

1. Pressurization equipment, mechanical equipment and lighting.
2. Elevator operating equipment.
3. Fire alarm and smoke detection systems.

604.2.19 Smokeproof Enclosures and Stair Pressurization Alternative. Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the International Building Code, Section 909.20.6.2**.**

604.2.20 Elevator Pressurization. Standby power shall be provided for elevator pressurization system as required by the International Building Code, Section 909.21.5.

604.2.21 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the International Building Code, Section 717.5.3, exception 2.3.

604.2.22 Common Exhaust Systems for Clothes Dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the International Mechanical Code, Section 504.10, Item 7.

604.2.23 Hydrogen Cutoff Rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the International Building Code, Section 421.8.

604.2.24 Means of Egress Illumination in Existing Buildings. Emergency power shall be provided for means of egress illumination in accordance with Section 1104.5 when required by the Fire Code Official. (90 minutes in I-2, 60 minutes elsewhere.)

(67) **Section 604** is hereby amended by adding a new **Section 604.8** to read as follows**:**

604.8 Energy time duration. Unless a time limit is specified by the Fire Code Official, in this chapter or elsewhere in this code, or in any other referenced code or standard, the emergency and standby power system shall be supplied with enough fuel or energy storage capacity for not less than 2-hour full-demand operation of the system.

Exception: Where the system is supplied with natural gas from a utility provider and is approved.

(68) **Section 609.2** is hereby amended to read as follows:

609.2 Where Required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, including but not limited to cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, as required by the Fire Code Official.

Exceptions:

1. {No change to existing Exception.}
2. Tents, as provided for in Chapter 31.

Additionally, fuel gas and power provided for such cooking appliances shall be interlocked with the extinguishing system, as required by Section 904.12.2. Fuel gas containers and piping/hose shall be properly maintained in good working order and in accordance with all applicable regulations.

(69) **Section 704.1** is hereby amended to read as follows:

704.1 Enclosure. Interior vertical shafts, including but not limited to stairways, elevator hoist ways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected in accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as required in Chapter 46. New floor openings in existing building shall comply with the International Building Code.

(70) **Section 705** is hereby added to read as follows:

Section 705
Multiple Occupancy Buildings

705.1 Scope. The provisions of this chapter shall apply to all buildings and structures where more than one (1) occupancy and/or business is located within same building or structure.

705.2 Separation. Each occupancy shall be separated from adjoining occupancies by a minimum one-hour fire rated demising wall or assembly, constructed in accordance with the International Building Code.

(71) **Section 807.3** *is hereby amended* to read as follows:

807.3 Combustible Decorative Materials. In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

(72) **Section 807.5.2.2** *is hereby amended* to read as follows:

807.5.2.2 Artwork in corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall.

Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent (50%) of the wall area.

(73) **Section 807.5.2.3** *is hereby amended* to read as follows:

807.5.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 20 percent of the specific wall area to which they are attached.

Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent (50%) of the wall area.

(74) **Section 807.5.5.2** *is hereby amended* to read as follows:

807.5.5.2 Artwork in corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall.

Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent (50%) of the wall area.

(75) **Section 807.5.5.3** *is hereby amended* to read as follows:

807.5.5.3 Artwork in classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 20 percent of the specific wall area to which they are attached.

Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent (50%) of the wall area.

(76) **Section 901.5** is hereby amended by adding the following language to the end of the current text:

{Current text inserted without change.} All required tests shall be conducted by and at the expense of the owner or his representative. The Fire Department shall not be held responsible for any damages incurred in such test. Where it is required that the Fire Department witness any such test, such test shall be scheduled with a minimum of 48-hour notice to the Fire Chief or his representative.

(77) **Section 901.6.1** is hereby amended by adding a new **Section 901.6.1.1** to read as follows:

901.6.1.1 Standpipe Testing. Building owners/managers must utilize a licensed fire protection company to maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.

2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the contractor shall connect hose from a fire hydrant or portable pumping system (as approved by the *Fire Code Official)* to each FDC, and flow water through the standpipe system to the roof outlet, or farthest interior outlet, to verify that each inlet connection functions properly. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.

3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.

4. If the FDC is not already provided with approved locking caps, the contractor shall install such locking caps for all FDC's as required by the *Fire Code Official*.

5. Upon successful completion of standpipe test, the contractor shall place a blue tag (as per "Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag") at the bottom of each standpipe riser in the building.

The tag shall be check-marked as “Fifth Year” for Type of ITM, and the note on the back of the tag shall read “5 Year Standpipe Test” at a minimum.

6. The procedures as required by “Texas Administrative Code, Fire Sprinkler Rules” with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (*Fire Code Official)* shall be followed.

7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.

8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.

9. Contact the *Fire Code Official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the Fire Code Official.

(78) **Section 901.6** is hereby amended by adding a new **Section 901.6.3** to read as follows:

901.6.3 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(79) **Section 901.7** is hereby amended to replace the first paragraph as follows:

901.7 Systems out of service. Where a required fire protection system is out of service or in the event of an excessive number of activations, the fire department and the *Fire Code Official* shall be notified immediately and, where required by the *Fire Code Official*, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

{Second paragraph remains unchanged.}

(80) **Section 901.8.2** is hereby amended to read as follows:

901.8.2 Removal of existing Occupant-use Hose Lines. The *Fire Code Official* is authorized to permit the removal of existing occupant-use hose lines and hose valves where all of the following conditions exist:

1. The hose line(s) would not be utilized by trained personnel or the fire department.
2. If the occupant-use hose lines are removed, but the hose valves are required to remain as per the Fire Code Official, such shall be compatible with local fire department fittings.

(81) **Section 901.11** is hereby added to read as follows:

901.11 Discontinuation or change of service. Notice shall be made to the *Fire Code Official* whenever contracted alarm services for monitoring of any fire alarm system is terminated for any reason, or a change in alarm monitoring provider occurs. Notice shall be made in writing to the *Fire Code Official* by the building owner and alarm service provider prior to the service being terminated.

(82) **Section 903.1.1** is hereby amended to read as follows:

903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard or as approved by the *Fire Code Official.*

(83) **Section 903.1.2** is hereby added to read as follows:

903.1.2 Spray booths and rooms. New and existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Chapter 9.

(84) **Section 903.1.3** is hereby added to read as follows:

903.1.3 Residential systems. Unless specifically allowed by this Code or the International Building Code, residential sprinkler systems installed in accordance with NFPA 13D or NFPA 13R shall not be recognized for the purposes of modifications, exceptions or reductions, commonly referred to as "trade-offs," permitted by other requirements of this Code or the International Building Code.

Residential sprinkler systems installed in accordance with NFPA 13R shall include attic sprinkler protection to be recognized for the purposes of such trade-offs permitted by other requirements of this Code, or for modifications permitted under Chapter 5 of the International Building Code. When such trade-offs are taken, an NFPA 13 sprinkler system shall be required.

(85) **Section 903.2** is hereby amended to read as follows:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Sections 903.2.1 through 903.2.12. Automatic sprinklers shall not be installed in elevator machine rooms, elevator machine spaces and elevator hoistways. Storage shall not be allowed within the elevator machine rooms. Signage shall be provided at the entry doors to the elevator machine rooms indicating “ELEVATOR MACHINERY – NO STORAGE ALLOWED, or as required by Section 511.

(86) **Section 903.2** is hereby amended to delete the Exception.

(87) **Section 903.2.9.3** is hereby added to read as follows:

903.2.9.3 Self-service storage facility. An approved automatic sprinkler system shall be installed throughout all self-service storage facilities.

903.2.9.3.1. Vertical storage limits. A screen shall be installed at eighteen inches (18”) below the level of the sprinkler heads to restrict storage above that level. This screen shall be a mesh of not less than one inch (1”) nor greater than six inches (6”) in size. The screen and its supports shall be installed such that all elements are at least eighteen inches (18”) below any sprinkler heads, measured from the level of the sprinkler deflector.

(88) **Section 903.2.11.3** and the associated **Exceptions** are hereby amended to read as follows:

903.2.11.3 Buildings more than 35 feet in height. An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1510 of the

International Building Code, located 35 feet (10,668 mm) or more above the lowest level of fire department vehicle access.

Exception: Open parking structures in compliance with Section 406.5 of the International Building Code and Section 903.2.11.9 of this Code.

(89) **Sections 903.2.11.7 through Section 903.2.11.9** are hereby added to read as follows:

903.2.11.7 High-piled combustible storage. For any building with a clear height exceeding 12 feet (4,572 mm), see Chapter 32 to determine if those provisions apply.

903.2.11.8 Spray booths and rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic sprinkler system and/or an approved automatic fire-extinguishing system in accordance with Chapter 9 and Section 1504.

903.2.11.9 Buildings over 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings with a building area over 6,000 sq. ft. For the purpose of this provision, fire walls shall not define separate buildings. Building area is defined by the reflection of the roof, commonly referred to as “drip line.”

Exceptions:

1. Open parking garages in compliance with Section 406.5 of the International Building Code, when all of the following conditions apply:

    a. The structure is freestanding.
    b. The structure does not contain any mixed uses, accessory uses, storage rooms, electrical rooms, elevators or spaces used or occupied for anything other than motor vehicle parking.
    c. The structure does not exceed 3 stories.
    d. An approved fire apparatus access road is provided around the entire perimeter of the structure.

(90) **Section 903.3.1.1.1** is hereby amended to read as follows:

903.3.1.1.1 Exempt locations. When approved by the *Fire Code Official*, automatic sprinklers shall not be required in the following rooms or areas where such *. . . {bulk of section unchanged} . . .* because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.

2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.

3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.

4. Elevator machine rooms, machinery spaces and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

(91) **Section 903.3.1** is hereby amended to add the following language at the end of the current text in such section:

Section 903.3.1 Standards. {Retain existing text unchanged.} For any structure or building, for which a specific use, lease, or tenant cannot be identified, such as a speculative retail or office building, the sprinkler system shall be designed to Ordinary Hazard Group II, or as permitted by the *Fire Code Official*.

For any structure or building with a clear height in excess of 12 feet, the sprinkler system shall be designed to provide a minimum of Ordinary Hazard Group II.

For any structure or building with a clear height in excess of 12 feet, and with a primary use of storage or warehouse, the sprinkler system shall be designed to protect Class IV Commodities to the maximum storage height.

Exception: If a commodity type and storage height can be determined, the sprinkler system shall be designed accordingly to the approved commodity class and storage height.

All buildings 3 or more stories shall be provided with floor control valves.

(92) **Section 903.3.1.2.2** is hereby amended to read as follows:

Section 903.3.1.2.2 Attics, Open Breezeways, and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, open breezeways, and attached garages.

(93) **Sections 903.3.1.3** is hereby amended to read as follows:

903.3.1.3 NFPA 13D Sprinkler systems. Where allowed, automatic sprinkler systems installed in one- and two-family dwellings and townhouses shall be installed throughout in accordance with NFPA 13D or in accordance with state law.

(94) **Section 903.3.1.4** is hereby added to read as follows:

903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the *Fire Code Official* for small sections of large diameter water-filled pipe.

(95) **Section 903.3.5** is hereby amended to add a second paragraph immediately following the current paragraph to read as follows:

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

(96) **Section 903.4** is hereby amended to add a second paragraph immediately after the existing paragraph to read as follows:

{Existing text to remain unchanged.} Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(97) **Section 903.4.2** is hereby amended to add a second paragraph immediately following the current paragraph to read as follows:

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

(98) **Section 903.7** is hereby added to read as follows:

Section 903.7 Automatic Sprinkler System Room Access. Sprinkler system risers providing protection for buildings with single tenant and multiple tenant spaces and/or occupancies shall be provided with a ground floor room directly accessible from the exterior of the building. The door must be labeled as the “RISER ROOM”, or as required by Section 511. The minimum size of the room shall be 36 sq. ft., with the minimum dimension being 6 ft. When approved by the *Fire Code Official*, smaller rooms may be permitted.

(99) **Section 905.2** is hereby amended to read as follows:

905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

(100) **Sections 905.3.9 and 905.3.9.1.** are hereby added to read as follows:

905.3.9. Building Area. In buildings exceeding 10,000 square feet in area per story, Class I automatic wet or manual wet standpipes shall be provided where any portion of the building’s interior area is more than 200 feet (60,960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access.

Exception:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.

2. R-2 occupancies of four stories or less in height having no interior corridors.

905.3.9.1 Class I standpipes shall be required in all occupancies in which the distance from a single accessible point for Fire Department ingress to any area within the structure exceeds two hundred fifty feet (250') along the route a fire hose is laid as measured from the fire lane as a single route.

(101) **Section 905.4, Item 1***,* is hereby amended to read as follows:

1. In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the Fire Code Official.

(102) **Section 905.4, Item 3***,* is hereby amended to read as follows:

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a {No change to rest.}

(103) **Section 905.4, Item 5***,* is hereby amended to read as follows:

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3 percent slope), each standpipe shall be provided with a two-way hose connection located to serve the roof or at the highest landing of a stairway with stair access to the roof provided in accordance with Section 1009.16. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.

(104) **Section 905.4** is hereby amended to add a new item 7 to read as follows:

7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred-foot (200') intervals along major corridors thereafter, or as otherwise approved by the Fire Code Official.

(105) **Section 905.9** is hereby amended to add a second controlling paragraph after the Exceptions to the existing paragraph to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(106) **Section 907.1.4** is hereby added to read as follows:

907.1.4. Design Standards. All alarm systems new or replacement shall be addressable. Alarm systems serving more than 20 smoke detectors shall be analog addressable.

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30% of the building. When cumulative building remodel or expansion exceeds

50% of the building, must comply within 18 months of permit application. This exception does not prohibit the need for new fire alarm devices on an existing system to be addressable.

(107) **Section 907.2.1** is hereby amended to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: {No change to first sentence.} Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and

2. Stop any conflicting or confusing sounds and visual distractions.

(108) **Section 907.2.3** is hereby amended to read as follows:

907.2.3 Group E. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5.2.2 and installed in accordance with 907.6 shall be installed in Group E educational occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of one hundred feet (100') of open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. A manual fire alarm system is not required in Group E educational and day care occupancies with an occupant load of less than 50 when provided with an approved automatic sprinkler system.

   Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.)

{No change to remainder of exceptions.}

(109) **Section 907.2.13, Exception 3** is hereby amended to read as follows:

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

(110) **Section 907.4.2.7** is hereby added to read as follows:

Section 907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

(111) **907.5.3** is hereby added to read as follows:

Occupant notification in accordance with this section and 907.5 shall be required for all new construction, or existing construction complying with the International Building Code, for renovations to existing buildings, tenant spaces, changes in occupancy, replacement or modification of the existing fire alarm system, or as required by the *Fire Code Official*, for all buildings or spaces provided with an approved automatic sprinkler system.

(112) **Section 907.6.1.1** is hereby added to read as follows:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from an addressable input (monitor) module may be wired Class B, provided the distance from the addressable module to the initiating device is ten feet or less.

(113) **907.6.3** is hereby amended to delete all four Exceptions.

(114) **907.6.3.2** is hereby added to read as follows:

907.6.3.2 Communication requirements. All alarm systems, new or replacement, shall transmit alarm, supervisory and trouble signals descriptively to the approved central station, remote supervisory station or proprietary supervising station as defined in NFPA 72, with the correct device designation and location of addressable device identification. Alarms shall not be permitted to be transmitted as a General Alarm or Zone condition.

(115) **907.6.6** is hereby amended to add a sentence to the end of current Section 907.6.6 to read as follows:

See 907.6.3 for the required information transmitted to the supervising station.

(116) **907.6.7** is hereby added to read as follows:

907.6.7 Waterflow Notification. When required by Section 903.4.2, an exterior audible and visible notification device shall be provided on the exterior of the building and shall be located above the Fire Department Connection. The notification device shall operate on a waterflow alarm only, shall be non-silenceable and shall continue to operate after the panel is silenced on the condition the alarm was a waterflow alarm only. The notification device shall be wired from the fire alarm control panel as a dedicated latching circuit. Minimum candela rating for the notification device shall be 75 (cd) candela.

(117) **Section 907.10** shall be added to read as follows:

907.10. Fire extinguishing systems. Automatic fire-extinguishing systems shall be connected to the building fire alarm system where a fire alarm system is required by another section of this code or is otherwise installed.

(118) **Section 909.22** is hereby added to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation Systems. Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective system

with a fire-resistance rating of not less than 2 hours.

909.22.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the Fire Code Official to confirm that the system is operating in compliance with these requirements.

(119) **Section 910.1, Exceptions 2 and 3,** are hereby amended to read as follows:

2. Only manual smoke and heat removal shall be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
3. Only manual smoke and heat removal shall be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50(m*S)1/2 or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

(120) **Section 910.2.3** is hereby added to read as follows:

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1,394 m^2) in single floor area.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3 and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

(121) **Section 910.2.4** is hereby added to read as follows:

910.2.4 Exit access travel distance increase. Buildings and portions thereof used as a Group F-1 or S-1 occupancy where the maximum exit access travel distance is increased in accordance with Section 1016.3.

(122) **Table 910.3** is hereby amended to read as follows:

Change the title of the first row of the table from “Group F-1 and S-1” to include “Group H,” to now read as follows: “Group H, F-1, and S-1”.

(123) **Section 910.3.2.2** is hereby amended by adding a second paragraph to read as follows:

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F° (38

degrees C°) greater than the temperature rating of the sprinklers installed.

(124) **Section 910.3.4** is hereby added to read as follows:

910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically. The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

910.3.4.2 Non-sprinklered Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

(125) **Section 910.4.3.1** is hereby amended to read as follows:

910.4.3.1 Makeup Air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m^2 per 0.4719 m^3/s) of smoke exhaust

(126) **Section 910.4.4** is hereby amended to read as follows:

910.4.4 Activation. The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

(127) **Section 912.2.1** is hereby amended to add the following text to the end of the current text:

912.2.1 Visible location. {Current text unchanged.} Where an approved fire lane is provided on site in order to provide fire department vehicle access to a building or structure, the fire department connection shall be located such that it is adjacent thereto and faces the fire lane.

(128) **Section 912.2.3** is hereby added to read as follows:

Section 912.2.3 Hydrant distance. An approved fire hydrant shall be located adjacent to the fire department connection (FDC), unless approved by the *Fire Code Official* to be located within 50 feet (50') as the hose lays.

(129) **Section 912.2.4** is hereby added to read as follows:

Section 912.2.4 High Rise Buildings. A second redundant FDC shall be provided for all high rise buildings, unless approved by the *Fire Code Official*.

(130) **Section 912.4** is hereby amended to add the following text to the end of the current text:

Section 912.4 Access. {Current text unchanged.} A minimum clear and unobstructed pathway of 10 feet shall be provided to access the fire department connection.

(131) **Section 912.5** is hereby amended to read as follows:

912.5 Signs. Signs in accordance with Section 511 shall be mounted on all fire department connections serving automatic sprinklers, standpipes or fire pump connections. Where the fire department connection does not serve the entire building, a sign shall be provided indicating the portions of the building served.

(132) **Section 913.1** is hereby amended by adding a second paragraph to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 feet (3') in width and six feet eight inches (6' 8") in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the Fire Code Official. Access keys shall be provided in the key box as required by Section 506.1.

(133) **Section 914.3.1.2** is hereby amended to read as follows:

914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than 420 120 feet (128 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

(134) **Section 1006.2.2.6** is hereby added to read as follows:

1006.2.2.6 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.

(135) **Section 1009.1** is hereby amended to add a 4th Exception to read as follows:

4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.

(136) **Section 1010.1.9.4, Exceptions 3 and 4** are hereby amended to insert a sentence at the beginning of each such Exception to read as follows:

Exceptions:
. . . .

3. Where a pair of doors serves an occupant load of less than 50 persons in a Group B, F, M or S occupancy. {Remainder unchanged}
4. Where a pair of doors serves a Group A, B, F, M or S occupancy {Remainder unchanged}

(137) **Section 1010.1.9.8** is hereby amended to add Paragraphs 7 and 8 to the end of the current text:

7. Doors shall be equipped with panic and fire exit hardware controlling a manual switch under the bar that will unlock the door. All wiring and circuitry to the switch and power unit shall will be fail-safe.

8. If a full building smoke detection system is not provided, approved smoke detectors shall be provided on both the access and egress sides of doors and in a location approved by the authority having jurisdiction of NFPA 72. Actuation of a smoke detector shall automatically unlock the door.

(138) **Section 1010.1.9.8** is hereby amended to add the following additional criteria to read as follows:

7. In Group E Occupancies where ingress is available by keys and/or access card located in a Knox Box mounted at the main entrance to the building, the activation of the fire alarm system shall unlock the egress portion or capability of all doors while the ingress function may remain secured.

(139) **Section 1010.1.9.9, Paragraph 5** is hereby amended to read as follows:

5. *Panic* or *fire exit hardware* shall be required and operation of the *panic* or *fire exit hardware* shall release the electromagnetic lock.

(140) **Section 1015.8 Window Openings, Paragraph Number 1** is hereby amended to read as follows:

1. Operable windows where the top of the sill of the opening is located more than 55 (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

(141) **Section 1020.1** is hereby amended by adding **Exception 6** to read as follows:

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

(142) **Section 1029.1.1.1,** is hereby delete in its entirety.

(143) **Section 1031.2** is hereby amended to read as follows:

1031.2 Reliability. Required exit accesses, exits or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency. An exit or exit passageway shall not be used for any purpose that

interferes with a means of egress. Security devices affecting means of egress shall be subject to approval of the Fire Code Official.

(144) **Section 1103.2** is hereby amended to read as follows:

Existing buildings that do not have approved radio coverage for emergency responders within the building, based on the existing coverage levels of the public safety communications system of the jurisdiction at the exterior and all portions of the interior of the building, shall be equipped with such coverage according to one of the following:

{Conditions remain unchanged.}

(145) **Section 1103.3** is hereby amended to add the following sentence immediately following the current text in that section:

Provide emergency signage as required by Section 607.3.

(146) **Section 1103.5.4** is hereby added to read as follows:

1103.5.4 Spray booths and rooms. Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

(147) **Sections 1103.7.8 and 1103.7.8.1** are hereby added to read as follows:

1103.7.8 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

(148) **Section 2304.1** is hereby amended to read as follows:

2304.1 Supervision of Dispensing. The dispensing of fuel at motor fuel-dispensing facility shall be in accordance with the following:

1. Conducted by a qualified attendant; and/or,
2. Shall be under the supervision of a qualified attendant; and/or
3. Shall be an unattended self-service facility in accordance with Section 2304.3.

Any time the qualified attendant of item 1 or 2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

(149) **Section 2401.2** is hereby deleted in its entirety.

(150) **Table 3206.2, footnote J** is hereby amended to read as follows:

j. Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or control mode special application sprinklers with a response time index of 50 (m • s) 1/2 or less that are listed to control a fire in the stored commodities with 12

or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

(151) **Section 3310.1** is hereby amended to add the following language at the end of the current text:

{Current text remains unchanged.} When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

(152) **Section 5601.1.3** is hereby amended to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited. The presence or use of fireworks within the jurisdiction of the City of McKinney in violation of this Ordinance is hereby declared to be a common and public nuisance. The restrictions of this section shall be applicable and in force throughout the territory of the City of McKinney, Texas, and extending for a distance outside the City limits for a total of 5,000 feet (5,000'); provided that this section shall not be in effect within any portion of such 5,000 feet (5,000') area which is contained within the territory of any other municipal corporation. The owner, lessee or occupant of the property or structure where fireworks are being stored or used shall be deemed responsible for violating this section.

Exceptions:

1. Only when approved for fireworks displays, storage and handling of fireworks as allowed in Section 5604 and 5608.
2. The use of fireworks for approved display as allowed in Section 5608.
3. Pursuant to 217.042(c) of the Texas Local Government Code, the sale of fireworks outside of the City's limits does not fall within the definition of and is not prohibited as a common and public nuisance outside of the City's corporate limits only.

(153) **Section 5601.7.1** shall be added to read as follows:

5601.7.1 Documentation. The Fire Chief or his designee may seize and destroy illegal fireworks prior to a court appearance and photographs of such seized and destroyed fireworks will provide sufficient evidence of a violation of Section 3301.1.3 for the municipal court.

(154) **Section 5703.6** is hereby amended to read as follows:

5703.6 Piping systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An *approved* method of secondary containment shall be provided for underground tank and piping systems.

(155) **Section 5704.2.9.5** is hereby amended to read as follows:

5704.2.9.5 Above-ground tanks inside of buildings. Above-ground tanks inside of buildings shall comply with Sections 5704.2.9.5.1 through 5704.2.9.5.3.

(156) **Section 5704.2.9.5** is hereby amended by adding a new **Section 5704.2.9.5.3** to read as follows:

5704.2.9.5.3 Combustible liquid storage tanks inside of buildings. The maximum aggregate allowable quantity limit shall be 3,000 gallons (11 356 L) of Class II or III combustible liquid for storage in protected aboveground tanks complying with Section 3404.2.9.7 when all of the following conditions are met:

1. The entire 3,000-gallon (11 356 L) quantity shall be stored in protected above-ground tanks;

2. The 3,000-gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks;

3. The tanks shall be located in a room protected by an automatic sprinkler system complying with Section 903.3.1.1; and

4. Tanks shall be connected to fuel-burning equipment, including generators, utilizing an approved closed piping system.

The quantity of combustible liquid stored in tanks complying with this section shall not be counted towards the maximum allowable quantity set forth in Table 5003.1.1(1), and such tanks shall not be required to be located in a control area. Such tanks shall not be located more than two stories below grade.

(157) **Section 5704.2.11.4** is hereby amended to read as follows:

Section 5704.2.11.4 Leak prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through 5704.2.11.4.3. An approved method of secondary containment shall be provided for underground tank and piping systems.

(158) **Section 5704.2.11.4.2** is hereby amended to read as follows:

5704.2.11.4.2 Leak detection. Underground storage tank systems shall be provided with an approved method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

(159) **Section 5704.2.11.4.3** is hereby added to read as follows:

5704.2.11.4.3 Observation wells. Approved sampling tubes of a minimum 4 inches (4”) in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches (12”) below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling sump at the corners of the excavation with a minimum of four (4) sumps. Sampling tubes shall be placed in the product line excavation within 10 feet (10’) of the tank excavation and one every 50 feet (50’) routed along product lines towards the dispensers, and a minimum of two (2) are required.

(160) **Section 5706.5.4.5** is hereby amended to read as follows:

5706.5.4.5 Commercial, industrial, governmental or manufacturing. Dispensing of Class II and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with Sections 5706.5.4.5.1 through 5706.5.4.5.3.

5706.5.4.5.1 Site requirements.

1. Dispensing may occur at sites that have been permitted to conduct mobile fueling.

2. A detailed site plan shall be submitted with each application for a permit. The site plan must indicate:

    a. all buildings, structures, and appurtenances on site and their use or function;
    b. all uses adjacent to the property lines of the site;
    c. the locations of all storm drain openings, adjacent waterways or wetlands;
    d. information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and
    e. the scale of the site plan.

3. The Fire Code Official is authorized to impose limits upon: the times and/or days during which mobile fueling operations are allowed to take place and specific locations on a site where fueling is permitted.

4. Mobile fueling operations shall be conducted in areas not generally accessible to the public.

5. Mobile fueling shall not take place within 15 feet (4.572 m) of buildings, property lines, or combustible storage.

3406.5.4.5.2 Refueling Operator Requirements.

1. The owner of a mobile fueling operation shall provide to the jurisdiction a written response plan which demonstrates readiness to respond to a fuel spill, carry out appropriate mitigation measures, and to indicate its process to properly dispose of contaminated materials when circumstances require.

2. The tank vehicle shall comply with the requirements of NFPA 385 and Local, State and Federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.

3. Signs prohibiting smoking or open flames within 25 feet (7.62 m) of the tank vehicle or the point of fueling shall be prominently posted on 3 sides of the vehicle including the back and both sides.

4. A fire extinguisher with a minimum rating of 40:BC shall be provided on the vehicle with signage clearly indicating its location.

5. The dispensing nozzles and hoses shall be of an approved and listed type.

6. The dispensing hose shall not be extended from the reel more than 100 feet (30.48m) in length.

7. Absorbent materials, non-water absorbent pads, a 10 foot (3.048 m) long containment boom, an approved container with lid, and a non-metallic shovel shall be provided to mitigate a minimum 5-gallon fuel spill.

8. Tanker vehicles shall be equipped with a fuel limit switch such as a count-back switch, limiting the amount

of a single fueling operation to a maximum of 500 gallons (1,893 L) between resetting of the limit switch.

Exception: Tankers utilizing remote emergency shut-off device capability where the operator constantly carries the shut-off device which, when activated, immediately causes flow of fuel from the tanker to cease.

9. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak, or spill. Training records shall be maintained by the dispensing company and shall be made available to the Fire Code Official upon request.

10. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency.

3406.5.4.5.3 Operational Requirements.

1. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.

2. Prior to beginning dispensing operations, precautions shall be taken to assure ignition sources are not present.

3. The engines of vehicles being fueled shall be shut off during dispensing operations.

4. Night time fueling operations shall only take place in adequately lighted areas.

5. The tank vehicle shall be positioned with respect to vehicles being fueled so as to preclude traffic from driving over the delivery hose and between the tank vehicle and the motor vehicle being fueled.

6. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.

7. Motor vehicle fuel tanks shall not be topped off.

8. The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the tank vehicle.

9. The code official and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.

(161) **Section 6103.2.1.8.** is hereby added to read as follows:

6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet (20’).

(162) **Section 6104.2, Exception 2** is hereby added to read as follows:

Exceptions:

1. {Current exception becomes Exception 1 unchanged.}
2. Except as permitted in Sections 308.3 and 6104.3.2, LP-gas containers are not permitted in residential areas.

(163) **Section 6104.3.3** is hereby added to read as follows:

6104.3.3 Spas, pool heaters and other listed devices. Where natural gas service is not available, LP-Gas containers are allowed to be used to supply spa and pool heaters or other listed devices. Such containers shall not exceed 250-gallon water capacity. *See* Table 6104.3 for location of containers.

Exception: Lots where LP-Gas can be off loaded wholly on the property where the tank is located may install 500 gallon aboveground or 1,000 gallon underground approved containers.

(164) **Section 6107.4** is hereby amended to read as follows:

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with Section 312.

(165) **Section 6109.13** is hereby amended to read as follows:

6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

(166) A new Chapter 68, entitled Mobile Food Vending is hereby established to read as follows:

CHAPTER 68
MOBILE FOOD VENDING

SECTION 6801
GENERAL

6801.1 Scope. The provisions of this chapter shall apply to the operation of mobile food vending.

6801.2 Construction Documents. Every vendor desiring to engage in mobile food vending shall make a written application to the Fire Department for a permit under this chapter. The applicant shall truthfully state, in full, all information requested by the Fire Department and be accompanied by permit application fee.

6801.3 Fees. An application for a permit under this chapter shall be accompanied by a fee in the amount of $100. There shall be no proration of fees. Fees are non-refundable once a permit has been issued by the Fire Department.

SECTION 6802
PERMITS

6801.2 Permits. It shall be unlawful to operate a mobile food vending unit without a permit as required by Section 105.6. All

permits shall be prominently displayed on the mobile food vending unit.

6801.2.1 Duration; non-transferability. Permits will be issued by the Fire Department for a calendar year from the date of issuance. Any permit issued under this chapter is non-transferable.

SECTION 6802
DEFINITIONS

MOBILE FOOD VENDING. Vending, serving, or offering for sale food and/or beverages from a mobile food vending unit.

MOBILE FOOD VENDING UNIT. Any motorized or non-motorized vehicle, trailer, or other device designed to be portable and not permanently attached to the ground from which food is vended, served, or offered for sale.

VENDER. Any individual engaged in the business of mobile food vending; if more than one individual is operating a single stand, cart or other means of conveyance, then vendor shall mean all individuals operating such single stand, cart or other means of conveyance.

OPERATE. All activities associated with the conducting of business, including set up and take down and/or actual hours where the mobile food vending unit is open for business.

SECTION 6803
INSPECTIONS

6803.1 General. Inspections of mobile food operations shall be set forth as outlined in this section.

6803.2 Permit Inspections. Once application for a permit is received by the Fire Department, the vendor shall coordinate an inspection with the Fire Department to verify all statements and requirements within this chapter are provided.

6803.3 Inspections. Food trucks shall be inspected at least annually by the Fire Department, or as deemed necessary. Inspections shall be coordinated with the Health Department when possible.

SECTION 6804
OPERATIONAL REQUIREMENTS

6804.1 General. Mobile food vending operations shall be as set forth in this section.

6804.2 Operational Requirements. Any vendor engaging in mobile food vending shall comply with the following requirements:

1. Provide appropriate waste receptacles at the site of the unit and remove all litter, debris and other waste attributable to the vendor on a daily basis.
2. Shall not be parked, situated or operated in a manner than restricts or blocks emergency vehicle apparatus access.
3. Shall not be parked, situated or operated in a manner than restricts or blocks fire hydrants, fire lanes or other fire protection equipment or access.
4. Not use any flashing or blinking lights or strobe lights.
5. Not use loud music, amplification devices or "crying out" or any other audible methods to gain attention which causes a disruption or safety hazard as determined by the City of McKinney.

6. Comply with the city's Noise Ordinance, Sign Ordinance and any other applicable ordinances.
7. Comply with all applicable federal, state and county regulations.
8. Not represent the granting of a permit under this chapter as an endorsement by the City of McKinney.
9. Cooking operations in which grease laden vapors are or can be created, shall be provided with a Type I hood and fire suppression system.
10. Fire suppression system shall be inspected by a licensed company every six months.
11. A minimum of 1 K- Class fire extinguisher shall be provided.
12. A minimum of 1 2A-10BC fire extinguisher shall be provided.
13. Propane cylinders shall be secured to the vehicle and installed in accordance with NFPA 58.
14. All temporary electrical shall comply with the provisions of this code and any other applicable city ordinances or codes.

6804.3 Maintenance. Maintenance of systems on mobile food preparation vehicles shall be in accordance with Sections 6804.3.1 through 6804.3.3.

6804.3.1 Exhaust system. The exhaust system, including hood, grease-removal devices, fans, ducts and other appurtenances, shall be inspected and cleaned in accordance with Section 607.3.

6804.3.2 Fire protection systems and devices. Fire protection systems and devices shall be maintained in accordance with Section 901.6.

6804.3.1 Fuel gas systems. LP-gas containers installed on the vehicle and fuel-gas piping systems shall be inspected annually by an approved inspection agency or a company that is registered with the U.S. Department of Transportation to requalify LP-gas cylinders, to ensure that system components are free from damage, suitable for the intended service and not subject to leaking. CNG containers shall be inspected every 3 years in a qualified service facility. CNG containers shall not be used past their expiration date as listed on the manufacturer's container label. Upon satisfactory inspection, the approved inspection agency shall affix a tag on the fuel gas system or within the vehicle indicating the name of the inspection agency and the date of satisfactory inspection.

SECTION 6805
FIRE EXTINGUISHERS

6805.1 Fire Extinguishers. Fire extinguishers shall be required in mobile food vending units in all of the following locations.

1. Mobile food vending units shall have at minimum one 2A-10BC portable fire extinguisher mounted in a conspicuous place within the kitchen area.

2. Mobile food vending units with portable generators shall have a 3A-40BC portable fire extinguisher in addition to the other fire extinguishers.

3. Mobile food vending units who utilize deep fat fryers, grills, or other cooking devices in which grease laden

vapors may be generated, shall have a K Class portable fire extinguisher, as required by Section 904.12.5.

6805.2 Inspections. All portable fire extinguishers shall be serviced, inspected, and tagged at least annually, or as otherwise required by this code or state requirements.

SECTION 6806
COMMERCIAL COOKING SYSTEMS

6806.1 Commercial cooking systems. A Type 1 hood shall be installed above all commercial cooking equipment that produce grease laden vapors in accordance with the 2015 International Mechanical Code and Section 609.

6806.2 Fire protection for commercial cooking systems. Cooking equipment shall be protected by automatic fire extinguishing systems in accordance with Section 904.12. All fire suppressions systems shall comply with UL300, or other equivalent standards.

6806.3 Applicable NFPA Standards. All commercial cooking systems shall comply with the applicable provisions of the NFPA 96 Annex B, and other applicable standards.

SECTION 6807
CLEARANCES

6807.1 Clearances. A minimum of 10 feet of clearance shall be provided from the mobile food vending unit to fire hydrants, buildings, structures and any combustible materials.

6807.2 Clearance to adjacent mobile food vending units. A minimum of 10-foot clearance shall be provide to adjacent mobile food vending units.

Exception: When in the opinion of the Fire Code Official, the clearance distance can be reduced if this would not pose any additional risks.

SECTION 6808
USE OF LPG

6808.1 Use of LPG. Liquefied Petroleum Gas systems shall comply with Sections 6807.2.

6808.2 LPG container location. Shall be located and secured on the exterior of the mobile food vending unit, open to atmosphere or if containers are kept in compartment, said compartment must be separate from the interior food preparation area. Access must be from the exterior of the unit and compartment floor and exterior door must be vented to the atmosphere.

6808.3 No smoking signs. All mobile food vending units with propane shall post a "NO SMOKING" sign next to or directly above the propane bottle and visible to the public. Such sign shall be posted with a minimum of four-inch lettering.

6808.4 Hoses and couplings. Any hose used to pipe L.P. Gas to a device shall be listed by UL, FM, or other approved agency. All couplings, fittings, and any other devices shall meet the requirements for LP Gas Service as outlined in the International Fuel Gas Code, NFPA 58 and/or 54.

6808.5 LPG tank separation distance. LPG tanks shall be located outside the mobile food establishment a minimum of five feet from the primary means of egress.

> **Exception.** LPG tanks that are installed as a permanent fixture inside a compartment.

6808.6 Maximum aggregate volume. The maximum aggregate capacity of LP-gas containers transported on the vehicle and used to fuel cooking appliances only shall not exceed 200 pounds (91 kg) propane capacity.

6808.7 LP-gas alarms. A listed LP-gas alarm shall be installed within the vehicle in the vicinity of LP-gas system components, in accordance with the manufacturer's instructions.

6808.8 Fuel sources other than LPG. When a fuel source other than LPG is used, it shall be installed and maintained in accordance with this code and any other applicable code. Use of fuels other than LPG shall be subject to the approval of the Fire Code Official.

SECTION 6809
SOLID FUEL

6809.1 Scope. The provisions of this section shall apply to the use wood, charcoal, or other solid fuel.

6809.2 Fuel Storage. Solid fuel shall not be stored within 3 feet of any heat producing device, cooking appliance or vent. Solid fuel shall not be stored within 3 feet of any flammable liquids, ignition sources, chemical or food and food supplies.

6809.3 Debris. Ash, cinders and other fire debris shall be removed from the firebox or cooking appliance at regular intervals. Removed debris shall be placed in a closed metal container at least 3 feet from the cooking appliances.

SECTION 6810
GENERATOR REFUELING

6810.1 Refueling of generators. Shall be performed in an approved location not less than 20 feet from the mobile food vending unit. Fuel shall be stored in a UL or FM approved flammable liquid safety container in an approved location. Generators shall be grounded in an approved method. Generators shall not be refueled in areas occupied by the public.

SECTION 6811
HOUSEKEEPING

6811.1 Housekeeping. Trash and other combustible materials shall be removed at regular intervals. Storage of combustible rubbish shall not produce conditions that will create a nuisance or hazard to the public health, safety or welfare.

6811.2 Clearances. Combustible rubbish shall not be stored, or otherwise located, within 3 feet of any fuel source, ignition sources, or heat producing appliances. Rubbish shall not be located within the means of egress of the mobile food vending unit.

SECTION 6812
REVOCATION

6812.1 Revocation. The Fire Department shall revoke the permit of any vendor engaged in mobile food vending who ceases to meet any requirement of this chapter or violates any other federal, state or local

regulation, makes a false statement on their application, or conducts activity in a manner that is adverse to the protection of the public health, safety and welfare.

Immediately upon such revocation, the Fire Department shall provide written notice to the permit holder by certified mail to their place of business or residence as indicated on the application. Immediately upon such revocation, the permit shall become null and void.

SECTION 6813
VIOLATIONS

6813.1 Violations. Any vendor or mobile food truck that violates this shall be subject to violations and fines in accordance with Section 109.

(167) **Section B105.2** is hereby amended by establishing an Exception to read as follows:

Exception: A reduction in required fire-flow of up to 50 percent (50%), as approved, is allowed when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2. The resulting fire-flow shall not be less than 1,500 gallons per minute for the prescribed duration as specified in Table B105.1.

(168) Table B105.2 is hereby amended by amending Footnote a to read as follows:

a. The reduced fire-flow shall not be less than 1,500 gallons per minute.

(169) **Section D104.2** is hereby amended by deleting the Exception in its entirety.

(170) **Section J101.1** is hereby amended to read as follows:

J101.1 Scope. New buildings shall have a building information sign(s), when required by the Fire Code Official that shall comply with Sections J101.1 through J101.7. Existing buildings shall be brought into compliance, when required by the Fire Code Official, with Sections J101.1 through J101.9 when one of the following occurs:"

(171) Section L101.2 is hereby added to read as follows:

L101.2 Required locations. A FARS shall be provided in all new construction when one of the following conditions occur:

1. Any new building 5 or more stories in height.
2. Any building determined to be a high-rise.
3. Any new building with 2 or more stories below grade.
4. Any new building 500,000 square feet or more in size.
5. Any new R-2 occupancy, or mixed-use occupancy, in which the total fire area exceeds 400,000 square feet and is 4 stories or more.

Section 4. The North Central Texas Council of Governments Region recommended Amendments that are attached hereto as Attachment A and incorporated herein as set forth in this Ordinance are also on file in the office of the City Secretary for permanent record and inspection. In the event of a conflict between the wording of any amendments to the *International Fire Code*, 2015 Edition, set out in this Ordinance and the amendments set out in the NCTCOG Amendments adopted by this Ordinance, the wording of the Amendments set out in this Ordinance shall control.

Section 5. Appendix A, entitled “Schedule of Fees,” to the Code of Ordinances, City of McKinney, Texas, is hereby amended by deleting Section 42, “Fire Prevention and Protection,” and replacing said section with a new Section 42, also entitled “Fire Prevention and Protection,” to read as follows:

“Chapter 42. Fire Prevention and Protection.

Sec. 42-26. Fire code amendments.

101.1 General. All fees assessed for inspections and permits shall be in accordance with this appendix.

102.1 Fire Fee. A fee shall be assessed in accordance with this section as part of the Building Permit.

102.2 Base fire plan and inspection fee

1. $0.05 per square foot.

103.1 Operational and Construction Permit Fee. Permits fees shall be assessed in accordance with this section, or as outlined in Table 106.1.

1. All operational permits listed in section 105.7 shall be assessed a minimum permit fee of $100, unless otherwise noted in Table 106.1.

2. Applicable permit fees shall be doubled for any fire protection system in which the installation of said fire protection system has commenced without the issuance of a permit(s).

104.1 Inspection Fee. Inspection fees shall be assessed in accordance with this section, or as outlined in Table 106.1

1. Fee of $100 will be assessed for any inspections in which the contractor does not show up.

2. Fee of $100 will be assessed for any inspection that is not cancelled within 24 hours prior to the scheduled inspection.

105.1 Plan Review Fees. Plan review fees shall be assessed in accordance with this section, or as outlined in Table 106.1.

1. Plan review required by changes, additions or revisions shall be assessed a fee of $100.

   No fees shall be charged for any subsequent plan review of changes, additions, or revisions to plans which plan review was initiated solely by the fire chief, or his designee, for items that the fire chief failed to identify on a previous plan review.

2. For use of outside consultants for plan review, inspections, or both: Actual costs

106.1 Standard Fees. Unless stipulated elsewhere in this section, a minimum fee of $100 shall be assessed for any plan review and/or permits issued.

TABLE 106 *(a)*		
FIRE DEPARTMENT FEE SCHEDULE		
PLAN REVIEW $ PERMIT FEES *(b)*		**FEE**
Fire Sprinkler Overhead Systems		See Table 106.1, Valuation Fee Scale *(d)*
Fire Sprinkler Modifications		See Table 106.1, Valuation Fee Scale *(d)*
Fire Alarm Systems		See Table 106.1, Valuation Fee Scale *(d)*
Fire Alarm Modifications		See Table 106.1, Valuation Fee Scale *(d)*

Expedited Plan Review Fee		$250
PERMITS *(b)*		**FEE**
Fire Sprinkler Modification Permit		$100
Fire Service Underground Water Line		$100
Commercial Hood Suppression System		$100
Aboveground Storage Tanks		$100
Underground Storage Tanks		$100
Access Controlled Gates		$100
LPG		$100
LPG Exchange		$100
Tent, Membrane Structures		$50 Per Tent
Foam		$100
Smoke Exhaust Control System		$100
Fire Pump		$100
Standpipe Systems		$100 Per Standpipe, Per Floor
Underground Storage Tank Removal/Abandonment		$100
Blasting		$100
Pyrotechnics Permit		Cost Recovery for 2 Operations Staff and 2 Fire Marshal's Office Staff. Minimum Charge $800
Access Controlled Egress Doors		$100 Per Floor
Compressed Gases		$100
Emergency Generator		$100
Gaseous Agent Suppression System		$100
Mass Notification System		$100
Model Rocket Use		$0
Paint Spray Booth		$100
Special Amusement Permit		$100
Carnivals & Fairs		$100
Parade Floats		$100
Mobile Food Vending		$100
Fire Lane Modification/Repair		$100
OPERATIONAL PERMITS		
Operational Permits		$100 Each Permit, Max $400 Per Year, Per Facility
BURN PERMITS		
Less than One Acre		$20 Per Day
More Than One Acre		$50 Per Day
INSPECTIONS		**FEE**
Fire Protection Systems Acceptance Test		$100
Re-Inspection		$100 ($50 Initial, $100 Each Additional)
Daycare Facilities		$100
Nursing Home Annual Inspection		$100
After Hours Inspections		Actual Overtime Cost of Employee(s) Minimum 2 hours
Pipeline Repair		$50
Christmas Tree Tent Inspections		$50
Certificate of Occupancy		$50

ANNUAL INSPECTIONS		**FEE**
Assembly Occupancy		$25
Business Occupancy		$25
Educational Occupancy		$25
Factory Occupancy		$25
Institutional Occupancy		$25
Residential Occupancies R-1 & R-4		$25
Residential Occupancies R-2		$25
Storage Occupancies		$25
FLOW TESTS		
Fire Hydrant Flow Test		$100
a. Unless otherwise noted in Table 106, fees shall be in accordance with this appendix.		
b. Fee is assessed per permit issued.		
c. Operational permits are for those facilities, buildings and uses that have hazardous or large-scale operations. These are normally for storage, handling and use. There are tables for each category on the regulated quantity and use along with reasonable exceptions.		
d. Minimum $100 charge.		

TABLE 106.1
VALUATION SCALE

TOTAL VALUATION	**FEE**
$1 to $500	$20
$501 to $2,000	$20.00 for the first $500.00 plus $2.50 for each additional $100.00, or fraction thereof, to and or fraction thereof, to and including $2,000.00
$2,001 to $25,000	$50.00 for the first $2,000.00 plus $10.00 for each additional $1,000.00, or fraction thereof, to and including $25,000.00
$25,001 to 50,000	$280.00 for the first $25,000.00 plus $8.00 for each additional $1,000.00, or fraction thereof, to and including $50,000.00
$50,001 to $100,000	$680.00 for the first $50,000.00 plus $6.00 for each additional $1,000.00, or fraction thereof, to and including $100,000.00
$100,001 to $500,000	$980.00 for the first $100,000.00 plus $4.00 for each additional $1,000.00, or fraction thereof, to and including $500,000.00
$500,001 to $1,000,000	$2,580.00 for the first $500,000.00 plus $3.00 for each additional $1,000.00, or fraction thereof, to and including $1,000,000.00
$1,000,001 and over	$4,080.00 for the first $1,000,000.00 plus $2.00 for each additional $1,000.00, or fraction thereof

Section 6. Except as provided in this Ordinance, all ordinances, orders or resolutions heretofore passed and adopted by the City Council of the City of McKinney, Texas, are hereby repealed to the extent that said ordinances, orders or resolutions, or parts thereof, are in conflict herewith.

Section 7. If any section, subsection, paragraph, sentence, clause, phrase or word of this Ordinance, or the application thereof to any person or circumstance, shall to any extent be held invalid, void or unconstitutional by a court of competent jurisdiction, such holding shall not affect the validity of the remaining portions of this Ordinance, and the City Council hereby declares that it would have passed such remaining portions of this Ordinance despite such invalidity, which remaining portions shall remain in full force and effect.

Section 8. Any person, firm, partnership, corporation or association violating any provision of this Ordinance or of any code adopted herein shall be deemed guilty of a misdemeanor and, upon conviction thereof, shall be fined in the sum of not more than $2,000.00, and each day such violation continues shall constitute a separate and distinct violation.

[Remainder of page intentionally left blank.]

Section 9. This Ordinance shall take effect and be in full force from and after its passage and publication, as provided by the Revised Civil Statutes of the State of Texas and the Home Rule Charter of the City of McKinney, Texas.

DULY PASSED AND APPROVED BY THE CITY COUNCIL OF THE CITY OF MCKINNEY, TEXAS, ON THIS 2ND DAY OF JANUARY, 2018.

_____
GEORGE C. FULLER
Mayor

CORRECTLY ENROLLED:

_____
SANDY HART, TRMC, MMC
City Secretary
DENISE VICE, TRMC
Assistant City Secretary

DATE: _____

APPROVED AS TO FORM:

_____
MARK S. HOUSER
City Attorney

ATTACHMENT A

NCTCOG Regional Amendments
Recommended Amendments to the
2015 International Fire Code
North Central Texas Council of Governments Region

The following sections, paragraphs, and sentences of the *2015 International Fire Code* (IFC) are hereby amended as follows: Standard type is text from the IFC. Underlined type is text inserted. ~~Lined through type is deleted text from IFC.~~ A double asterisk (**) at the beginning of a section identifies an amendment carried over from the 2012 edition of the code and a triple asterisk (***) identifies a new or revised amendment with the 2015 code.
Note: Historically, the North Central Texas Council of Governments (NCTCOG) has limited Chapter 1 amendments in order to allow each city to insert their local policies and procedures. We now have suggested certain items to be brought to the attention of cities considering adoption of the code that may be of concern to several jurisdictions. **It is still intended to be discretionary to each city to determine which Chapter 1 amendments to include.** Note that Appendices must be specifically adopted by Ordinance. See Sample Ordinance on Page xii of 2015 IFC. Also, note that several sections of the code, as indicated in the Sample Ordinance, require jurisdictional specificity as to dollar amounts, geographic limits, etc.

Explanation of Options A and B:
Please note that as there is a wide range in fire-fighting philosophies/capabilities of cities across the region, OPTIONS "A" and "B" are provided in the Fire and Building Code amendments. Jurisdictions should choose one of these based on their fire-fighting philosophies/capabilities when adopting code amendments.

***Section 102.1; change #3 to read as follows:**

3. Existing structures, facilities, and conditions when required in Chapter 11 or in specific sections of this code.

(Reason: To clarify that there are other provisions in the fire code applicable to existing buildings that are not located in Chapter 11, such as Section 505 Premises Identification.)

***Section 105.3.3; change to read as follows:**

105.3.3 Occupancy Prohibited before Approval. The building or structure shall not be occupied prior to the fire code official issuing a permit when required and conducting associated inspections indicating the applicable provisions of this code have been met.

(Reason: For clarity to allow for better understanding in areas not requiring such permits, such as unincorporated areas of counties. This amendment may be struck by a city.)

***Section 105.7; add Section 105.7.19 to read as follows:**

105.7.19 Electronic access control systems. Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

(Reason: Adds construction permit requirements for electronic access control systems affecting access and/or egress to ensure proper design and installation of such systems. These changes reflect local practices of municipalities in this region.)

***Section 202; amend and add definitions to read as follows:**

** **[B] AMBULATORY CARE FACILITY.** Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

- Dialysis centers

- Procedures involving sedation

- Sedation dentistry

- Surgery centers

- Colonic centers

- Psychiatric centers

(Reason: to clarify the range of uses included in the definition)

**** [B] ATRIUM.** An opening connecting ~~two~~ three or more stories… *{remaining text unchanged}*

(Reason: Accepted practice in the region based on legacy codes. IBC Section 1009 permits unenclosed two story stairways under certain circumstances.)

***** [B] DEFEND IN PLACE.** A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

(*Reason: Added from International Building Code (IBC) definitions for consistency in interpretation of the subject requirements pertaining to such occupancies.)*

****FIRE WATCH.** A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the *fire code official*, for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

(Reason: Clearly defines options to the fire department for providing a fire watch.)

****FIREWORKS.** Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, *deflagration*, ~~or~~ *detonation*, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein. *… {remainder of text unchanged}…*

(Reason: Increased safety from fireworks related injuries.)

****Option A**

HIGH-PILED COMBUSTIBLE STORAGE: add a second paragraph to read as follows:

Any building classified as a group S Occupancy or Speculative Building exceeding 12,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

****Option B***
HIGH-PILED COMBUSTIBLE STORAGE: add a second paragraph to read as follows:

Any building classified as a group S Occupancy or Speculative Building exceeding 6,000 sq. ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

(Reason: To provide protection for worst-case scenario in flexible or unknown situations.)

****Option A**

HIGH-RISE BUILDING. {No Change Required}

****Option B**

HIGH-RISE BUILDING. A building with an occupied floor located more than ~~75~~ 55 feet (~~22 860~~ 16 764 mm) above the lowest level of fire department vehicle access.

(Reason: Allows for additional construction safety features to be provided, based on firefighting response capabilities.)

****REPAIR GARAGE**. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement, and other such minor repairs.

(Reason: To further clarify types of service work allowed in a repair garage, as well as to correspond with definition in the IBC.)

****SELF-SERVICE STORAGE FACILITY.** Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

(Reason: To provide a definition that does not exist in the code.)

****STANDBY PERSONNEL.** Qualified fire service personnel, approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be as normally calculated by the jurisdiction.

*****UPGRADED OR REPLACED FIRE ALARM SYSTEM.** A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware

(Reason: This is referenced in several places, but the wording of "upgraded or replaced" is somewhat ambiguous and open to interpretation. Defining it here allows for consistent application across the region.)

*****Section 307.1.1; change to read as follows:***

307.1.1 Prohibited Open Burning. Open burning ~~shall be prohibited~~ that is offensive or objectionable because of smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exception: {No change.}

(Reason: To further protect adjacent property owners/occupants from open burning and/or smoke emissions from open burning.)

*****Section 307.2; change to read as follows:***

307.2 Permit Required. A permit shall be obtained from the *fire code official* in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or open burning ~~a bonfire~~. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Examples of state or local law, or regulations referenced elsewhere in this section may include but not be limited to the following:

1. Texas Commission on Environmental Quality (TCEQ) guidelines and/or restrictions.
2. State, County, or Local temporary or permanent bans on open burning.
3. Local written policies as established by the *fire code official*.

(Reason: Amendments to 307.2, 307.4, 307.4.3, and 307.5 better explain current requirements and recognize that jurisdictions have local established policies that best fit their environments.)

*****Section 307.3; change to read as follows:***

307.3 Extinguishment Authority. ~~When open burning creates or adds to a hazardous situation, or a required permit for open burning has not been obtained, the fire code official is authorized to order the extinguishment of the open burning operation.~~ The fire code official is authorized to order the extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation.

(Reason: Provides direction as to responsible parties relative to extinguishment of the subject open burning.)

*****Section 307.4; change to read as follows:***

307.4 Location. The location for open burning shall not be less than ~~50~~ 300 feet (~~15 240~~ 91 440 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within ~~50~~ 300 feet (~~15 240~~ 91 440 mm) of any structure.

Exceptions: {No change.}

(*Reason: To increase the separation distance thereby increasing the safety to adjacent properties, as per applicable TCEQ rules and regulations regarding outdoor burning.)*

*****Section 307.4.3, Exceptions: add exception #2 to read as follows:***

Exceptions:

2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system.

(Reason: To reflect similar allowances for open-flame cooking in these same locations.)

Section 307.4.4 and 5; add section 307.4.4 and 307.4.5 to read as follows:

307.4.4 Permanent Outdoor Firepit. Permanently installed outdoor firepits for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanently installed outdoor fireplaces constructed in accordance with the International Building Code.

307.4.5 Trench Burns. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

(Reason: To provide a greater level of safety for this potentially hazardous fire exposure condition. Decrease in separation distance allowed for outdoor firepits due to permanent nature of construction having substantial securement.)

Section 307.5; change to read as follows:

307.5 Attendance. *Open burning*, trench burns, bonfires, *recreational fires*, and use of portable outdoor fireplaces shall be constantly attended until the… *{Remainder of section unchanged}*

(Reason: Adds attendance for trench burns based on previous amendment provision for such.)

Section 308.1.4; change to read as follows:

308.1.4 Open-flame Cooking Devices. ~~Charcoal burners and other o~~Open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be ~~operated~~ located or used on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 lbs (5 containers).

2. Where buildings, balconies and decks are protected by an approved *automatic sprinkler system*, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs (2 containers).

3. {No change.}

(Reason: Decrease fire risk in multi-family dwellings and minimizes ignition sources and clarify allowable limits for 1 & 2 family dwellings, and allow an expansion for sprinklered multi-family uses. This amendment adds clarification and defines the container size allowed for residences.)

Section 308.1.6.2, Exception #3; change to read as follows:

Exceptions:

3. Torches or flame-producing devices in accordance with Section ~~308.4~~ 308.1.3.

(Reason: Section identified in published code is inappropriate.)

****Section 308.1.6.3; change to read as follows:***

308.1.6.3 Sky Lanterns. A person shall not release or cause to be released an ~~untethered~~ unmanned free-floating devices containing an open flame or other heat source, such as but not limited to a sky lantern.

(Reason: Eliminates the potential fire hazard presented by utilization of such devices and the potential accidental release of such devices.)

Section 311.5; change to read as follows:

311.5 Placards. ~~Any~~ The *fire code official* is authorized to require marking of any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards, ~~shall be marked~~ as required by Section 311.5.1 through 311.5.5.

(Reason: There may be situations where placarding is not desired or necessary; also clarifies intent that it is not the fire code official's responsibility to provide the placard.)

****{Note that prior amendment to Section 401.9 in the 2012 IFC recommended amendments has been relocated to Section 901.6.3 as a more appropriate location for the requirement.}*

****Section 403.5; change Section 403.5 to read as follows:***

403.5 Group E Occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E

occupancy and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with Sections 403.5.1 through 403.5.3.

(Reason: The diagrams are intended to assist with egress in such occupancies – specifically, the primary teacher is not always present to assist children with egress. Also, such will help reinforce evacuation drill requirements.)

******Section 404.2.2; add Number 4.10 to read as follows:***

4.10 Fire extinguishing system controls.

(Reason: The committee believed this information could be of great help to such plans to facilitate locating sprinkler valves to minimize water damage, for instance.)

******Section 405.4; change Section 405.4 to read as follows:***

405.4 Time. The fire code official may require an evacuation drill at any time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

(Reason: This change clarifies who may require a fire or evacuation drill).

*****Section 501.4; change to read as follows:***

501.4 Timing of Installation. When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they shall be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure. ~~, such protection shall be installed and made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided. Temporary street signs shall be installed at each street intersection when construction of new roadways allows passage by vehicles in accordance with Section 505.2.~~

(Reason: Reflects current practice in the region relative to ensuring fire department and EMS access during construction, which can be a time of increased frequency for emergency incidents.)

*****Section 503.1.1; add sentence to read as follows:***

Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a ten feet (10') wide unobstructed pathway around the external walls of the structure.

(Reason: Recognizes that the hose lay provision can only be measured along a pathway that is wide enough for fire fighter access.)

*****Section 503.2.1; change to read as follows:***

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than ~~20~~ 24 feet (~~6096 mm~~ 7315 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)~~ 14 feet (4267 mm).

Exception: Vertical clearance may be reduced; provided such reduction does not impair access by fire apparatus and *approved* signs are installed and maintained indicating the established vertical clearance when approved.

(Reason: Amendments to 503.2.1 and 503.2.2 recognize that the equipment now used in firefighting is increasing in size. The code already recognizes that larger dimensions may be required under Section 503.2.2. The amendments are to standardize the dimensions for this area. With the increase in fire apparatus size, this will allow for the passage of two fire apparatus during a fire or EMS emergency.)

*****Section 503.2.2; change to read as follows:***

503.2.2 Authority. The *fire code official* shall have the authority to require an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations.

(Reason: Amendments to 503.2.1 and 503.2.2 recognize that the equipment now used in firefighting is increasing in size. The code already recognizes that larger dimensions may be required under Section 503.2.2. The amendments are to standardize the dimensions for this area. With the increase in fire apparatus size, this will allow for the passage of two fire apparatus during a fire or EMS emergency.)

******Section 503.2.3; change Section 503.2.3 to read as follows:***

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of 80,000 Lbs for fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

(Reason: To address the current size of fire trucks in use – figure derived from DOT requirements for waiver of vehicle exceeding such weight.)

***Section 503.3; change to read as follows:**

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~~ Striping, signs, or other markings, when approved by the *fire code official*, 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~~ Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

(1) Striping – Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

(2) Signs – Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart along both sides of the fire lane. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

(Reason: Establishes a standard method of marking and reflects local long-standing practices.)

***Section 503.4; change to read as follows:**

503.4 Obstruction of Fire Apparatus Access Roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

(Reason: As originally worded, the section implied that vehicles could be parked in the marked fire lane and not be in violation if the minimum width is still maintained. Current accepted enforcement practice is to require the entire marked fire lane to be maintained clear and unobstructed.)

***Section 505.1; change to read as follows:**

505.1 Address Identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than ~~4 inches (102 mm)~~ 6 inches (152.4 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 3 ½ inches (88.9 mm) in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

(Reason: To increase the minimum addressing requirements for commercial properties and establish a minimum for single-family residential properties Such improves legibility of these signs which are critical to emergency response in a more timely manner.)

***Section 507.4; change to read as follows:**

507.4 Water Supply Test Date and Information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 "Recommended Practice for Fire Flow Testing and Marking of Hydrants" and within one year of sprinkler plan submittal. The *fire code official* shall be notified prior to the water supply test. Water supply tests shall be witnessed by the *fire code official*, as required ~~or approved documentation of the test shall be provided to the *fire code official* prior to final approval of the water supply system~~. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the *fire code official*. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements.

(Reason: Clarifies intent of the test to ensure contractor accounts for water supply fluctuations.)

Section 507.5.4; change to read as follows:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

(Reason: Maintains wording from 2006 Code to ensure these critical devices are available in an emergency incident.)

Section 509.1.2; add new Section 509.1.2 to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches (50.8 mm) when located inside a building and 4 inches (101.6 mm) when located outside, or as approved by the *fire code official*. The letters shall be of a color that contrasts with the background.

(Reason: Provides direction as to appropriate sign criteria to develop consistency in this regard.)

Section 603.3.2.1, Exception; change exception to read as follows:

Exception: The aggregate capacity limit shall be permitted to be increased to 3,000 gallons (11,356 L) in accordance with all requirements of Chapter 57. ~~of Class II or III liquid for storage in protected above-ground tanks~~... *{Delete remainder of Exception}*

(Reason: Change to Section 5704.2.9.5 is included in this amendment package.)

Section 603.3.2.2; change to read as follows:

603.3.2.2 Restricted Use and Connection. Tanks installed in accordance with Section 603.3.2 shall be used only to supply fuel oil to fuel-burning ~~or generator~~ equipment installed in accordance with Section 603.3.2.4. Connections between tanks and equipment supplied by such tanks shall be made using closed piping systems.

(Reason: Relocate the exception to Chapter 57 for applicability to generator sets, due to contradictory charging statement in 603.1 to not apply to internal combustion engines. Further, such large quantities of combustible liquid are more thoroughly addressed in Chapter 57 relative to such tanks.)

****Section 604; change and add to read as follows:***

604.1.1 Stationary Generators. Stationary emergency and standby power generators required by this code shall be *listed* in accordance with UL 2200.
604.1.2 Installation. Emergency power systems and standby power systems shall be installed in accordance with the *International Building Code*, NFPA 70, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.
604.1.3 through 604.1.8 {No changes to these sections.}
604.1.9 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.
604.2 Where Required. Emergency and standby power systems shall be provided where required by Sections 604.2.1 through ~~604.2.16~~ 604.2.24 or elsewhere identified in this code or any other referenced code.
604.2.1 through 604.2.3 {No change.}
604.2.4 ~~Group A occupancies.~~ Emergency Voice/alarm Communications Systems. Emergency power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as specified elsewhere in this code, as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

Covered and Open Malls, Section 907.2.20 and 914.2.3
Group A Occupancies, Sections 907.2.1 and 907.5.2.2.4.
Special Amusement Buildings, Section 907.2.12.3
High-rise Buildings, Section 907.2.13
Atriums, Section 907.2.14
Deep Underground Buildings, Section 907.2.19

604.2.5 through 604.2.11 {No change.}
604.2.12 Means of Egress Illumination. Emergency power shall be provided for *means of egress* illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)
604.2.13 Membrane Structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6.1. (90 minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the *International Building Code*. (4 hours) Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.
604.2.14 {No change.}
604.2.15 Smoke Control Systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, as required in Section 909.11:

Covered Mall Building, *International Building Code*, Section 402.7
Atriums, *International Building Code*, Section 404.7
Underground Buildings, *International Building Code*, Section 405.8
Group I-3, *International Building Code*, Section 408.4.2
Stages, *International Building Code*, Section 410.3.7.2
Special Amusement Buildings (as applicable to Group A's), *International Building Code*, Section 411.1
Smoke Protected Seating, Section 1029.6.2.1

604.2.17 Covered and Open Mall Buildings. Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.3.

604.2.18 Airport Traffic Control Towers. A standby power system shall be provided in airport traffic control towers more than 65 ft. in height. Power shall be provided to the following equipment:

1. Pressurization equipment, mechanical equipment and lighting.
2. Elevator operating equipment.
3. Fire alarm and smoke detection systems.

604.2.19 Smokeproof Enclosures and Stair Pressurization Alternative. Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the *International Building Code*, Section 909.20.6.2.

604.2.20 Elevator Pressurization. Standby power shall be provided for elevator pressurization system as required by the *International Building Code*, Section 909.21.5.

604.2.21 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the *International Building Code*, Section 717.5.3, exception 2.3.

604.2.22 Common Exhaust Systems for Clothes Dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the *International Mechanical Code,* Section 504.10, Item 7.

604.2.23 Hydrogen Cutoff Rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the *International Building Code*, Section 421.8.

604.2.24 Means of Egress Illumination in Existing Buildings. Emergency power shall be provided for *means of egress* illumination in accordance with Section 1104.5 when required by the fire code official. (90 minutes in I-2, 60 minutes elsewhere.)

604.3 through 604.7 {No change.}

604.8 Energy Time Duration. Unless a time limit is specified by the fire code official, in this chapter or elsewhere in this code, or in any other referenced code or standard, the emergency and standby power system shall be supplied with enough fuel or energy storage capacity for not less than 2-hour full-demand operation of the system.

Exception: Where the system is supplied with natural gas from a utility provider and is approved.

(Reason: These provisions provide a list to complete and match that throughout the codes. The only new items are the reference to COPS in NFPA 70, and the specified Energy time duration. Other changes are a reference to a code provision that already exists.)

******Section 609.2; change to read as follows:***

609.2 Where Required. A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors, including but not limited to cooking equipment used in fixed, mobile, or temporary concessions, such as trucks, buses, trailers, pavilions, or any form of roofed enclosure, as required by the fire code official.

Exceptions:

1. Tents, as provided for in Chapter 31.
2. {No change to existing Exception.}

Additionally, fuel gas and power provided for such cooking appliances shall be interlocked with the extinguishing system, as required by Section 904.12.2. Fuel gas containers and piping/hose shall be properly maintained in good working order and in accordance with all applicable regulations.

(Reason: To require fire protection and prevention for mobile food trucks and other mobile commercial cooking operations for the protection of occupants and first responders, including the fuel gas utilized for the cooking operation.)

*****Section 704.1; change to read as follows:***

704.1 Enclosure. Interior vertical shafts including, but not limited to, *stairways*, elevator hoistways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected in accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as required in Chapter 11. New floor openings in existing buildings shall comply with the *International Building Code.*

(Reason: Provides standard minimum protection retroactively, but clarifies that this section is not to be used to reduce higher protection levels that were required when originally constructed.)

******Section 807.3; change to read as follows:***

807.3 Combustible Decorative Materials. ~~In other than Group I-3~~ In occupancies in Groups A, E, I, and R-1, and dormitories in Group R-2, curtains, draperies, fabric hangings and other similar combustible decorative materials suspended from walls or ceilings shall comply with Section 807.4 and shall not exceed 10 percent of the specific wall or ceiling area to which they are attached.

(Reason: Section 807 was re-arranged and modified from the 2012 IFC: previously, curtains were required to be NFPA 701 compliant and limited to 10 percent of the applicable wall in A, E, I, R-1, and R-2 dormitory occupancies, but now, per the published 2015 IFC, Section 807.3 would apply to all occupancies, except I-3 (non-combustible only). Such a change is a tremendous expansion of the requirement, and no justification was provided in the proposed code change at the code hearings as to the reasons for such an expansion of the requirement, especially considering that it also applies to existing buildings. The board believes that this change is an over-reach for such a stringent requirement and that maintenance of the legacy language is appropriate at this time.)

***Section 807.5.2.2 and 807.5.2.3; change to read as follows:**

807.5.2.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

807.5.2.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached.
Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

(Reason: This change allows an increase in wall coverage due to the presence of sprinklers. Also provides additional guidance relative to fire resistance requirements in these areas.)

***Section 807.5.5.2 and 807.5.5.3; change to read as follows:**

807.5.5.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

807.5.5.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

(Reason: This change allows an increase in wall coverage due to the presence of sprinklers. Also provides additional guidance relative to fire resistance requirements in these areas.)

***Section 901.6.1; add Section 901.6.1.1 to read as follows:**

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be backflushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.

2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the *fire code official*) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.

3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.

4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the *fire code official*.

5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.

6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (*fire code official*) shall be followed.

7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.

8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.

9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*.

(Reason: Increases the reliability of the fire protection system and re-emphasizes the requirements of NFPA 25 relative to standpipe systems, as well as ensuring that FDC connections are similarly tested/maintained to ensure operation in an emergency incident.)

*****Section 901.6.3; add Section 901.6.3 to read as follows:***

901.6.3 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

(Reason: Places the responsibility on the business or property owner to maintain their fire alarm systems in approved condition. Allows the enforcement of "prohibition of false alarms". Replaces text lost from the legacy codes that helps to ensure the maintenance of life safety systems.)

*****Section 901.7; change to read as follows:***

901.7 Systems Out of Service. Where a required *fire protection system* is out of service or in the event of an excessive number of activations, the fire department and the *fire code official* shall be notified immediately and, where required by the *fire code official*, the building shall either be evacuated or an *approved fire watch* shall be provided for all occupants left unprotected by the shut down until the *fire protection system* has been returned to service. *… {remaining text unchanged}*

(Reason: Gives fire code official more discretion with regards to enforcement of facilities experiencing nuisance alarm or fire protection system activations necessitating correction/repair/replacement. The intent of the amendment is to allow local jurisdictions to enforce fire watches, etc., where needed to ensure safety of occupants where fire protection systems are experiencing multiple nuisance activations.

******Section 901.8.2; change to read as follows:***

901.8.2 Removal of ~~existing~~ Occupant-use Hose Lines. The *fire code official* is authorized to permit the removal of ~~existing~~ occupant-use hose lines and hose valves where all of the following conditions exist:

1. ~~Installation is not required by this code or the *International Building Code*.~~
2. The hose line(s) would not be utilized by trained personnel or the fire department.
3. ~~T~~ If the ~~remaining outlets~~ occupant-use hose lines are removed, but the hose valves are required to remain as per the fire code official, such shall be ~~are~~ compatible with local fire department fittings.

(Reason: Occupant-use hose lines have been an issue of concern that fire code officials have struggled with for many years now, primarily in that they are required by the published code, even though occupants are rarely properly trained in their use or provided with the OSHA-required protective gear for such use, such as with an industrial fire brigade. The allowance for these hose lines to remain only promotes the possibility of an occupant attempting to fight fire for an unknown duration, rather than evacuate, and potentially injure themselves or others through such action. They present greater risk than benefit to the occupants, and as such, the above gives the fire code official the authorization to allow removal of such at his or her discretion.)

*****Section 903.1.1; change to read as follows:***

903.1.1 Alternative Protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted ~~instead of~~ in addition to automatic sprinkler protection where recognized by the applicable standard ~~and~~, or as *approved* by the *fire code official*.

(Reason: Such alternative systems do not provide the reliability of automatic sprinkler protection. Most gaseous type systems are highly susceptible to open doors, ceiling or floor tile removal, etc. However, an applicant could pursue an Alternate Method request to help mitigate the reliability issues with these alternative systems with the fire code official if so desired, or there may be circumstances in which the fire code official is acceptable to allowing an alternate system in lieu of sprinklers, such as kitchen hoods or paint booths.)

***Section 903.2; add paragraph to read as follows:**

Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating "ELEVATOR MACHINERY – NO STORAGE ALLOWED."

(Reason: Firefighter and public safety. This amendment eliminates the shunt trip requirement of the International Building Code Section 3006.5 for the purpose of elevator passenger and firefighter safety. This amendment is contingent on the Building Code amendment eliminating the Exceptions to Section 3006.4, such that passive fire barriers for these areas are maintained.)

***Section 903.2; delete the exception.**

(Reason: The exception deletion is due to the fact that such telecom areas pose an undue fire risk to the structural integrity of the building.)

****Section 903.2.9; add Section 903.2.9.3 to read as follows:**

903.2.9.3 Self-Service Storage Facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

(Reason: Fire departments are unable to inspect these commercial occupancies and are unaware of the contents being stored. Previous allowance to separate units by fire barriers is difficult to enforce maintenance after opening.)

Option A

***Section 903.2.11; change 903.2.11.3 and add 903.2.11.7 and 903.2.11.8, as follows:**

903.2.11.3 Buildings 55 Feet or more in Height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories ~~with an occupant load of 30 or more~~, other than penthouses in compliance with Section 1510 of the *International Building Code*, located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exceptions:

~~1.~~ Open parking structures in compliance with Section 406.5 of the *International Building Code, having no other occupancies above the subject garage.*

~~2. Occupancies in Group F-2.~~

903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

[Remainder of page intentionally left blank.]

****Option B**

Section 903.2.11; change 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

903.2.11.3 Buildings ~~55~~ 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories ~~with an occupant load of 30 or more~~, other than penthouses in compliance with Section 1510 of the *International Building Code*, located ~~55~~ 35 feet (~~16 764~~ 10 668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exceptions~~:~~:

~~1.~~ Open parking structures in compliance with Section 406.5 of the *International Building Code, having no other occupancies above the subject garage*.

~~2. Occupancies in Group F-2.~~

903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 to determine if those provisions apply.

903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.11.9 Buildings Over 6,000 sq. .ft. An automatic sprinkler system shall be installed throughout all buildings with a building area 6,000 sq. ft. or greater and in all existing buildings that are enlarged to be 6,000 sq. ft. or greater. For the purpose of this provision, fire walls shall not define separate buildings.

Exception: Open parking garages in compliance with Section 406.5 of the *International Building Code*.

(Reason: Provides jurisdictions options as to their desired level of sprinkler protection based on multiple factors including firefighting philosophies/capabilities.)

*****Section 903.3.1.1.1; change to read as follows:***

903.3.1.1.1 Exempt Locations. When approved by the *fire code official*, automatic sprinklers shall not be required in the following rooms or areas where such *...{text unchanged}…* because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. ~~In rooms or areas that are of noncombustible construction with wholly noncombustible contents.~~
5. ~~Fire service access~~ Elevator machine rooms, ~~and~~ machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.
6. {Delete.}

(Reason: Gives more direction to code official. Exception 4 deleted to provide protection where fire risks are poorly addressed. Amendment 903.2 addresses Exception 5 above relative to the elimination of sprinkler protection in these areas to avoid the shunt trip requirement.)

*****Section 903.3.1.2.3; add section to read as follows:***

[F] Section 903.3.1.2.3 Attics and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, in accordance with NFPA 13 and or NFPA 13R requirements, and attached garages.

(Reason: Attic protection is required due to issues with fire exposure via soffit vents, as well as firefighter safety. Several jurisdictions indicated experience with un-protected attic fires resulting in displacement of all building occupants. NFPA 13 provides for applicable attic sprinkler protection requirements, as well as exemptions to such, based on noncombustible construction, etc. Attached garages already require sprinklers via NFPA 13R – this amendment just re-emphasizes the requirement.)

******Section 903.3.1.3; change to read as follows:***

903.3.1.3 NFPA 13D Sprinkler Systems. *Automatic sprinkler systems* installed in one- and two-family *dwellings*; Group R-3; Group R-4 Condition 1 and *townhouses* shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law.

(Reason: To allow the use of the Plumbing section of the International Residential Code (IRC) and recognize current state stipulations in this regard.)

******Section 903.3.1.4; add to read as follows:***

[F] 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

(Reason: In the last few years, severe winters brought to light several issues with current practices for sprinklering attics, not the least of which was wet-pipe sprinklers in ventilated attics provided with space heaters, etc. for freeze protection of such piping. This practice is not acceptable for the protection of water-filled piping in a ventilated attic space as it does not provide a reliable means of maintaining the minimum 40 degrees required by NFPA, wastes energy, and presents a potential ignition source to the attic space. Listed antifreeze is specifically included because NFPA currently allows such even though there is no currently listed antifreeze at the time of development of these amendments. The intent of this amendment is to help reduce the large number of freeze breaks that have occurred in the past with water-filled wet-pipe sprinkler systems in the future, most specifically in attic spaces.)

*****Section 903.3.5; add a second paragraph to read as follows:***

[F] Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every water-based fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

(Reason: To define uniform safety factor.)

*****Section 903.4; add a second paragraph after the exceptions to read as follows:***

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(Reason: To avoid significant water losses. Consistent with amendment to IFC 905.9.)

*****Section 903.4.2; add second paragraph to read as follows:***

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

(Reason: Fire department connections are not always located at the riser; this allows the fire department faster access.)

***Section 905.2; change to read as follows:**

905.2 Installation Standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

(Reason: To define manual dry standpipe supervision requirements. Helps ensure the integrity of the standpipe system via supervision, such that open hose valves will result in a supervisory low air alarm.)

****Section 905.3; add Section 905.3.9 and exception to read as follows:**

905.3.9 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
2. R-2 occupancies of four stories or less in height having no interior corridors.

(Reason: Allows for the rapid deployment of hose lines to the body of the fire.)

****Section 905.4, change Item 1, 3, and 5, and add Item 7 to read as follows:**

1. In every required ~~interior~~ exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. {No change.}
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where floor areas adjacent to an exit passageway are reachable from an ~~interior~~ exit stairway hose connection by a {No change to rest.}

4. {No change.}
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way ~~a~~ hose connection ~~shall be~~ located to serve the roof or at the highest landing of an ~~interior~~ exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. {No change.}
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

(Reason: Item 1, 3, and 5 amendments to remove 'interior' will help to clarify that such connections are required for all 'exit' stairways, to ensure firefighter capabilities are not diminished in these tall buildings, simply because the stair is on the exterior of the building. Item 5 reduces the amount of pressure required to facilitate testing, and provides backup protection for fire fighter safety. Item 7 allows for the rapid deployment of hose lines to the body of the fire.)

****Section 905.9; add a second paragraph after the exceptions to read as follows:**

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

(Reason: To avoid significant water losses. Consistent with amendment to IFC 903.4.)

****Section 907.1; add Section 907.1.4 and 907.1.4.1 to read as follows:**

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

(Reason: Provides for the ability of descriptive identification of alarms, and reduces need for panel replacement in the future. Updated wording to match the language of the new requirement at 907.5.2.3. Change of terminology allows for reference back to definitions of NFPA 72)

***Section 907.2.1; change to read as follows:**

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies ~~where the~~ having an occupant load ~~due to the assembly occupancy is~~ of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the *International Building Code* shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: {No change.}

Activation of fire alarm notification appliances shall:

1. Cause illumination of the *means of egress* with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

(Reason: Increases the requirement to be consistent with Group B requirement. Also addresses issue found in Group A occupancies of reduced lighting levels and other A/V equipment that distracts from fire alarm notification devices or reduces ability of fire alarm system to notify occupants of the emergency condition.)

***Section 907.2.3; change to read as follows:**

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. {No change.}
   1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.) {No change to remainder of exceptions.}

(Reason: To distinguish educational from day care occupancy minimum protection requirements. Further, to define threshold at which portable buildings are considered a separate building for the purposes of alarm systems. Exceptions provide consistency with State law concerning such occupancies.)

***Section 907.2.13, Exception 3; change to read as follows:**

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the *International Building Code*; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants, and similarly enclosed areas.

(Reason: To indicate that enclosed areas within open air seating type occupancies are not exempted from automatic fire alarm system requirements.)

***Section 907.4.2; add Section 907.4.2.7 to read as follows:**

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

(Reason: Helps to reduce false alarms.)

***Section 907.6.1; add Section 907.6.1.1 to read as follows:**

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

(Reason: To provide uniformity in system specifications and guidance to design engineers. Improves reliability of fire alarm devices and systems.)

Section 907.6.3; delete all four Exceptions.

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems. This is moved from 907.6.5.3 in the 2012 IFC and reworded to match new code language and sections.)

Section 907.6.6; – add sentence at end of paragraph to read as follows:

[F] See 907.6.3 for the required information transmitted to the supervising station.

(Reason: To assist responding personnel in locating the emergency event for all fire alarm systems. This is moved from 907.6.5.3 in the 2012 IFC and reworded to match new code language and sections.)

Section 909.22; add to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

[F] 909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation Systems. Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

909.21.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

(Reason: To assist with enforcement of such as a smoke control system, as per Section 909.6.3, especially since a permit is now specifically required for such systems in the Fire Code. Also ensures that a firefighter's override panel is provided as per 909.16 for such systems. The above amendment copies the applicable requirements for such systems from Section 909.20 of the Building Code into the Fire Code. Although the published code did copy the elevator pressurization requirements into the Fire Code, it did not copy over the stair pressurization requirements.)

******Section 910.2; change Exception 2. and 3.to read as follows:***

[F] 2. Only manual smoke and heat removal shall ~~not~~ be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.

3. Only manual smoke and heat removal shall ~~not~~ be required in areas of buildings equipped with control mode special application sprinklers with a response time index of 50(m*S)$^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

(Reason: Allows the fire department to control the smoke and heat during and after a fire event, while still prohibiting such systems from being automatically activated, which is a potential detriment to the particular sprinkler systems indicated.)

*****Section 910.2; add subsections 910.2.3 with exceptions to read as follows:***

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m^2) in single floor area.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

   Exception: Buildings of noncombustible construction containing only noncombustible materials.

(Reason: Maintains a fire protection device utilized in such occupancies where it is sometimes necessary to allow chemicals to burn out, rather than extinguish.)

******Section 910.3; add section 910.3.4 to read as follows:***

910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

[F] 910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.
The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

910.3.4.2 Nonsprinklered Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.
Exception: Listed gravity-operated drop out vents.

(Reason: Amendment continues to keep applicable wording from prior to the 2012 edition of the IFC. Specifically, automatic activation criteria is no longer specifically required in the published code. Specifying a temperature range at which smoke and heat vents should activate in sprinklered buildings helps to ensure that the sprinkler system has an opportunity to activate and control the fire prior to vent operation.)

******Section 910.4.3.1; change to read as follows:***

910.4.3.1 Makeup Air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be ~~manual or~~ automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m2 per 0.4719 m3/s) of smoke exhaust.

(Reason: Makeup air has been required to be automatic for several years now in this region when mechanical smoke exhaust systems are proposed. This allows such systems to be activated from the smoke control panel by first responders without having to physically go around the exterior of the building opening doors manually. Such requires a significant number of first responders on scene to conduct this operation and significantly delays activation and/or capability of the smoke exhaust system.)

***Section 910.4.4; change to read as follows:**

910.4.4 Activation. The mechanical smoke removal system shall be activated ~~by manual controls only~~ automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

(Reason: The provision of a manual only mechanical smoke removal system does not provide equivalency with automatic smoke and heat vents. This amendment clarifies that the primary intent is for automatic systems, unless exceptions are provided as in 910.2 – consistent with the charging statements of the section.)

Section 912.2; add Section 912.2.3 to read as follows:

912.2.3 Hydrant Distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

(Reason: To accommodate limited hose lengths, improve response times where the FDC is needed to achieve fire control, and improve ease of locating a fire hydrant in those situations also. Also, consistent with NFPA 14 criteria.)

Section 913.2.1; add second paragraph and exception to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the *fire code official*. Access keys shall be provided in the key box as required by Section 506.1.

(Reason: This requirement allows fire fighters safer access to the fire pump room. The requirement allows access without being required to enter the building and locate the fire pump room interior access door during a fire event. The exception recognizes that this will not always be a feasible design scenario for some buildings, and as such, provides an acceptable alternative to protect the pathway to the fire pump room.)

***Section 914.3.1.2; change to read as follows:**

914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than ~~420~~ 120 feet (128 m) in *building height*, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

(Reason: The 2009 edition of the IFC added this requirement based on a need for redundancy of the water supply similar to the redundancy of the power supply to the fire pumps required for such tall buildings, partially due to the fact that these buildings are rarely fully evacuated in a fire event. More commonly, the alarm activates on the floor of the event, the floor above and the floor below. Back-up power to the fire pump becomes critical for this reason. Certainly, the power is pointless if the water supply is impaired for any reason, so a similar requirement is provided here for redundant water supplies. The 2015 edition changes the requirement to only apply to very tall buildings over 420 ft. This amendment modifies/lowers the requirement to 120 ft., based on this same height requirement for fire service access elevators. Again, the language from the 2009 and 2012 editions of the code applied to any high-rise building. This compromise at 120 ft. is based on the above technical justification of defend-in-place scenarios in fire incidents in such tall structures.)

Section 1006.2.2.6; add a new Section 1006.2.2.6 as follows:

1006.2.2.6 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the Electrical Code as adopted.

(Reason: Cross reference necessary for coordination with the NEC which has exiting requirements as well.)

***Section 1009.1; add the following Exception 4:**

Exceptions:

{previous exceptions unchanged}

4. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009.

(Reason: To accommodate buildings regulated under Texas State Law and to be consistent with amendments to Chapter 11.)

***Section 1010.1.9.4 Bolt Locks; change Exceptions 3 and 4 to read as follows:**

Exceptions:

3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F, M or S occupancy. {*Remainder unchanged*}
4. Where a pair of doors serves a Group A, B, F, M or S occupancy {*Remainder unchanged*}

(Reason: Application to M occupancies reflects regional practice; No. 4 expanded to Group A due to it being a similar scenario to other uses; No. 4 was regional practice.)

****Section 1015.8 Window Openings; change number 1 to read as follows:**

1. Operable windows where the top of the sill of the opening is located more than ~~75 feet (22 860 mm~~) 55 (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

(Reason: In Option B jurisdictions, change "75 feet" to "55 feet".)

***Section 1020.1 Construction; add Exception 6 to read as follows:**

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

(Reason: Revise the 2012 published NCTCOG amendment to this section to clarify intent is not to require automatic fire alarm system or notification throughout the tenant space, but rather, only in the corridor.)

Section 1029.1.1.1; delete this section. Spaces under Grandstands and Bleachers:

(*Reason: Unenforceable*.)

****Section 1031.2; change to read as follows:**

1031.2 Reliability. Required *exit accesses, exits* and *exit discharges* shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency ~~when the building area served by the means of egress is occupied~~. An *exit* or *exit passageway* shall not be used for any purpose that interferes with a means of egress.

(Reason: Maintain legacy levels of protection and long-standing regional practice, and provide firefighter safety.)

****Section 1103.3; add sentence to end of paragraph as follows:**

Provide emergency signage as required by Section 607.3.

(Reason: Coordinates requirements of previous amendment.)

***Section 1103.5; add Section 1103.5.1 to read as follows:**

1103.5.1 Group A-2. ~~An automatic sprinkler system shall be installed in accordance with Section 903.3.1.1 throughout existing buildings or portions thereof used as Group A-2 occupancies with an occupant load of 300 or more~~. **Spray Booths and Rooms.** Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

(Reason: Consistent with amendment to IFC 2404, and long-standing regional requirement. The published 1103.5.1 requiring sprinklers retroactively in A-2 occupancies was deleted by ICC Errata.)

***Section 1103.7; add Section 1103.7.8 and 1103.7.8.1 to read as follows:**

1103.7.8 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

1103.7.8.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

(Reason: To assist responding personnel in locating the emergency event and provide clarity as to percentages of work that results in a requirement to upgrade the entire fire alarm system.)

***Section 2304.1; change to read as follows:**

2304.1 Supervision of Dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be ~~conducted by a qualified attendant or shall be under the supervision of a qualified attendant at all times or shall be~~ in accordance with ~~Section 2204.3.~~ the following:

1. Conducted by a qualified attendant; and/or,
2. Shall be under the supervision of a qualified attendant; and/or
3. Shall be an unattended self-service facility in accordance with Section 2304.3.

At any time the qualified attendant of item Number 1 or 2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

(Reason: Allows a facility to apply the attended and unattended requirements of the code when both are potentially applicable.)

***Section 2401.2; delete this section.**
(Reason: This section eliminates such booths from all compliance with Chapter 15 including, but not limited to: size, ventilation, fire protection, construction, etc. If the product utilized is changed to a more flammable substance, the lack of compliance with Chapter 15 could result in significant fire or deflagration and subsequent life safety hazard.)

***Table 3206.2, footnote j; change text to read as follows:**

j. ~~Not required~~ Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or control mode special application sprinklers with a response time index of 50 (m • s) 1/2 or less that are listed to control a fire in the stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

(Reason: Allows the fire department to control the smoke and heat during and after a fire event, while ensuring proper operation of the sprinkler protection provided. Also, gives an alternative to smoke and heat vents.)

***Section 3310.1; add sentence to end of paragraph to read as follows:**

When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time at which construction has progressed beyond completion of the foundation of any structure.

(Reason: Reference requirement of Section 501.4.)

***Section 5601.1.3; change to read as follows:**

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling, and use of fireworks are prohibited.

Exceptions:

1. Only when approved for fireworks displays, storage, and handling of fireworks as allowed in Section 5604 and 5608.

~~2. Manufacture, assembly and testing of fireworks as allowed in Section 5605.~~

~~3.~~2. The use of fireworks for approved fireworks displays as allowed in Section 5608.

~~4. The possession, storage, sale~~ *… {Delete remainder of text.}*

(Reason: Restricts fireworks to approved displays only, which is consistent with regional practice. Such is intended to help protect property owners and individuals from unintentional fireworks fires within the jurisdiction, as well as to help protect individuals from fireworks injuries. It is noted that there has been a change in the State Law to allow possession of unopened fireworks in certain areas of the vehicle, and it is highly recommended that AHJ's familiarize themselves with the applicable State Laws in this regard.)

***Section 5703.6; add a sentence to read as follows:**

5703.6 Piping Systems. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An *approved* method of secondary containment shall be provided for underground tank and piping systems.

(Reason: Increased protection in response to underground leak problems and remediation difficulty in underground applications. Coordinates with TCEQ requirements.)

***Section 5704.2.9.5; change Section 5704.2.9.5 and add Section 5704.2.9.5.3 to read as follows:**

5704.2.9.5 Above-ground Tanks Inside of Buildings. Above-ground tanks inside of buildings shall comply with Section 5704.2.9.5.1 ~~and 5704.2.9.5.2~~ through 5704.2.9.5.3.
5704.2.9.5.1 {No change.}
5704.2.9.5.2 {No change.}
5704.2.9.5.3 Combustible Liquid Storage Tanks Inside of Buildings. The maximum aggregate allowable quantity limit shall be 3,000 gallons (11 356 L) of Class II or III combustible liquid for storage in protected aboveground tanks complying with Section 5704.2.9.7 when all of the following conditions are met:

1. The entire 3,000 gallon (11 356 L) quantity shall be stored in protected above-ground tanks;

2. The 3,000 gallon (11 356 L) capacity shall be permitted to be stored in a single tank or multiple smaller tanks;

3. The tanks shall be located in a room protected by an *automatic sprinkler system* complying with Section 903.3.1.1; and

4. Tanks shall be connected to fuel-burning equipment, including generators, utilizing an *approved* closed piping system.

The quantity of combustible liquid stored in tanks complying with this section shall not be counted towards the maximum allowable quantity set forth in Table 5003.1.1(1), and such tanks shall not be required to be located in a control area. Such tanks shall not be located more than two stories below grade.

(Reason: Relocated from exception to 603.3.2.1 as published, as per reason statement for deletion in that section.)

***Section 5704.2.11.4; add a sentence to read as follows:**

5704.2.11.4 Leak Prevention. Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 ~~and 5704.2.11.5.2~~ through 5704.2.11.4.3. An *approved* method of secondary containment shall be provided for underground tank and piping systems.

(Reason: Increased protection in response to underground leak problems and remediation difficulty in underground applications.)

***Section 5704.2.11.4.2; change to read as follows:**

5704.2.11.4.2 Leak Detection. Underground storage tank systems shall be provided with an *approved* method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

(Reason: Reference to IFC Section 5704.2.11.4.3 amendment.)

***Section 5704.2.11.4; add Section 5704.2.11.4.3 to read as follows:**

5704.2.11.4.3 Observation Wells. Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling tube at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

(Reason: Provides an economical means of checking potential leaks at each tank site.)

***Section 6103.2.1; add Section 6103.2.1.8 to read as follows:**

6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

(Reason: To provide a consistent and reasonable means of regulating the use of portable LP-Gas containers in these situations. Reduces the hazard presented by portable containers when natural gas is already available. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)

***Section 6104.2, Exception; add an exception 2 to read as follows:**

Exceptions:

1. *{existing text unchanged}*

2. Except as permitted in Sections 308 and 6104.3.2, LP-gas containers are not permitted in residential areas.

(Reason: To provide a consistent and reasonable means of regulating the use LP-Gas containers. Reduces the hazard presented by such containers when natural gas is already available. References regional amendment to IFC 6104.3.2. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)

***Section 6104.3; add Section 6104.3.2 to read as follows:**

6104.3.2 Spas, Pool Heaters, and Other Listed Devices. Where natural gas service is not available, an LP-gas container is allowed to be used to supply spa and pool heaters or other listed devices. Such container shall not exceed 250-gallon water capacity per lot. See Table 6104.3 for location of containers.

Exception: Lots where LP-gas can be off-loaded wholly on the property where the tank is located may install up to 500 gallon above ground or 1,000 gallon underground approved containers.

(Reason: Allows for an alternate fuel source. Dwelling density must be considered and possibly factored into zoning restrictions. Reduces the hazard presented by over-sized LP-Gas containers. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)

******Section 6107.4 and 6109.13; change to read as follows:***

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with ~~NFPA 58~~ Section 312.

6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

~~**Exception:** Vehicle impact protection shall not be required for protection of LP-gas containers where the containers are kept in lockable, ventilated cabinets of metal construction.~~

(Reason: NFPA 58 does not provide substantial physical protection [it allows raised sidewalks, fencing, ditches, parking bumpers as 'vehicle barrier protection'] of the container(s) from vehicular impact as is required and has been required historically, as per Section 312, i.e. bollard protection. Further, the exception to Section 6109.13 would allow for portable containers in ventilated metal cabinets to not require any physical protection whatsoever from vehicular impact, regardless of the location of the containers. Please note that current State Law does not allow for the enforcement of any rules more stringent than that adopted by the State, so this amendment is only applicable as to the extent allowed by that State Law.)

****** {Applicable to those jurisdictions adopting Appendix B}***
Table B105.2; change footnote a. to read as follows:

a. The reduced fire-flow shall be not less than 1,000 1,500 gallons per minute.

(Reason: The minimum fire-flow of 1,500 gpm for other than one- and two- family dwellings has existed since the 2000 edition of the IFC, as well as the Uniform Fire Code before that. Little to no technical justification was provided for the proposed code change at the code hearings. The board believes that the already-allowed 75 percent reduction in required fire-flow for the provision of sprinkler protection is already a significant trade-off. The minimum 1,500 gpm is not believed to be overly stringent for the vast majority of public water works systems in this region, especially since it has existed as the requirement for so many years. Further, the continued progression of trading off more and more requirements in the codes for the provision of sprinkler protection has made these systems extremely operation-critical to the safety of the occupants and properties in question. In other words, should the sprinkler system fail for any reason, the fire-flow requirements drastically increase from that anticipated with a sprinkler-controlled fire scenario.

END