**Section 101.1; amend to read as follows:

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

**Sections 103 and 103.1; amend to read as follows:

SECTION 103 FIRE PREVENTION

103.1 Creation of agency. The Fire Prevention Division of the Fire Department is hereby created and the official in charge thereof shall be known as the *fire code official*. [Remainder unchanged]

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

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

**Section 105.3.3; amend 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 <u>when required</u> and conducting associated inspections indicating the applicable provisions of this code have been met.

**Section 105.6.25; add to read as follows:

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

***Section 107.3; delete.

- **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 or staff has accepted responsibility for care recipients already incapable. This group may include but not be limited to the following:
 - Dialysis centers
 - Procedures involving sedation
 - -Sedation dentistry
 - Surgery centers
 - Colonic centers
 - Psychiatric centers
- **[B] ATRIUM. An opening connecting two three or more stories... [remaining text unchanged]
- **[B] <u>DEFEND IN PLACE.</u> 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*, or *detonation*, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.3G fireworks or 1.4G fireworks. [Remainder of text unchanged]
- **HIGH-PILED COMBUSTIBLE STORAGE. [Existing text to remain] 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 (speculative warehouse), 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 75 55 feet (22 860 16 764 mm) 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

**Section 307.1.1; amend 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]

**Section 307.2; amend 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 <u>open burning a bonfire</u>. 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*.

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.

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

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

Exceptions: [No change]

***Section 307.4.1; amend to read as follows:

307.4.1 Bonfires. A bonfire shall not be conducted within 50 feet (15 240 mm), or greater distance as determined by the *fire code official*, of a structure or combustible material unless the fire is contained in a barbecue pit. Conditions that could cause a fire to spread within the required setback 50 feet (15 240 mm) of a structure shall be eliminated prior to ignition.

^{**}Section 307.3; amend to read as follows:

**Section 307.4.3; add Exception 2 to read as follows:

Exceptions:

- 1. Portable outdoor fireplaces used at one- and two-family dwellings.
- 2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system.

**Section 307.4.4; add 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 Residential Code* or *International Building Code*.

**Section 307.4.5; add to read as follows:

<u>307.4.5 Trench Burns.</u> Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

**Section 307.5; amend to read as follows:

307.5 Attendance. *Open burning*, <u>trench burns</u>, bonfires, *recreational fires*, and use of portable outdoor fireplaces... [Remainder unchanged]

**Section 308.1.4; amend to read as follows:

308.1.4 Open-flame Cooking Devices. Charcoal burners and other 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 where 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). All LP-gas containers shall be stored outside, as per Chapter 61.
- 2. Where buildings, balconies and decks are protected by an <u>approved</u> <u>automatic sprinkler system</u>, and 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). All LP-gas containers shall be stored outside, as per <u>Chapter 61</u>.
- 3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 2-1/2 pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

**Section 308.1.6.2, Exception 3; amend to read as follows:

3. Torches or flame-producing devices in accordance with Section 308.4 308.1.3.

**Section 308.1.6.3; amend to read as follows:

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

**Section 311.5; amend 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 114 of this code relating to structural or interior hazards shall be marked as required by Section 311.5.1 through 311.5.5.

**Section 403.4; amend to read as follows:

403.4 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 403.4.1 through 403.4.3.

**Section 404.2.2; add Item 4.10 to read as follows:

4.10. Fire extinguishing system controls.

***Section 405.5; amend to read as follows:

405.5 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.

Exceptions:

- 1. [No change]
- 2. [No change]
- 3. <u>Notification of teachers/staff having supervision of light- or sound-sensitive students/occupants</u>, such as those on the autism spectrum, for the protection of those students/occupants, shall be allowed prior to conducting a drill.

**Section 501.4; amend to read as follows:

501.4 Timing of Installation. Where fire apparatus access roads or a water supply for fire protection are 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.

**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 10 feet (3048 mm) wide unobstructed pathway around the external walls of the structure.

**Section 503.2.1; amend 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.

**Section 503.2.2; amend to read as follows:

503.2.2 Authority. The *fire code official* shall have the authority to require or permit modifications to the required an increase in the minimum access widths and vertical clearances where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

***Section 503.2.3; amend to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of <u>85,000 Lbs. for</u> fire apparatus and shall be surfaced so as to provide all-weather driving capabilities.

- **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.

**Section 503.4; amend 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 503.2.2 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

**Section 505.1; amend 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.

**Section 507.4; amend 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.

**Section 507.5.4; amend to read as follows:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. <u>Posts</u>, 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.

**Section 509.1.2; add 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.

- ***Section 605.4 through 605.4.2.2; amend to read as follows:
- **605.4 Fuel oil storage systems.** Fuel oil storage systems for building heating systems shall be installed and maintained in accordance with this code. Tanks and fuel-oil piping systems shall be installed in accordance with Chapter 13 of the *International Mechanical Code* and Chapter 57.
 - **605.4.1 Fuel oil storage in outside, above-ground tanks.** Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31 and Chapter 57.
 - **605.4.1.1 Approval.** Outdoor fuel oil storage tanks shall be in accordance with UL 142 or UL 2085, and also listed as double-wall/secondary containment tanks.
 - **605.4.2 Fuel oil storage inside buildings.** Fuel oil storage inside buildings shall comply with Sections 605.4.2.2 through 605.4.2.8-or and Chapter 57.
 - **605.4.2.1 Approval.** Indoor fuel oil storage tanks shall be in accordance with UL 80, UL 142 or UL 2085.
 - **605.4.2.2 Quantity limits.** One or more fuel oil storage tanks containing Class II or III *combustible liquid* shall be permitted in a building. The aggregate capacity of all tanks shall not exceed the following:
 - 1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142 or UL 2085, and also listed as a double-wall/secondary containment tank for Class II liquids.
 - 2. 1,320 gallons (4996 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142 or UL 2085. The tank shall be listed as a secondary containment tank, and the secondary containment shall be monitored visually or automatically.
 - 3. 3,000 gallons (11 356 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7. The tank shall be listed as a secondary containment tank, as required by UL 2085, and the secondary containment shall be monitored visually or automatically.

**Section 807.5.2.2 and 807.5.2.3; amend 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.

**Section 807.5.5.2 and 807.5.5.3; amend 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. <u>Curtains</u>, <u>draperies</u>, <u>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.</u>

**Section 901.6.1.1; add 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 or inspected by approved camera when foreign material is present or when caps are missing, 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*.

- **Section 901.6.4; add to read as follows:
- 901.6.4 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.
- **Section 901.7; amend to read as follows:
- **901.7 Systems Out of Service.** Where a required *fire protection system* is out of service <u>or in the</u> event of an excessive number of activations, the fire department... [Remainder unchanged]
- **Section 903.1.1; amend 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.
- **Section 903.2; add paragraph to read as follows and delete the Exception for telecommunications buildings:

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."

- ***Section 903.2.4.2; amend to read as follows:
- 903.2.4.2 Group F-1 distilled spirits. An automatic sprinkler system shall be provided throughout a Group F-1 fire area used for the manufacture of distilled spirits <u>involving more than 120 gallons of distilled spirits</u> (>16% alcohol) in the fire area at any one time.
- ***Section 903.2.9.3; amend to read as follows:
- 903.2.9.3 Group S-1 distilled spirits or wine. An automatic sprinkler system shall be provided throughout a Group S-1 fire area used for the bulk storage of distilled spirits or wine involving more than 120 gallons of distilled spirits or wine (>16% alcohol) in the fire area at any one time.
- **Section 903.2.9.4 and 903.2.9.5; delete Exception to 903.2.9.4 and add Section 903.2.9.5 to read as follows:
- <u>903.2.9.5 Self-Service Storage Facility.</u> An automatic sprinkler system shall be installed throughout all self-service storage facilities.

***Section 903.2.11; amend 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 1511 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.

Exception:

- 1. 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.
- <u>903.2.11.8 Spray Booths and Rooms.</u> 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 where 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 structure.

**Section 903.3.1.1.1; amend 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, where approved by the *fire code official*.
 - 3. Generator and transformer rooms, <u>under the direct control of a public utility</u>, 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. [Delete]
 - 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]

***Section 903.3.1.2; amend to read as follows:

- **903.3.1.2 NFPA 13R sprinkler systems.** Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:
 - 1. Four stories or less above grade plane.
 - 2. The floor level of the highest story is 30 35 feet (9144 10668 mm) or less above the lowest level of fire department vehicle access.
 - 3. The floor level of the lowest story is 30 35 feet (9144 10668 mm) or less below the lowest level of fire department vehicle access. [Remaining text unchanged]

***Section 903.3.1.2.2; amend to read as follows:

903.3.1.2.2 Corridors and balconies in the means of egress. Sprinkler protection shall be provided in <u>all</u> corridors and for <u>all</u> balconies. in the means of egress where any of the following conditions apply: [Delete the remainder of this section]

**Section 903.3.1.2.3; delete section and replace as follows:

<u>Section 903.3.1.2.3 Attached Garages and Attics.</u> Sprinkler protection is required in attached garages, and in the following attic spaces:

- 1. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.
- 2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
- 3. Attic spaces of buildings that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access.
- 4. Group R-4, Condition 2 occupancy attics not required by Item 1 or 3 to have sprinklers shall comply with one of the following:
 - 4.1. Provide automatic sprinkler system protection.
 - 4.2. Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
 - 4.3. Construct the attic using noncombustible materials.
 - 4.4. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.
 - 4.5. Fill the attic with noncombustible insulation.

**Section 903.3.1.3; amend 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.

**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.

**Section 903.3.5; add a second 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 water-based fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

**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.

**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.

***Section 905.3.9; add 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. <u>Automatic dry</u>, semi-automatic dry, and manual dry standpipes are allowed as provided for in NFPA 14 where approved by the fire code official.
 - 2. R-2 occupancies of four stories or less in height having no interior corridors.

**Section 905.4; amend Items 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.

Exception: [No change]

- 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... [remainder of text unchanged]
- 4. [No change]
- 5. Where the roof has a slope less than 4 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.

***Section 905.8; amend to read as follows:

905.8 Dry standpipes. Dry standpipes shall not be installed.

Exception: Where subject to freezing and in accordance with NFPA 14. <u>Additionally, 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 Supervisory alarm.</u>

**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.

***Section 906.1 Item 1; delete Exception 3.

** Section 907.1.4; add to read as follows:

<u>907.1.4 Design Standards.</u> 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.

**Section 907.2.1; amend 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 where the Group A occupant load is 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.

**Section 907.2.3; amend 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 <u>educational</u> occupancies. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. <u>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.</u>

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]

***Section 907.2.10; amend to read as follows:

907.2.10 Group S. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S public- and self-storage occupancies three stories or greater in height for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: [No change]

**Section 907.2.13, Exception 3; amend 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.

** Section 907.4.2.7; add to read as follows:

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

**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.

**Section 907.6.3; delete all four Exceptions.

**Section 907.6.6; add sentence at end of paragraph to read as follows:

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

**Section 910.2; amend to read as follows:

910.2 Where required. Smoke and heat vents or a mechanical smoke removal system shall be installed as required by Sections 910.2.1, and 910.2.2, and 910.2.3.

Exceptions:

- 1. Frozen food warehouses used solely for storage of Class I and II commodities where protected by an *approved automatic sprinkler system*.
- 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.

**Section 910.2.3; add to read as follows:

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

1. <u>In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.</u>

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.

**Section 910.4.3.1; amend 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.

** Section 912.2.3; add 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.

***Section 913.2.1.1; add to read as follows:

913.2.1.1 Fire Pump Room Access. 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 IFC 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 IFC Section 506.1.

**Section 914.3.1.2; amend to read as follows:

914.3.1.2 Water Supply to required Fire Pumps. In all buildings that are more than 420 120 feet (128 36.6 m) in building height, and buildings of Type IVA and IVB construction that are more than 120 feet (36.6 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]

***Section 1006.2.1 amend Exception 3 to read as follows:

1006.2.1 Egress based on occupant load and common path of egress travel distance.

[Existing text to remain]

3. Unoccupied <u>rooftop</u> mechanical rooms and *penthouses* are not required to comply with the common path of egress travel distance measurement.

**Section 1009.8; add Exception 7 as follows:

1009.8 Two-way communication.

[Existing text to remain]

1. Buildings regulated under State Law and built in accordance with State registered plans, including variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

**Section 1010.2.5; amend Exceptions 3 and 4 as follows:

1010.2.5 Bolt locks.

[Existing text to remain]

- 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]

**Section 1020.2; add Exception 6 as follows:

1020.2 Construction.

[Existing text to remain]

6. <u>In unsprinklered group B occupancies</u>, 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 must activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors must be connected to an approved automatic fire alarm system where such system is provided.

**Section 1030.1.1.1; delete.

**Section 1032,2; amend to read as follows:

1032.2 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 where 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.

**Section 1103.3; add sentence to end of paragraph as follows:

Provide emergency signage as required by Section 604.4.

**Section 1103.5.1; add sentence to read as follows:

Fire sprinkler system installation shall be completed within 24 months from date of notification by the *fire code official*.

**Section 1103.5.6; add to read as follows:

<u>1103.5.6 Spray Booths and Rooms.</u> Existing spray booths and spray rooms shall be protected by an *approved* automatic fire-extinguishing system in accordance with Section 2404.

**Section 1103.7.7; add to read as follows:

1103.7.7 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.

1103.7.7.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

***Section 1203; amend and add to read as follows:

1203.1 [No change]

1203.1.1 [No change]

1203.1.2 [No change]

1203.1.3 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.

1203.1.4 [No change]

1203.1.5 Load Duration. Emergency power systems and standby power systems shall be designed to provide the required power for a minimum duration of 2 hours without being refueled or recharged, unless specified otherwise in this code.

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

1203.1.6 through 1203.1.9 [No change]

1203.1.10 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.

1203.2 Where Required. Emergency and standby power systems shall be provided where required by Sections 1203.2.1 through 1203.2.1826 or elsewhere identified in this code or any other referenced code.

1203.2.1 through 1203.2.3 [No change]

1203.2.4 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, 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

Group A Occupancies, Sections 907.2.1 and 907.5.2.2

Special Amusement Areas, Section 907.2.12 and 914.7

High-rise Buildings, Section 907.2.13 and 914.3

Atriums, Section 907.2.14 and 914.4

Deep Underground Buildings, Section 907.2.19 and 914.5

1203.2.5 through 1203.2.14 [No change]

1203.2.15 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)

1203.2.16 Membrane Structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6. (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.

1203.2.17 [*No change*]

1203.2.18 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

Special Amusement Areas (as applicable to Group A's), *International Building Code*, Section 411

Smoke Protected Seating, Section 1030.6.2

1203.2.19 [No change]

1203.2.20 <u>Covered and Open Mall Buildings.</u> Emergency power shall be provided in accordance with Section 907.2.20 and 914.2.

- <u>1203.2.21 Airport Traffic Control Towers.</u> 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.
- 1203.2.22 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 909.20.7.2.
- <u>1203.2.23 Elevator Pressurization.</u> Standby power shall be provided for elevator pressurization system as required by the *International Building Code*, Section 909.21.5.
- 1203.2.24 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.

<u>1203.2.25 Common Exhaust Systems for Clothes Dryers.</u> Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the *International Mechanical Code*, Section 504.11, Item 7.

<u>1203.2.26 Means of Egress Illumination in Existing Buildings.</u> 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.)

1203.3 through 1203.6 [No change]

**Section 2304.1; amend 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.

2021 IFC AMENDMENTS - CHAPTER 24

**Section 2401.2; delete.

2021 IFC AMENDMENTS – CHAPTER 31

**Section 3103.3.1; delete.

2021 IFC AMENDMENTS – CHAPTER 32

**Table 3206.2, footnote h; amend to read as follows:

h. 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.

**Table 3206.2; add footnote j to row titled 'High Hazard' and 'Greater than 300,000' to read as follows:

j. High hazard high-piled storage areas shall not exceed 500,000 square feet. A 2-hour *fire wall* constructed in accordance with Section 706 of the *International Building Code* shall be used to divide high-piled storage exceeding 500,000 square feet in area.

***Section 3311.1; amend to read as follows:

3311.1 Required access. Approved vehicle access for firefighting and emergency response shall be provided to all construction or demolition sites. Vehicle access shall be provided to within 100 50 feet (30 480 15 240 mm) of temporary or permanent fire department connections. Vehicle access shall be provided by either temporary or permanent roads, capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available. When fire apparatus access roads are required to be installed for any structure or development, access shall be approved prior to the time which construction has progressed beyond completion of the foundation of any structure. Whenever the connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign.

2021 IFC AMENDMENTS - CHAPTER 56

**Section 5601.1.3; amend 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, the storage and handling of fireworks as allowed in Section 5604 and 5608.
- 2. [Delete]
- 3. The use of fireworks for *approved* fireworks displays as allowed in Section 5608.
- 4. [Delete]

**Section 5703.6; add sentence to end of paragraph to read as follows:

An approved method of secondary containment shall be provided for underground tank and piping systems.

**Section 5704.2.11.4; amend 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 5704.2.11.4.2 through 5704.2.11.4.3. An *approved* method of secondary containment shall be provided for underground tank and piping systems.

**Section 5704.2.11.4.2; amend 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 <u>and as specified in Section 5704.2.11.4.3.</u>

**Section 5704.2.11.4.3; add 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.

**Section 5707.4; add paragraph to read as follows:

Mobile fueling sites shall be restricted to commercial, industrial, governmental, or manufacturing, where the parking area having such operations is primarily intended for employee vehicles. Mobile fueling shall be conducted for fleet fueling or employee vehicles only, not the general public. Commercial sites shall be restricted to office-type or similar occupancies that are not primarily intended for use by the public.

**Section 6103.2.1.8; add 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.

**Section 6104.2; add Exception 2 to read as follows:

Exceptions:

- <u>1.</u> [Existing text to remain]
- 2. Except as permitted in Sections 308 and 6104.3.3, LP-gas containers are not permitted in residential areas.

**Section 6104.3.3; add to read as follows:

6104.3.3 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.

**Section 6107.4; amend 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.

**Section 6109.13; delete Exception.

END OF IFC AMENDMENTS