

EXHIBIT "A"

CITY OF BALCH SPRINGS LOCAL AMENDMENTS TO 2015 INTERNATIONAL FIRE CODE.

Section 101.1 Change to read as follows:

These regulations shall be known as the Fire Code of the City of Balch Springs, hereinafter referred to as "this code."

Section 102.1 Change # 3, Add #5.

102.1 Construction and design provisions.

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

5. The provisions of this code apply to buildings built under the IRC and IBC.

Section 103.1 Change to read as follows:

General

The Fire Marshal's Office is established within the jurisdiction under the direction of the Fire Chief. The function of the division shall be the implementation, administration, and enforcement of the provisions of this code.

Section 103.1.2 Add to read as follows:

Fire Marshal's Office Commissioned Personnel.

The Fire Chief and TCLEOSE commissioned members of the Balch Springs Fire Marshal's Office shall have the same powers as any police officer in this jurisdiction when performing their duties under this code.

Section 103.2 Change to read as follows:

Appointment

The Fire Marshal shall be appointed by the Fire Chief of the jurisdiction or will be one in the same. The Fire Marshal shall not be removed from the office except for cause and after full opportunity to be heard on specific and relevant charges by and before the appointing authority.

Section 103.3 Change to read as follows:

Deputies

In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the Fire Chief shall have the authority to appoint a Deputy Fire Marshal, other related technical officers, inspectors and other employees.

Section 104.10.2 Add section 104.10.2 to read as follows:

Hazardous Materials

The Balch Springs Fire Marshal's Office is authorized to investigate the cause, origin, and circumstances of any unauthorized releases of hazardous materials. Any remedies deemed necessary to correct a situation by the FMO investigator shall be the same as if required by the Fire Code Official. Any violations noted and/or citations issued shall be the same as if issued by the Fire Code Official.

Section 105.1 Change to read as follows:

Permit Required.

Permits required by this code shall be obtained from the Balch Springs Fire Department, Fire Marshal's Office. Permit fees shall be paid prior to issuance of the permit. Issued permits shall be kept on the premises designated therein at all times and shall be readily available for inspection by the fire code official. A permit must be obtained prior to and approved before the use, installation of, or any construction begins for such work that would require said permit.

Section 105.1.4 change numerical order only (from 105.1.4 to 105.1.7)

Will read as follows with no change to wording.

Section 105.1.7 Permit Fees

A permit fee shall be paid prior to conducting activities as follows:

1. Fire alarm systems to include the installation, addition to or alteration of a fire alarm system.
2. Fire sprinkler systems to include the installation, addition to or alteration of a fire sprinkler system.
3. Fire suppression systems to include the installation of, addition to or alteration of a fire suppression system.

4. Underground storage tanks to include the installation, removal, addition to or alteration of underground storage tanks and piping for the storage of hazardous materials, flammable liquids, or combustible liquids.
5. Above ground storage tanks to include the installation, removal, addition to or alteration of above ground storage tanks and piping for the storage of hazardous materials, flammable liquids, or combustible liquids.
6. Open Burning.
7. Fireworks/Pyrotechnics Displays.
8. Access control gates: Including the installation of or to alter an existing access control gates across a fire apparatus access road or fire lanes.
9. Single or Multi-family inspection: An inspection performed in connection with any change of tenancy or occupancy.
10. Explosive materials: The storage, use or detonation of explosive materials.
11. Carnivals or Tents: When for public use temporary or permanent.

Section 105.1.5 change numerical order only (from 105.1.5 to 105.1.8)

Permit fee schedule

Balch Springs Fire Dept Permit Fees:

Automatic Fire Sprinkler:

0—99,999 Sq. Ft.	\$50.00 Minimum	\$.030 per Sq. Ft.
100,000—299,999 Sq. Ft.	\$2,000.00 for 1st 100,000	\$.014 Each Additional Sq. Ft.
300,000 + Sq. Ft.	\$4,000.00 for 1st 300,00	\$.009 Each Additional Sq. Ft.
Single Family Residential	\$50.00 per system	

Automatic Fire Alarm Systems:

0—10 Devices	\$50.00 per Building
11—25 Devices	75.00 per Building
25—99 Devices	150.00 per Building
100—199 Devices	200.00 per Building

200+ Devices	400.00 per Building
ANSUL Fire Presentation Suppression Systems	100.00 per system
Underground Fire Lane (Main Only)	50.00 per system
Controlled Trench Burns	300.00 per Day
Access Gate Control System	100.00 per system
Carnival/Tent Inspection	150.00 per tent
Fire Works Permit	100.00 per Day
Fuel Tank Removal	100.00 per Tank
Fuel Tank Installation	100.00 per Tank
Temporary Above Ground Tank Storage (example: Propane Cylinders)	100.00 annually
Multifamily Residential Inspection	25.00 per unit/per vacancy
Single Family Rental Property Inspection	25.00 per unit/per vacancy

Plans Review Fee:

Commercial 0.02/sq.ft	50.00 Minimum
Residential	50.00

Any fees not listed will be determined by the Fire Marshal's Office in advance of permitting.

Re-inspections/Pre-inspections:

1. A re-inspection fee shall be charged for each certificate of occupancy inspection after the initial inspection has been completed and each subsequent inspection if necessary.
2. A re-inspection fee shall be charged for each re-inspection of a fire alarm system, fire sprinkler system, fire suppression system, underground storage tanks and above ground storage tanks after the initial inspection.

3. A pre-inspection fee shall be charged for inspections conducted prior to the application for a certificate of occupancy.

Investigation fee:

An investigation shall be made whenever any work for which a permit is required by this code has commenced without first obtaining a permit. An investigation fee shall be collected whether or not a permit is subsequently issued. The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code nor from any penalty prescribed by law. The investigation fee shall be equal to the amount of the permit fee required by this code not to exceed two thousand (\$2,000.00) dollars.

Inspection after normal business hours:

Normal business hours are Monday through Friday from 8:00 a.m. until 4:00 p.m. with the exception of holidays. Inspections may be conducted after hours or on Saturdays if requested and inspection personnel are available. The fee for such inspections shall be seventy-five (\$75.00) dollars per hour per inspector with two (2) hour minimum.

Plan review fees:

Plan review fees shall be charged as determined by the Fire Marshal and/or to include the requirement of an approved Third Party Reviewer as published on the official website of the Balch Springs Fire Department. The entity submitting the plans for approval will be responsible for any and all fees charged by the third party and the Fire Marshal's Office. A total may be requested before the plan submittal.

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.

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.

Section 108 Change to read as follows:

Section 108 Appeals

Whenever the Fire Marshal's Office disapproves an application or refuses to grant a permit applied for, or when it is claimed that the provisions of the code do not apply or that the true intent and meaning of the code have been misconstrued or wrongly interpreted, the applicant may appeal the decision of the Fire Marshal's Office to the Building and Standards Commission within thirty days after such decision date, or within the time allowed by a specific section of the code, whichever is applicable. Any provision of the code establishing an ability of appeals shall be referred to the Building and Standards Commission as the final deciding authority.

Section 109.3 Change numerical order to: 109.4

Section 109.4:

VIOLATION PENALTIES: Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a misdemeanor, punishable by a fine of not more than two thousand (\$2,000.00) dollars for each offense. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 111.4 Change to read as follows:

Failure to Comply. Any person who shall continue any work after having been served with a stop work order or working on a job site where a stop work order is posted in plain site for all to see, except for such work as directed by the stop work order to correct and/or remove the violation or unsafe condition, shall be liable to a fine of not less than (\$500.00) five-hundred dollars for the first day's offense and (\$2,000.00) two-thousand dollars each subsequent day's offense. Each day after a first offense shall constitute a separate offense.

Chapter 2, Definitions

Section 202 Add new definitions to the existing list of definitions in section 202 to read as follows:

ADDRESSABLE FIRE DETECTION SYSTEM is 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 alarm verification.

[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

ANALOG INTELLIGENT ADDRESSABLE FIRE DETECTION SYSTEM is any system capable of calculating a change in value by directing 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 present 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 the maintenance mode.

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

BUILDING OFFICIAL shall be held to mean the Building Official for the City of Balch Springs, Texas.

BUREAU OF FIRE PREVENTION shall be held to mean the Balch Springs Fire Marshall's Office.

CHIEF OF THE BUREAU OF FIRE PREVENTION shall be the Fire Chief of the City of Balch Springs, Texas.

CITY shall be held to mean the City of Balch Springs, Texas.

CORPORATE COUNSEL shall be held to mean the City Attorney for the City of Balch Springs, Texas.

[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.

FIRE CODE OFFICIAL is the Fire Chief, Fire Marshall or other designated authority charged by the applicable governing body with the duties of administration and enforcement of the code, or a duly authorized representative.

FIRE WATCH is 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 purpose 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 1.4G fireworks or 1.3G fireworks as set forth herein. ... *{remainder of text unchanged}*...

FLEET VEHICLE shall be held to mean a motor vehicle which is one of a group of motor vehicles, owned or operated as a unit and used in the ongoing course of business.

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.

HIGH RISE BUILDING is a building having floors used for human occupancy located more than 55 feet above the lowest level of the fire department access.

JURISDICTION is the City of Balch Springs, Texas.

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 PERSONEL Qualified fire service personnel, employed by the City and approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Marshal. 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

Chapter 3, General Precautions against Fire

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.}

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*.

Section 307.3; change to read as follows:

307.3 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 Change to read as follows:

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

Exceptions: {No change.}

Section 307.4.1 Amend by deleting this section in its entirety.

Section 307.4.2 Amend by deleting this section in its entirety.

Section 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.

Section 308.1.4; change to read as follows:

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 15 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.}

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.

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 unmanned free-floating devices containing an open flame or other heat source, such as but not limited to asky lantern.

Section 311.5; change 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, shall be marked as required by Section 311.5.1 through 311.5.5.

Chapter 4, Emergency Planning and Preparedness

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.

Section 404.2.2; add Number 4.10 to read as follows:

4.10 Fire extinguishing system controls.

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.

Chapter 5, Fire Service Features

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.

Section 503.1.1. Amend by adding the following information to the end of first paragraph in section 503.1.1 to read as follows:

Except for single- or two-family residences, the path of measurement shall be a minimum of a five (5) foot wide unobstructed pathway around the external walls of the structure. An existing fire lane shall not be altered, abandoned or obstructed without the approval of the code official and only upon a showing that adequate fire protection will not be compromised.

Section 503.1.4 Add to read as follows:

Fire Lane Installation Timing. Prior to the issuance of a building permit, fire lanes required by this section shall be designated on a site plan and a minimum of three (3) sets of said plans shall be submitted to the Fire Marshal for approval. No structure shall be allowed to progress beyond the foundation until the required fire lanes and any necessary hydrant are made serviceable and acceptable.

Section 503.1.5 Add to read as follows:

Existing Fire Lanes. Any fire lane that has been established prior to passage of the ordinance from which this article is derived and designated by the Fire Marshal or that has been established by separate ordinance shall be a fire lane for all intents and purposes and shall be maintained as required by this code.

Section 503.1.6 Add to read as follows:

Maintenance of Fire Lanes:

1. The fire code official shall report any negligent surface conditions, markings, or signs to the owner or person in control of property upon which a fire lane exists and shall issue instructions for repair.

2. It shall be unlawful for the owner or person in control of property upon which a fire lane has been designated or exists to fail to maintain the surface of the fire lane in good condition, free of potholes and other non-approved obstructions.

3. It shall be unlawful for the owner or person in control of property on which a fire lane has been designated or exists to fail to maintain any marking of the fire lane as required by this Code in a condition which is not clearly legible.

Section 503.2.1 Change to read as follows:

Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than Twenty four (24) feet except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than fourteen (14) feet, and twenty-six (26) feet for buildings above 30 feet in height.

Section 503.2.2 Change to read as follows:

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.

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.

Section 503.2.7 Change to read as follows:

Grade. The maximum lateral grade of a fire apparatus access road shall not exceed Five (5) percent and the maximum longitudinal grade shall not exceed Eight (8) percent. The approach grade must also be approved prior to any construction by the Fire Code Official.

Section 503.3 Change to read as follows:

Marking. Approved striping shall be provided for fire apparatus access roads as required. In addition to striping, signs or other approved notices shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof where deemed necessary by the code official for clear identification of a fire apparatus access road. Signs or notices and striping shall be maintained in a clean and legible condition at all times and replaced or repaired when required by the fire code official to provide adequate visibility.

1.Striping. Fire apparatus access roads shall be marked by painted lines of red traffic paint six (6) inches 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 white letters at twenty-five foot 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 twelve (12) inches wide and eighteen (18) inches high. Signs shall be painted on a white background with letters and borders in red using not less than two-inch lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six (6) feet, six (6)

inches above finished grade. Signs shall be spaced not more than fifty (50) feet apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Marshal.

Section 503.4 Change to read as follows:

Obstruction of fire apparatus access roads shall not be obstructed in any manner including the parking, stopping, standing, loading or unloading 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. The installation of speed bumps across fire lanes shall require the approval of the Fire Marshal.

Any unauthorized vehicle on a fire lane is:

(1) Subject to removal by the operator of the premises, with the expense of removal and storage to be borne by the registered owner of the vehicle,

(2) Subject to citation, as well as removal, by the Fire Marshal or a Police Officer, and

(3) Prima facie evidence that the person in whose name the vehicle is registered is guilty of a violation of the parking provisions of this section if the driver cannot be located, or if the driver responsible can be located then said driver will be guilty of the parking violation and subject to citation. Expense of removal and storage to be borne by the registered owner of the vehicle or driver whom ever claims the vehicle from the City impound.

Section 503.4.1 Add to read as follows:

Loading zone. A loading zone shall not co-exist with a fire lane. A loading zone shall not be established within a fire lane.

Section 503.6 Amend by adding the following sentence to the end of the existing paragraph in section 503.6: A Balch Springs Fire Department permit and approval is required prior to the installation of a gate across an access road.

Section 505.1 Change to read as follows:

Address numbers. Approved numerals of a minimum **8 inches** height and of a high 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 8-inch height building numerals or addresses and 6-inch height suite/apartment numerals of a high 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 20-inch by 30-inch background on border.

Address numbers shall be Arabic numerals or alphabet letters. The minimum stroke width shall be **1 inch**.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum **4 inches** in height and a high 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; 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*, or qualified personnel from the Balch Springs water department, 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 water flow 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; 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.

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.

Section 511 Add to read as follows:

Emergency Radio Communications. Ensures proper communications inside a building during emergency operations.

511.1 Signal strength in buildings. 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 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 according to the emergency radio system's provider and system manager.

Chapter 6, Building Services and Systems

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.

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 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.

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.

604.1.9 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.

604.2.4 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

604.2.12 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.

604.2.15 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.)

604.8 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.

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.

Chapter 7, Fire-Resistance-Rated Construction

Section 704.1 Change to read as follows:

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 11. New floor openings in existing buildings shall comply with the *International Building Code*.

Section 807.3; change 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.

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.

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.

Chapter 9, Fire Protection Systems

Section 901.6.1.1 Add section to read as follows:

Standpipe Testing. Building owner/managers must utilize a licensed fire protection contractor to test and certify standpipe systems. In addition to the testing and maintenance requirements of NFPA 25 applying to standpipe systems, 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 system.
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 to verify that each inlet connection functions properly. There is no required pressure criterion 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. Contact the Fire Marshal for additional information.
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 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, 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 Marshal 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.

Section 901.7 Change to read as follows:

Systems out of service. Where a required fire protection is out of service or in the event of numerous accidental activations, the fire department and the code official shall be notified immediately and where required by the code official, the building shall either be evacuated or standby personnel shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service. Where utilized, standby personnel shall be provided with at least one (1) approved means for notification of the fire department and their

only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

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 occupant-use hose lines valves and hose where all of the following conditions exist:

2. The hose line(s) would not be utilized by trained personnel or the fire department.
3. 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 are compatible with local fire department fittings.

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 in addition to automatic sprinkler protection where recognized by the applicable standard or as approved by the fire code official.

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."

Section 903.2 Delete the exception in its entirety.

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.

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 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories other than penthouses in compliance with Section 1510 of the International Building Code, located 35 feet (668 mm) or more above the lowest level of fire department vehicle access, measured to the finished floor.

Exceptions:

Open parking structures in compliance with Section 406.5 of the International Building Code, having no other occupancies above the subject garage.

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.

Section 903.3.1.1.1 Change to read as follows:

Exempt locations. When approved by the code official, sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely 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 as 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 two (2) hours.
5. 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 903.3.1.2.3; 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.

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.

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 Amend by adding a second paragraph to the existing section 903.3.5 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.

**Section 903.4. Amend the section by adding a paragraph after the exceptions in section 903.4 to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to an automatic sprinkler system and shall cause an alarm upon detection of water flow lasting more than forty-five (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 strobe ONLY notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection. A Horn device of a minimum 90 decibels shall be located no closer than 20 feet and no further than 30 feet of the fire department connection.

Section 905.2 Change to read as follows:

Installation standards. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe system shall be supervised with a minimum of ten (10) psig and a maximum of forty (40) psig air pressure with a high/low 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.

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.

Section 905.9 Change 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 lasting more than forty-five (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 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. All detection devices shall have a unique point of identification.

Exception: Existing systems will be required to comply with this section when building remodel involving thirty (30) percent or more of the building occurs or expansion increasing the building more than thirty (30) percent occurs. When cumulative building remodel or expansion exceeds fifty (50) percent of the building, compliance is required within eighteen (18) months of permit application.

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 having an occupant load 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.

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.}

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.

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.

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:

[F] See 907.6.3 for the required information transmitted to the supervising station.

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.

Section 910.2; change Exception 2. and 3.to read as follows:

[F] 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 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; 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 m²) 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.

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.

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.

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.

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.

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.

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.}

Chapter 10, Means of Egress

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.

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.

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}

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 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.

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.

Section 1029.1.1.1; delete this section. Spaces under Grandstands and Bleachers:

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. 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 607.3.

Section 1103.5; add Section 1103.5.1 to read as follows:

1103.5.1 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.

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.

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.

Section 2401.2; delete this section.

Table 3206.2, footnote j; change text 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 $50 (m \cdot s)^{1/2}$ 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.

*****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.

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. {Delete text.}
3. The use of fireworks for approved fireworks displays as allowed in Section 5608.
4. {Delete text.}

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.

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 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.

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 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; 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.

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.

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.

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.

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.

***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 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.

{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 1,500 gallons per minute.

END