Recommended Amendments to the 2003 International Fire Code

North Central Texas Council of Governments region

The following sections, paragraphs, and sentences of the 2003 International Fire Code are hereby amended as follows: Standard type is text from the IFC. <u>Underlined type is text inserted</u>. Lined through type is deleted text from IFC.) A double asterisk at the beginning of a section identifies an amendment carried over from the 2000 edition of the code and a triple asterisk identifies a new amendment with the 2003 code.

Note: Fire sprinkler code provisions for single-family dwellings and duplexes may be found in the International Residential Code.

**Section 102.4; change to read as follows:

102.4 Application of building <u>other codes</u>. The design and construction of new structures shall comply with <u>this code</u>, and other codes as applicable the *International Building Code*. Repairs, alterations and additions to existing structures shall comply with this code and the International Existing Building Code.

(Reason: Clarification of requirements and that the IFC also applies to new residential construction and the International Existing Building Code is not recommended for adoption at this time.)

**Section 102.6; change to read as follows:

102.6 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 45 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between the provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the reference dodes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the ICC *Electrical Code* shall mean the Electrical Code as adopted.

(Reason: Legal wording to recognize locally adopted codes and amendments adopted with referenced codes.)

***Section 202; amend definition of Fire Watch as follows:

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals <u>or standby personnel when required by the fire code official</u>, 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.

**Section 202; add a new definition to read as follows:

HIGH-RISE BUILDING. A building having any floors used for human occupancy located more than 75 feet (22 860 mm) above the lowest level of fire department vehicle access.

**Section 202; add a new definition to read as follows:

HIGH-RISE BUILDING. A building having any floors used for human occupancy located more than 55 feet (16 764 mm) above the lowest level of fire department vehicle access.

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

**Section 202; add definitions as follows:

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.

(Reason: To provide definitions that do not exist in the code.)

**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 <u>open burning</u> 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 guidelines and/or restrictions.

2. State, County or Local temporary or permanent bans on open burning.

3. Local written policies as established by the Code Official.

**Section 307.3; change to read as follows:

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

(exceptions unchanged)

Option A

Option B

**Add Section 307.3.3 to read as follows:

<u>307.3.3 Trench Burns.</u> Trench burns shall be conducted in air curtain trenches and in accordance with <u>Section 307.2.</u>

**Section 307.4; change to read as follows:

307.4 Attendance. Open burning, <u>trench burns</u>, bonfires or recreational fires shall be constantly attended until the . . . {*remainder of section unchanged*}.

(Reason: Amendments to 307.2, 307.3, 307.3.3 and 307.4 better explain current requirements and recognize that jurisdictions have local established policies that best fit their environments.)

**Section 308.3.1; change to read as follows:

308.3.1 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated <u>or located</u> on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions:

- 1. One- and two-family dwellings.
- 2. Where buildings, balconies and decks are protected by an <u>approved</u> automatic sprinkler system.

(Reason: To better explain protection options.)

**Section 308.3.1.1; change to read as follows:

308.3.1.1 Liquefied-petroleum-gas-fueled cooking devices. When permitted as listed in the exceptions of Section 308.3.1, LP-gas burners having an LP-gas container with a water capacity greater than 2.5 pounds [nominal 1 pound (0.454 kg) LP-gas capacity] shall not be located on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exception: One- and two-family dwellings, and other residential occupancies when those residential occupancies are in compliance with Section 308.3.1, exception #2, may have containers with a water capacity not greater than 20 pounds (9.08 kg) [nominal 1 pound (0.454 kg) LP-gas capacity].

(Reason: Clarification and defines container size residences are allowed.)

***Section 405.1; change to read as follows:

405.1 General. Emergency evacuation drills complying with the provisions of this section shall be conducted in the occupancies listed in Section 404.2 <u>Table 405.2</u> or when required by the fire code official. Drills shall be designed in cooperation with the local authorities.

(Reason: To correct the discrepancy between general and specific requirements.)

***Section 408.5.4; change to read as follows:

408.5.4 Drill frequency. Emergency evacuation drills shall be conducted at least six twelve times per year, two four times per year on each shift.

(Reason: Due to the turn over in staff, twelve drills per year are necessary for procedural familiarity. This amendment is in line with Table 405.2)

**Section 503.1.1; add the following sentence to the first paragraph:

Except for single- or two-family residences, the path of measurement shall be along a minimum of a ten feet (10') wide unobstructed pathway around the external walls of the structure.

(Reason: Recognizes that the hose lay provision can only be measured along a pathway that is wide enough for fire fighter access.)

**Section 503.2.1; change to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 <u>24</u> feet (6096 mm <u>7315mm</u>), 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.) <u>14 feet (4267 mm)</u>.

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; change to read as follows:

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

(Reason: Amendments to 503.2.1 and 503.2.2 recognize that the equipment now used in fire fighting is increasing in size. The code already recognizes that larger dimensions may be required under Section 503.2.2. The amendments are to standardize the dimensions for this area. With the increase in fire apparatus size, this will allow for the passage of two fire apparatus during a fire or EMS emergency.)

**Section 503.3; change to read as follows:

503.3 Marking. Where required by the fire code official, approved <u>Approved striping or, when allowed by</u> <u>the code official, signs, or both, or other approved notices</u> shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs or notices and striping 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 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 stripping 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. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

(Reason: Establishes a standard method of marking.)

**Section 503.4; change to read as follows:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

(Reason: As originally worded, it implied that vehicles could be parked in the marked fire lane and not be in violation if the minimum width is still maintained. Current accepted enforcement practice is to require all of the marked fire lane to be maintained clear and unobstructed.)

**Section 704.1; change to read as follows:

704.1 Enclosure. Interior vertical shafts, including but not limited to stairways, elevator hoistways, service and utility shafts, that connect two or more stories of a building shall be enclosed or protected <u>in</u> accordance with the codes in effect at the time of construction but, regardless of when constructed, not less than as specified in Table 704.1. When openings are required to be . . . {remainder of section unchanged}.

(Reason: Provides standard minimum protection retroactively, but clarifies that this section is not to be used to reduce higher protection levels that were required when originally constructed.)

** Section 803.3.2 and Section 803.4.2; add an exception to read as follows:

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.

(Reason: This change allows an increase in wall coverage due to the presence of sprinklers.)

**Section 804.1.1; add a second exception to read as follows:

Exceptions:

<u>1. {existing exception unchanged}</u>

2. Trees shall not be prohibited inside private dwelling units of Group R-2 Occupancies.

(Reason: Eliminates rule for private dwelling space.)

**Section 901.7; change to read as follows:

901.7 Systems out of service. Where a required fire protection system is out of service <u>or in the event of an excessive number of activations</u>, 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 an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

(Reason: Gives Fire Chief more discretion. Requires adoption of definition amendment in Section 202.)

**Section 902.1; under "Standpipe, Types of" definition, amend "Manual dry" by adding a sentence to read as follows:

The system must be supervised as specified in Section 905.2.

(Reason: Corresponds with Section 905.2 recommended amendment.)

*** Section 903.2; delete the exception.

(Reason: These areas pose a fire risk to the structural integrity of the building.)

**Add Section 903.2.8.3 to read as follows:

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

Exception: One-story self-service storage facilities that have no interior corridors, with a one-hour fire barrier separation wall installed between every storage compartment.

(Reason: Consistent with unamended IBC.)

Option A

**Section 903.2.10; amend 903.2.10.3 and add 903.2.10.4, 903.2.10.5, and 903.2.10.6 as follows:

903.2.10.3 Buildings more than 55 feet in height. An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the *International Building Code*, having an occupant load of 30 or more that is located 55 feet (16 764 mm) or more above the lowest level of fire department vehicle access.

Exception:

1. Airport control towers.

2. Open parking structures in compliance with Section 406.3 of the Building Code.
3. Occupancies in Group F-2.

<u>903.2.10.4 High-Piled Combustible Storage.</u> For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 23 to determine if those provisions apply.

903.2.10.5 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be

North Central Texas 2003 IFC amendments protected by an approved automatic fire-extinguishing system.

Option B

**Section 903.2.10; amend 903.2.10.3 and add 903.2.10.4, 903.2.10.5, and 903.2.10.6 as follows:

903.2.10.3 Buildings more than 55 35 feet in height. An automatic sprinkler system shall be installed throughout buildings with a floor level. other than penthouses in compliance with Section 1509 of the *International Building Code*, having an occupant load of 30 or more that is located 55 35 feet (16 764 10 668mm) or more above the lowest level of fire department vehicle access.

Exception:

1. Airport control towers.

2. Open parking structures in compliance with Section 406.3 of the International Building Code.

3. Occupancies in Group F-2.

<u>903.2.10.4 High-Piled Combustible Storage.</u> For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 23 to determine if those provisions apply.

903.2.10.5 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.10.6 Buildings Over 6,000 sq.ft. An automatic sprinkler system shall be installed throughout all buildings with a building area over 6,000 sq.ft. For the purpose of this provision, fire walls shall not define separate buildings.

Exceptions:

1. Open parking garages in compliance with Section 406.3 of the International Building Code. 2. Type A-5.

(Reason: Reflect local practices.)

**Section 903.3.1.1.1; change to read as follows:

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

- 1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
- 2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
- 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 fireresistance rating of not less than 2 hours.
- 4. In rooms or areas that are of noncombustible construction with wholly noncombustible contents.

(Reason: Gives more discretion to code official. Protects locations where fire risks are poorly addressed.)

**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 fire protection system shall be designed with a 10 psi safety factor.

(Reason: To define uniform safety factor.)

**Section 903.4; add a second paragraph after the exceptions to read as follows:

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

(Reason: To avoid significant water losses. Consistent with amendment to IFC 905.9.)

**Add Section 903.6.2 to read as follows:

903.6.2 Spray booths and rooms. New and existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 1504.

(Reason: Consistent with amendment to IFC 1504.)

**Section 905.2; change to read as follows:

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

(Reason: To define manual dry standpipe supervision requirements.)

**Section 905.3.2; delete exceptions #1 and #2.

(Reason: Reflects local practice.)

**Section 905.4, item #5; change to read as follows:

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a <u>two-way</u> hose connection located either . . . {remainder of paragraph unchanged} . . .

(Reason: Clarity.)

**Section 905.9; add a second paragraph after the exceptions to read as follows:

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

(Reason: To avoid significant water losses. Consistent with amendment to IFC 903.4.)

**Add Section 907.1.3 to read as follows:

907.1.3 Design Standards. All alarm systems new or replacement serving 50 or more alarm actuating devices shall be addressable fire detection systems. Alarm systems serving more than 75 smoke detectors or more than 200 total alarm activating devices shall be analog intelligent addressable fire detection systems.

Exception: Existing systems need not comply unless the total building remodel or expansion initiated after the effective date of this code, as adopted, exceeds 30% of the building. When cumulative building remodel or expansion exceeds 50% of the building must comply within 18 months of permit application.

(Reason: Consistent with local practice.)

**Section 907.2.3; change to read as follows:

907.2.3 Group E. A manual fire alarm system 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</u> <u>Group E day care occupancies</u>. <u>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>

(Reason: To distinguish educational from day care occupancy minimum protection requirements. Further, to define threshold at which portable buildings are considered a separate building for the purposes of alarm systems.)

**Section 907.2.3; change exception #1 and add exception #1.1 to read as follows:

- 1. Group E <u>educational and day care</u> occupancies with an occupant load of less than 50 <u>when</u> <u>provided with an approved automatic sprinkler system</u>.
 - 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.)

(Reason: Consistent with Texas State laws concerning day care facility requirements.)

**Section 907.2.12; change to read as follows:

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Option A

907.2.12 High-rise buildings. Buildings having <u>any</u> floor used for human occupancy located more than 75 feet (22 860 mm) above the lowest level *(balance unchanged)*

**Section 907.2.12; change to read as follows:

907.2.12 High-rise buildings. Buildings having <u>any</u> floors used for human occupancy located more than 75 55 feet (22.860 16 764 mm) above the lowest level of fire department vehicle access shall be provided with an automatic fire alarm system and an emergency voice/alarm communications system in accordance with Section 907.2.12.2.

(Reason: To correct definition of high-rise for Option B jurisdictions.)

**Section 907.2.12, exception #3; change to read as follows:

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

(Reason: To indicate that enclosed areas within open air seating type occupancies are not excepted from automatic fire alarm system requirements.)

**Section 907.4; add a second paragraph to read as follows:

Manual alarm actuating devices shall be an approved double action type.

(Reason: Consistent with local requirements.)

** Add Section 907.6.1 to read as follows:

907.6.1 Installation. All fire alarm systems shall be installed in such a manner that the failure of any single alarm-actuating or alarm-indicating device will not interfere with the normal operation of any other such devices. All systems shall be Class "A" wired with a minimum of six feet separation between supply and return loops. IDC – Class "A" style – D – SLC Class "A" Style 6 – notification Class "B" Style Y.

(Reason: To provide uniformity in system specifications and guidance to design engineers.)

Option A

Option B

**Section 907.9.2; change to read as follows:

907.8.2 High-rise buildings. In buildings that have <u>any</u> floor located more than 75 feet (22 860 mm) above the . . . {*remainder of section unchanged*}.

**Section 907.9.2; change to read as follows:

Option B

907.9.2 High-rise buildings. In buildings that have <u>any</u> floor located more than $\frac{75}{55}$ feet ($\frac{22.860}{16.764}$ mm) above the . . . {*remainder of section unchanged*}.

(Reason: Correct definition of high-rise for Option B jurisdictions.)

***Section 1008.1.3.4; add criteria #7 as follows:

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

(Reason: To increase safety by preventing smoke from causing a malfunction in the motion sensor release mechanism while at the same time obscuring the manual release button and thereby potentially trapping people in an exit corridor of a burning building.)

**Section 1016.1; add an exception #5 to read as follows:

5. In Group B office buildings, corridor walls and ceilings need not be of fire-resistive construction within office spaces of a single tenant when the space is equipped with an approved automatic smoke-detection system within the corridor. The actuation of any detector shall activate alarms audible in all areas served by the corridor. The smoke-detection system shall be connected to the building's fire alarm system where such a system is provided.

(Reason: Consistent with regional amendment to IBC 1016.1.)

**Section 1019.1.8; change to read as follows:

1019.1.8 Smokeproof enclosures. In buildings required to comply with Section 403 or 405, each of the exits of a building that serves stories where the any floor surface is located more than 75 feet (22 860 mm) above the lowest level of fire...{remainder of section unchanged}

**Section 1019.1.8; change to read as follows:

1019.1.8 Smokeproof enclosures. In buildings required to comply with Section 403 or 405, each of the exits of a building that serves stories where the any floor surface is located more than 75 55 feet (22 860 16 764 mm) above the lowest level of fire . . . {*remainder of section unchanged*}.

Option A

Option B

(Reason: Correct definition of high-rise for Option B jurisdictions.)

**Section 1504.6; change to read as follows:

1504.6 Fire Protection. <u>New and existing spray</u> Spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system ... *[remainder of section unchanged]* ...

(Reason: Consistent protection in all spray booths.)

**Section 2302; add a second paragraph to the definition of "High-Piled Combustible Storage" to read as follows:

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

Option B

Option A

**Section 2302; add a second paragraph to the definition of "High-Piled Combustible Storage" to read as follows:

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

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

**Section 3301.1.3; change to read as follows:

3301.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. <u>Only when approved for fireworks displays</u>, storage and handling of fireworks as <u>provided</u> permitted in Section 3304 and 3308.

2. Manufacture, assembly and testing of fireworks as permitted in Section 3304.

3.—The use of fireworks for <u>approved</u> display as permitted in Section 3308.

4. The possession...consumer fireworks.

(Reason: Restricts to approved displays, which is consistent with local practice.)

***Section 3302; change the definition of "fireworks" to read as follows:

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purposes by combustion, deflagration, and 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.

(Reason: Increased safety from fireworks related injuries.)

**Section 3403.6; add a sentence to read as follows:

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

**Section 3404.2.11.5; add a sentence to read as follows:

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

(Reason: Increased protection in response to underground leak problems and rehabilitation difficulty in underground applications.)

**Section 3404.2.11.5.2; change to read as follows:

3404.2.11.5.2 Leak detection. Underground storage tank systems ... [bulk of provision unchanged] ... and installed in accordance with NFPA 30 and as specified in Section 3404.2.11.5.3.

(Reason: Reference to Section 3404.2.11.5.3 amendment.)

**Add Section 3404.2.11.5.3 to read as follows:

3404.2.11.5.3 Dry sumps. Approved sampling tubes of a minimum 6 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 sump at the corners of the excavation with a minimum of 4 sumps. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

(Reason: Provides an economical means of checking potential leaks at each tank site.)

**Delete Section 3406.5.4.5 and replace with the following:

3406.5.4.5 Commercial, industrial, governmental or manufacturing. Dispensing of Class II and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles located at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with Sections 3406.5.4.5.1 through 3406.5.4.5.3.

3406.5.4.5.1 Site requirements.

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

- 2. <u>A detailed site plan shall be submitted with each application for a permit. The site plan must indicate:</u>
 - a. all buildings, structures, and appurtenances on site and their use or function;
 - b. all uses adjacent to the property lines of the site;
 - c. the locations of all storm drain openings, adjacent waterways or wetlands;
 - d. <u>information regarding slope, natural drainage, curbing, impounding and how a spill will be retained</u> <u>upon the site property; and,</u>
 - e. The scale of the site plan.
- 3. <u>The Code Official is authorized to impose limits upon: the times and/or days during which mobile</u> <u>fueling operations are allowed to take place and specific locations on a site where fueling is permitted.</u>
- 4. Mobile fueling operations shall be conducted in areas not generally accessible to the public.
- 5. <u>Mobile fueling shall not take place within 15 feet (4.572 m) of buildings, property lines, or combustible storage.</u>

3406.5.4.5.2 Refueling Operator Requirements.

- 1. <u>The owner of a mobile fueling operations shall provide to the jurisdiction a written response plan which demonstrates readiness to respond to a fuel spill, carry out appropriate mitigation measures, and to indicate its process to properly dispose of contaminated materials when circumstances require.</u>
- 2. <u>The tank vehicle shall comply with the requirements of NFPA 385 and Local, State and Federal</u> requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.
- 3. <u>Signs prohibiting smoking or open flames within 25 feet (7.62 m) of the tank vehicle or the point of fueling shall be prominently posted on 3 sides of the vehicle including the back and both sides.</u>
- 4. <u>A fire extinguisher with a minimum rating of 40:BC shall be provided on the vehicle with signage clearly indicating its location.</u>
- 5. The dispensing nozzles and hoses shall be of an approved and listed type.
- 6. <u>The dispensing hose shall not be extended from the reel more than 100 feet (30.48m) in length.</u>
- 7. <u>Absorbent materials, non-water absorbent pads, a 10 foot (3.048 m) long containment boom, an approved container with lid, and a non-metallic shovel shall be provided to mitigate a minimum 5-gallon fuel spill.</u>
- 8. <u>Tanker vehicles shall be equipped with a fuel limit switch such as a count-back switch, limiting the amount of a single fueling operation to a maximum of 500 gallons (1893 L) between resettings of the limit switch.</u>

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

- 9. <u>Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak, or spill.</u> Training records shall be maintained by the dispensing company and shall be made available to the Code Official upon request.
- 10. <u>Operators of tank vehicles used for mobile fueling operations shall have in their possession at all</u> times an emergency communications device to notify the proper authorities in the event of an emergency.

3406.5.4.5.3 Operational Requirements.

- 1. <u>The tank vehicle dispensing equipment shall be constantly attended and operated only by designated</u> personnel who are trained to handle and dispense motor fuels.
- 2. Prior to beginning dispensing operations, precautions shall be taken to assure ignition sources are not present.
- 3. <u>The engines of vehicles being fueled shall be shut off during dispensing operations.</u>
- 4. <u>Night time fueling operations shall only take place in adequately lighted areas.</u>

- 5. <u>The tank vehicle shall be positioned with respect to vehicles being fueled so as to preclude traffic from</u> <u>driving over the delivery hose and between the tank vehicle and the motor vehicle being fueled.</u>
- 6. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.
- 7. Motor vehicle fuel tanks shall not be topped off.
- 8. The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the tank vehicle.
- 9. The Code Official and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.

(Reason: Provides clarity and organization of the site, operation and use requirements.)

**Add Section 3803.2.1.8 to read as follows:

3803.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

(Reason: To provide a consistent and reasonable means of regulating the use of portable LP-Gas containers in these situations.)

**Section 3804.2; add an exception #2 to read as follows:

Exceptions:

<u>1. {existing exception unchanged}</u>
<u>2. Except as permitted in 308.3 and 3804.3.2, LP-gas containers are not permitted in residential areas.</u>

(Reason: To provide a consistent and reasonable means of regulating the use of portable LP-Gas containers. References regional amendment to IFC 3804.3.2.)

**Add Section 3804.3.2 to read as follows:

<u>3804.3.2 Spas, Pool Heaters and other listed devices.</u> Where natural gas service is not available, LP-Gas containers are allowed to be used to supply spa and pool heaters or other listed devices. Such containers shall not exceed 250-gallon water capacity. See Table 3804.3 for location of containers.

(Reason: Allows for an alternate fuel source.)

END