

ORDINANCE NO. 15,860

AN ORDINANCE to amend the Municipal Code of the City of Des Moines, Iowa, 2000, adopted by Ordinance No. 13,827, passed June 5, 2000, as heretofore amended, by amending Sections 46-1, 46-5, 46-61, 46-62, 46-63, 46-65, 46-67, 46-68, 46-70, 46-279, 46-457, 46-469, 46-485, 46-487, 46-498, 46-510, 46-556, 46-581 and 46-582, by repealing Section 46-458, 46-484 and 46-486, and by adding and enacting new Sections 46-71, 46-72, 46-73, 46-441, 46-488, 46-489, 46-490, 46-522, 46-523, 46-584, 46-585 and 46-586, relating to fire prevention and protection.

Be It Ordained by the City Council of the City of Des Moines, Iowa:

Section 1. That the Municipal Code of the City of Des Moines, Iowa, 2000, adopted by Ordinance No. 13,827, passed June 5, 2000, as heretofore amended, is hereby amended by amending Sections 46-1, 46-5, 46-61, 46-62, 46-63, 46-65, 46-67, 46-68, 46-70, 46-279, 46-457, 46-469, 46-485, 46-487, 46-498, 46-510, 46-556, 46-581 and 46-582, by repealing Section 46-458, 46-484 and 46-486, and by adding and enacting new Sections 46-71, 46-72, 46-73, 46-441, 46-488, 46-489, 46-490, 46-522, 46-523, 46-584, 46-585 and 46-586, relating to fire prevention and protection, as follows:

**Sec. 46-1. Permits required.**

- (a) It shall be unlawful for any person to use a building or premises or engage in any activities for which a permit is required by this chapter without first having obtained such permit. Permits are required from the fire prevention bureau for the uses listed in subsections (b) through (h) of this section.
- (b) Permits shall be required for the installation, major repair, abandonment, or removal of the following installations, and the fee for each such construction shall be the amount established in the schedule of fees adopted by the city council by resolution:
  - (1) Compressed and liquefied petroleum gas system (see section 46-278 of this chapter).
  - (2) Flammable or combustible liquid tanks (see section 105.7.9 of the fire code).
  - (3) Compressed gas systems designed for storage or use of a compressed gas in excess of the quantities identified in 46-1 (7).
  - (4) Open-flame decorative devices/fire pits (see section 46-73 of this chapter).
- (c) Yearly operational permits shall be required for each of the following facilities or uses, and the fee for each such installation or use shall be the amount established in the schedule of fees adopted by the city council by resolution:

- (1) Aviation Facility. To use a Group H or Group S for aircraft servicing or repair and aircraft fuel-servicing vehicles (see chapter 20 of the fire code).
- (2) Acetylene generator. To operate an acetylene generator having a carbide capacity of five pounds or greater (see section 46-121 of this chapter).
- (3) Calcium carbide. To store or keep calcium carbide in excess of 100 pounds (see section 46-121 of this chapter)
- (4) Cellulose nitrate film. To store, handle, or use nitrate film in quantities in excess of five reels or 25 pounds in weight (see section 306 of the fire code)
- (5) Cellulose nitrate (pyroxylin).
  - a. To store or handle more than 25 pounds of cellulose nitrate plastic (see section 306 of the fire code).
  - b. To manufacture or assemble pyroxylin articles or parts of (see chapter 65 of the fire code).
- (6) Combustible fiber. To store or handle combustible fibers in quantities in excess of 100 cubic feet (see chapter 37 of the fire code).
- (7) Compressed gases. To store, handle or use at normal temperatures and pressures in excess of quantities indicated:
  - a. Flammable gases in excess of 200 cubic feet (see chapter 58 of the fire code).
  - b. Non-flammable gases in excess of 6,000 cubic feet (see chapter 53 of the fire code).
  - c. Oxidizing gases in excess of 504 cubic feet (see chapter 63 of the fire code).
  - d. Corrosive or toxic gases in any amount (see chapter 50 of the fire code).
  - e. Highly toxic, radioactive or reactive (unstable) materials in any amount (see chapter 60 and 66 of the fire code).
  - f. Carbon Dioxide for beverage systems in excess of 100 pounds of carbon dioxide (see section 105.6.8 of the fire code).
- (8) Dry cleaning plants. To engage in the business of dry cleaning, as prescribed by class or type of system (see chapter 21 of the fire code).
- (9) Dust-producing operations. To operate a grain elevator; flour, starch or feed mill; or plant pulverizing aluminum, coal, cocoa, magnesium, spices, sugar or other material producing dusts as defined in chapter 22 of the fire code.
- (10) Activities or uses involving explosives or blasting agents. (see chapter 56 of the fire code):
  - a. Keep, store or sell explosives.
  - b. Transport explosives.
  - c. Blasting using explosives.
- (11) Activities or uses involving explosives, small arms ammunition, small arms primers, smokeless propellants, black rifle powder (see chapter 56 of the fire code):
  - a. Small arms ammunition, to store or sell.
  - b. Small arms primers and smokeless propellants, to store or sell.
  - c. Black rifle powder, to store or sell.
- (12) Inspection, maintenance and certification of fire appliances.
- (13) Operation for conducting a fireworks or fire, open flames or flammable material display or compound, use or store of pyrotechnic special effects material (see section 46-215 of this chapter).

- (14) Conducting a flammable finish operation by painting, spraying, dipping or storing flammable products for these operations (see chapter 24 of the fire code).
- (15) Flammable or combustible liquids (see section 105.6.16 of fire code).
- (16) Fruit ripening. To ripen fruit by the process described in chapter 25 of the fire code using ethylene gas.
- (17) Garages. To use any structure as a place of business for repairing motor vehicles (see chapter 23 of the fire code).
- (18) Hazardous chemicals. To store or handle the following hazardous chemicals in excess of the quantities indicated (see Chapter 50 of the fire code).

Combustible liquids – see 105.6.16

Corrosive liquids – 55 gallons

Corrosive solids – 1000 pounds

Flammable liquids - see 105.6.16

Flammable solids – 100 pounds

Highly toxic liquids and solids – any amounts

Toxic liquids – 10 gallons

Toxic solids – 100 pounds

#### Organic Peroxides

Liquids – Class I and II – any amount

Liquids – Class III – 1 gallon

Liquids – Class IV – 2 gallons

Liquids - Class V – no permit required

Solids – Class I and II – any amount

Solids – Class III – 10 pounds

Solids – Class IV – 20 pounds

Solids – Class V – no permit required

#### Oxidizing materials

Oxidizing liquids class 4 – any amount

Oxidizing liquids class 3 – 1 gallon

Oxidizing liquids class 2 – 10 gallons

Oxidizing liquids class 1 – 55 gallons

Oxidizing solids class 4 – any amount

Oxidizing solids class 3 – 10 pounds

Oxidizing solids class 2 – 100 pounds

Oxidizing solids class 1 – 500 pounds

Unstable (reactive) materials

- Liquids class 3 & 4 – any amount
- Liquids class 2 – 5 gallons
- Liquids class 1- 10 gallons
- Solids class 3 & 4 – any amount
- Solids class 2 – 50 pounds
- Solids class 1 – 100 pounds

Water reactive materials

- Liquids class 3 - any amount
- Liquids class 2 - 5 gallons
- Liquids class 1 – 55 gallons
- Solids class 3 – any amount
- Solids class 2 – 50 pounds
- Solids class 1 – 500 pounds

- (19) Liquefied petroleum gas. To operate or maintain an LP gas system or store LP gas (see section 46-278 of this chapter).
- (20) Lumberyards. To store lumber in excess of 100,000 board feet (see chapter 28 of the fire code).
- (21) Magnesium. To melt, cast, heat treat or grind more than ten pounds of magnesium per working day (see chapter 59 of the fire code).
- (22) Mall, covered. To use a covered mall in the following manner: placing or constructing temporary kiosks, display booths, concession equipment or the like in the mall; to use the mall as a place of assembly; to use open-flame or flame-producing devices; to display any liquid or gas fueled powered equipment; to use liquefied natural gas or compressed flammable gas 30 days only.
- (23) Organic coatings. To manufacture more than one gallon of organic coatings in a working day (see chapter 29 of the fire code).
- (24) Ovens, industrial baking or drying. To operate an industrial baking or drying oven regulated by this chapter (see chapter 30 of the fire code).
- (25) Refrigerant equipment. To operate a refrigeration unit or system having a refrigerant circuit containing more than 220 pounds (100 kg) of group A1 or 30 pounds (14 kg) of any other group refrigerant.
- (26) Tents. To erect or maintain a tent, temporary stage canopy, or membrane structure (see section 105.6.47 and article IX of this chapter) having an area in excess of 400 square feet.
- (27) Tire rebuilding. To operate a tire rebuilding or tire recapping plant (see chapter 34 of the fire code).
- (28) High piled combustible storage. To use a building or a portion thereof as a high piled storage area in excess of 500 square feet, including storage of combustible materials on pallets, in racks or on shelves where the top of the storage is greater than 12 feet in height, and also including certain commodities, such as rubber tires, Group A plastics, flammable liquids, idle pallets and similar commodities where the top of the storage is greater than 6 feet in height (see sections 105.6.22 and 202 of the fire code).

- (d) A permit shall be required for construction, installation or modification of the following types of fire protection systems and equipment, and the fee for issuance of such permit shall be the amount established in the schedule of fees adopted by the city council by resolution:
  - (1) Automatic fire-extinguishing systems and related equipment.
  - (2) Standpipe system (not part of a combined sprinkler/standpipe system).
  - (3) Fire alarm and detection systems and related equipment.
  - (4) Fire pumps and related equipment.
  - (5) Reserved.
  - (6) Reserved.
  - (7) Demolition of a fire protection system (without replacement or modification).
- (e) A permit shall be required for removal of an underground storage tank which contains or has contained any substance for which a permit is required under this section (see section 105.7.9(3) of the fire code), and the fee for such permit shall be the amount established in the schedule of fees adopted by the city council by resolution.
- (f) Exemption for certain classes of applicants. Persons performing work or operations for the federal government or the state may obtain permits for such work or operations without paying the permit fees described in this section.
- (g) A permit shall be required for open fires or open burns pursuant to sections 46-71 and 46-72. Outdoor fireplaces or grills burning untreated wood or charcoal used solely for the non-commercial preparation of food shall not be required to obtain a permit,
- (h) The permit fees required by this section shall be doubled whenever a permit is not obtained prior to conducting the activities described in this section. No additional permits shall be issued to any person who owes the city the double fee established in this subsection.

**Sec. 46-5. Notice of violation--administrative penalties--corrective action order.**

- (a) The fire department is authorized to issue a notice of violation imposing administrative penalties upon any person who fails to perform an act required by chapter 46 of this code or who commits an act prohibited by said chapter.
- (b) Such notice of violation may include a corrective action order requiring compliance with the violated code section within thirty (30) days.
- (c) The administrative penalty for such violations shall be as provided in the schedule of administrative penalties adopted by the city council by resolution.
- (d) Notice of violation, with the applicable penalty for such violation noted thereon, shall be issued to and served upon the violator. Service of the notice upon the violator may be by regular mail or by delivery in person. Such notice shall include:
  - (1) a statement that the violator has a right to appeal regarding the violation; and
  - (2) a statement that the violator may file a written or telephone appeal with the fire marshal or his authorized representative. The appeal must be made within 30 days of issuance of the notice and identify the Notice of Violation appealed from and state the basis for the appeal, and the violator's name, mailing address, email address, and daytime telephone number. The fire marshal or his authorized representative will consider the appeal on the basis of the appeal and record and will notify the violator by mail, telephone or email of the decision as promptly as is reasonably possible. The appeal shall stay payment of the administrative penalty

and performance of the corrective action until the appeal is decided. If issuance of the notice of violation is upheld, the violator shall have 30 days from issuance of the appeal decision to pay the administrative penalty and to perform the corrective action.

- (e) Penalties assessed pursuant to notice of violation shall be paid by the violator in full as directed in the notice within thirty (30) days of its issuance. Corrective action as required pursuant to notice of violation shall be completed by the violator as directed in the notice within thirty (30) days of its issuance.
- (f) The administrative penalties set out in the schedule of administrative penalties shall be charged in lieu of the fines and penalties provided for in section 46-3 and 46-4, unless the violator refuses to correct the violation and pay the scheduled administrative penalty, or the fire chief or the chief's authorized representative determines that immediate enforcement action by misdemeanor or municipal infraction prosecution pursuant to section 46-3 and 46-4, or by public nuisance procedure or any other remedy available at law, is, in view of the particular circumstances of the case, necessary to achieve compliance with the requirements of this chapter. The fire department shall maintain a record of all violations, administrative penalties charged or other enforcement actions taken.

**Sec. 46-61. Adoption of international fire code.**

- (a) This chapter shall consist of the International Fire Code, 2018 edition, published by the International Code Council, Inc., and known commonly and referenced in this chapter as the "International Fire Code" and as the "fire code", which volume is incorporated in this chapter by this reference as fully as though set forth in this chapter in its entirety, excepting only such portions as are stated to be deleted therefrom and such amendments or additional provisions as are set forth in this article.
- (b) This chapter and all provisions incorporated in this chapter, by reference or otherwise, shall be known as the fire prevention code, may be cited as such, and will be referred to in this chapter as such and as "this code" or as "this article" or as "this chapter." Further references made in this chapter to chapters will be to chapters of the International Fire Code. References to section numbers not preceded by "46-" will be to sections in the International Fire Code.

**Sec. 46-62. Deletions.**

The following sections are hereby deleted from the International Fire Code adopted in section 46-61 of this article and are of no force or effect in this chapter:

- (1) Sections 106, 510.3, 605.12.4 Item #5, 806.1.1 Exception #2, 5701.4.
- (2) Appendix A.
- (3) Section 903.3.1.2.3.

**Sec. 46-63. Amendments and additions.**

- (a) Article I of this chapter and the remaining sections in this chapter are and represent amendments and additions to the requirements contained in the International Fire Code.

Where the requirements conflict with those of the International Fire Code, the requirements of this chapter shall prevail.

(b) The following sections of the International Fire Code are deleted and are amended as follows:

- (1) Section 109 (see section 46-64 of this chapter).
- (2) Section 105, except sections 105.1, 105.6.8, 105.6.16, 105.6.22 and 105.7.9 thereof which are not amended or deleted and remain incorporated in this chapter (see section 46-1 of this chapter).
- (3) Section 3501.2 (see section 46-121 of this chapter).
- (4) Section 5608.2 (see article VI of this chapter).
- (5) Sections 5001.5, 5001.6.2, 5001.6.3, 5001.6, (see article IV of this chapter).
- (6) Section 6104, except 6104.1 and Table 6104.3 which is not amended or deleted and remains incorporated in this chapter (see article VIII of this chapter).
- (7) Section 308.1.4 (see section 46-66).
- (8) Section 311.1, 311.1.1, and 311.2 (see section 46-70 of this chapter).
- (9) Section 1101.4 (see section 46-68 of this chapter).
- (10) Section 5601.4 Exception (see section 46-218 of this chapter).
- (11) Section 503.2.1 (see section 46-442 of this chapter).
- (12) Section 505.1 (see section 46-443 of this chapter).
- (13) Section 507.5.1.1. (see section 46-445 of this chapter).
- (14) Section 507.5.5 (see section 46-445 of this chapter).
- (15) Section 508.1 (see section 46-456 of this chapter).
- (16) Section 1203.7 (see section 46-457 of this chapter).
- (17) Section 1203.8 (see section 46-457 of this chapter).
- (18) Section 903.2.1.1 (see section 46-469 of this chapter).
- (19) Section 903.2.1.2 (see section 46-469 of this chapter).
- (20) Section 903.2.1.3 (see section 46-469 of this chapter).
- (21) Section 903.2.1.4 (see section 46-469 of this chapter).
- (22) Section 903.2.2 (see section 46-469 of this chapter).
- (23) Section 903.2.2.1 (see section 46-469 of this chapter).
- (24) Section 903.2.3 (see section 46-469 of this chapter).
- (25) Section 903.2.4 (see section 46-469 of this chapter).
- (26) Section 903.2.7 (see section 46-469 of this chapter).
- (27) Section 903.2.9 (see section 46-469 of this chapter).
- (28) Section 903.2.9.1 (see section 46-469 of this chapter).
- (29) Section 903.3.1.2 (see section 46-469 of this chapter).
- (30) Section 903.2.11.1.3 (see section 46-469 of this chapter).
- (31) Section 903.4.2 (see section 46-469 of this chapter).
- (32) Section 901.4.6.1 (see section 46-469 of this chapter).
- (33) Section 907.6.6 (see section 46-471 of this chapter).
- (34) Section 910.2.1 (see section 46-472 of this chapter).
- (35) Section 914.3.1.2 (see section 46-473 of this chapter).
- (36) Section 1008.3.3 (see section 46-484 of this chapter).
- (37) Section 1028.5.1 (see section 46-485 of this chapter).
- (38) Section 3301.2 (see section 46-520 of this chapter).
- (39) Section 3311.1 (see section 46-522 of this chapter).

- (40) Section 3313.1 (see section 46-523 of this chapter).
- (41) Section D105.3 (see section 46-580 of this chapter).
- (c) The addition of the following sections/appendices:
  - (1) Appendices B, C, D, I, K and M.
  - (2) Section 111.5 (see section 46-69 of this chapter).
  - (3) Section 311.7 (see section 46-70 of this chapter).
  - (4) Section 5701.6 (see section 46-246 of this chapter).
  - (5) Section 503.1.4 (see section 46-441 of this chapter).
  - (6) Section 511 (see section 46-444 of this chapter).
  - (7) Section 507.5.7 (see section 46-445 of this chapter).
  - (8) Section 507.5.8 (see section 46-445 of this chapter).
  - (9) Section 903.1.2 (see section 46-469 of this chapter).
  - (10) Section 903.2.2.1 (see section 46-469 of this chapter).
  - (11) Section 903.2.9 item #6 (see section 46-469 of this chapter).
  - (12) Section 905.3.9 (see section 46-470 of this chapter).
  - (13) Section 907.1.4 (see section 46-471 of this chapter).
  - (14) Section 1009.2 item #11 (see section 46-485 of this chapter).
  - (15) Section 1010.1.6.1 (see section 46-485 of this chapter).
  - (16) Section 1010.1.9.1 (see section 46-486 of this chapter).
  - (17) Section 1014.4 item #6 (see section 46-488 of this chapter).
  - (18) Section 1015.9 (see section 46-489 of this chapter).
  - (19) Section 1030.4.3 (see section 46-490 of this chapter).
  - (20) Section 1107.1 (see section 46-498 of this chapter).
  - (21) Section 1107.2 (see section 46-498 of this chapter).
  - (22) Section 1107.3 (see section 46-498 of this chapter).
  - (23) Section 3202.1 (see section 46-510 of this chapter).
  - (24) Section 3206.2.1 (see section 46-510 of this chapter).
  - (25) Section 3206.4.2 (see section 46-510 of this chapter).
  - (26) Section 3301.2 (see section 46-520 of this chapter).
  - (27) Section 3310.1.1 (see section 46-521 of this chapter).
  - (28) Section D104.5 (see section 46-581 of this chapter).
  - (29) Section D104.5.1 (see section 46-582 of this chapter).
  - (30) Section D107.1 Exception #2 (see section 46-583 of this chapter).
  - (31) Section D104.4 (see section 46-584 of this chapter).
  - (32) Section D106.4 (see section 46-585 of this chapter).
  - (33) Section D107.3 (see section 46-586 of this chapter).

**Sec. 46-65. Inspections for multi-family dwellings.**

- (a) Where circumstances make compliance with adopted codes or standards infeasible due to rapid technological advancement or cause undue hardship to the operation of a business, the fire chief may, under authority of section 104.9 of the International Fire Code, authorize alternate methods and materials, as provided in a more recent edition of a nationally recognized code.
- (b) Group R division 3 occupancies shall be inspected upon request or approval of the occupant. Fire department personnel will not be responsible for the inspection of group R



division 1 occupancies, except hotels and dormitories. Housing code enforcement shall be responsible for enforcement of the housing code and fire safety requirements as provided in article IV of chapter 26 of the city code.

**Sec. 46-67. Single and multiple station smoke alarms.**

Listed single and multiple-station smoke alarms complying with UL 268 shall be installed in accordance with provisions of this code and the household fire warning equipment provision of NFPA 72. Smoke alarms in dwelling units shall be addressable with sounder bases and monitored by the building fire alarm system as a supervisory signal only. Mini horns in dwelling units are not required if notification from a building fire alarm system is through the smoke alarms with sounder bases. Section 46-67 only applies to the R-1, R-2, R-4 and I-1 occupancies as defined in the International Fire Code. Single and multi-station smoke alarms shall be installed in locations detailed in sections 907.2.11.1 and 907.2.11.2.

**Sec. 46-68. Owner Notification for retroactive provisions.**

- (a) Upon the issuance of a building permit under chapter 26 of the City Code and determination by the fire code official that alterations are needed to the existing building to provide a minimum degree of fire and life safety to persons occupying said building, the property owner has three (3) calendar years from the date of issuance of the building permit to comply with the requirements of chapter 11 of the International Fire Code in effect at the time of permit issuance that apply to the building in question. If, at the end of the initial three (3) year period, the fire code official determines that the property owner has made substantial progress in bringing the property into compliance, the fire code official may grant a single two (2) year extension to the owner to complete such work. If, however, the fire code official determines that substantial progress has not been made by the property owner by the end of the initial three (3) year period or, when applicable, the property owner fails to complete the work during the two (2) year extension period, then the property will be subject to compliance with the retroactive requirements of chapter 11 in effect at the end of the initial three (3) year period or, when applicable, the two (2) year extension period that apply to the building in question.
- (b) Upon determination by the fire code official that alterations are needed to an existing building to provide a minimum degree of fire and life safety to persons occupying said building and/or to provide for fire prevention and response within said building, the fire code official may require the property owner to comply with some or all of the requirements of chapter 11 of the International Fire Code in effect at the time of such determination, and may require the property owner to comply with the specified requirements within the time period set forth in written notice given by the fire code official to the property owner, not to exceed three (3) calendar years from the date of said notice or as dictated in the International Fire Code, whichever is longer.

**Sec. 46-70. Vacant Premises.**

- (a) Section 311.1 of the International Fire Code is amended to read as follows:

**311.1 General.**

Permanently or temporarily unoccupied buildings, structures, premises or portions thereof, including tenant spaces, shall be safeguarded and maintained in accordance with Sections 311.1.1 through 311.5.5.

- (b) Section 311.1.1 of the International Fire Code is amended to read as follows:

**311.1.1 Abandoned premises.** Buildings, structures and premises for which an owner cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties may be considered abandoned, declared unsafe and abated by demolition or rehabilitation in accordance with chapters 26, 42 and/or 60 of the city code, as applicable.

- (c) Section 311.2 of the International Fire Code is amended to read as follows:

**311.2 Safeguarding vacant premises.** Permanently and temporarily unoccupied buildings, structures, premises or portions thereof (collectively “premises”) shall be secured and protected by persons owning or in charge or control of such premises in accordance with Sections 311.2.1 through 311.2.3.

- (d) Section 311 of the International Fire Code is amended by adding a new section 311.7 as follows:

**Section 311.7 Compliance.** The fire code official may notify the person(s) owning, or in charge or control of, a vacant building, structure, premises or portion thereof (collectively “premises”) of failure to comply with any of the requirements of Sections 311.2 to 311.4, and may require compliance by such person(s) within the time set forth in the notice. If compliance does not occur within the time set forth in the notice, the fire chief or his or her designee may seek available remedies, including but not limited to abatement and assessment of costs pursuant to chapters 26, 42 and/or 60 of the city code, as applicable.

**Sec. 46-71. Bonfires.**

Delete Section 307.4.1 of the International Fire Code and insert in lieu thereof the following new section:

Section 307.4.1 Permit Required. A permit shall be obtained prior to conducting any type of bonfire.

Insert New Section 307.4.1.1 with the following language:

Section 307.4.1.1 Bonfires. A bonfire shall not be conducted within 50 feet (15,240 mm) of a structure or combustible material unless the fire is contained in a barbecue pit.

Conditions that could cause a fire to spread within 50 feet (15,240 mm) of a structure shall be eliminated prior to ignition.

**Sec. 46-72. Recreational Fires.**

Delete Section 307.4.2 of the International Fire Code and insert in lieu thereof the following new section:

Section 307.4.2 Permit Required. A permit shall be obtained prior to conducting any type of recreational fire.

Exception: Outdoor fireplaces or grills burning untreated wood or charcoal used solely for the non-commercial preparation of food. Such fires shall be extinguished upon completion of the food preparation. Such fires shall be conducted in an appliance that: provides for air entrainment underneath the fuel source, provides a cooking grate, and provides a non-combustible cover.

Insert New Section 307.4.2.1 with the following language:

Section 307.4.2.1 Recreational fires. Recreational fires shall not be conducted within 25 feet (7620 mm) of a structure or combustible material. Conditions that could cause a fire to spread within 25 feet (7620 mm) of a structure shall be eliminated prior to ignition.

**Sec. 46-73. Open-flame Decorative Devices/Fire Pits.**

Insert New Section 308.5 of the International Fire Code with the following language:

Section 308.5 Permit Required. A permit shall be obtained prior to installing or using an open flame decorative device/fire pit.

Exception: one- and two-family dwellings.

Insert New Section 308.5.1 with the following language:

Section 308.5.1 Open-flame Decorative Devices/Fire Pits. Open-flame decorative devices/fire pits shall comply with the restrictions identified in Section 308.3.1 of the fire code.

**Sec. 46-279. Location of containers.**

- (a) No liquefied petroleum gas installation shall be permitted in fire zone nos. 1 and 2 of the fire district as defined in section 46-2 of this chapter, unless specifically approved by the fire chief on a temporary basis only or the containers are not larger than 20 pounds, located outside a building, and are used for cooking purposes only.
- (b) The aggregate capacity of any one installation shall not exceed 1,000 gallons of water capacity, except that in particular installations this limit may be altered at the discretion of the chief of the fire prevention bureau after due consideration of all factors involved. Bulk

- plants, gas utility plants, container charging operations, and larger amounts of storage shall be governed by approved national standards and state regulations.
- (c) Containers and first stage regulating equipment shall be located outside of buildings, other than buildings especially provided for this purpose, except that small department of transportation containers and regulating equipment may be used indoors under the following conditions:
    - (1) If temporarily used for demonstration purposes and the container has a maximum water capacity of 20 pounds.
    - (2) If used with a completely self-contained gas hand torch or similar equipment and the container has a maximum water capacity of 2 1/2 pounds.
  - (d) Each individual container shall be located in accordance with Table 6104.3 of the fire code.
  - (e) Containers installed for use shall not be stacked one above the other. Containers of 1,000 gallons or less shall be set on concrete pads of sufficient size to prevent tipping. Concrete blocks or bricks shall not be used.
  - (f) The minimum separation between liquefied petroleum gas containers and flammable liquid tanks shall be 20 feet, and the minimum separation between a container and the centerline of the dike shall be ten feet.

#### **Sec. 46-441. Outdoor Venue Access.**

Insert new Section 503.1.4 with the following language:

**503.1.4 Outdoor Venue Access.** A 10 ft. wide emergency access road designed to support a 36,000 lb. weight load shall be provided within 350-feet of all portions of an outdoor venue designed and used for public gathering events (e.g. soccer complex, park, skate park, sports fields, amphitheaters) to facilitate emergency vehicle access.

**Exception:** The fire code official is authorized to increase the dimension of 350 feet where emergency access roads cannot be installed because of the location on property, topography, waterway, nonnegotiable grades, or other similar conditions, frequency of use and an approved alternative means of emergency access is provided.

#### **Sec. 46-457. Emergency Power.**

Insert New Section 1203.7 with the following language:

**Section 1203.7 Shutdown of Emergency and Standby Power Systems.** In addition to the requirements of NFPA 110 for a remote manual stop, a switch of an approved type shall be provided to shut down the generator. The switch shall be provided at an approved location.

Insert New Section 1203.8 with the following language:

**Section 1203.8 Emergency Generator Signs.** Main electrical disconnects and main breaker panels supplied by the generator shall be provided with approved signs.

Additionally, doors accessing emergency and standby power systems shall be provided with approved signs. When approved switches for emergency power shut-down are located remote from the fire alarm annunciator, an approved sign shall be provided at fire alarm annunciator. Approved signs shall contain the word CAUTION in black letters at least 2 inches (50 mm) high on a yellow background. Such warning signs shall be placed so as to be readily discernible.

**Sec. 46-458. Repealed by Ord. No. 15,860.**

**Sec. 46-469. Automatic Fire Sprinkler Requirements.**

Insert New Section 901.4.6.1 with the following language:

**901.4.6.1 Fire Sprinkler Riser Room.** A fire sprinkler riser room shall be separated from the electrical room. The riser room shall have no electrical panels, devices, or apparatus inside the room other than the outlets or support equipment (lighting, air compressor, and heater) required for the use of the fire sprinkler system and/or the fire alarm panel. The sprinkler riser room shall not be exclusively accessed from the electrical room, but the electrical room may be accessed from the fire riser room.

Delete Section 903.2.1.1 and insert in lieu thereof the following new section:

**903.2.1.1 Group A-1.** An automatic sprinkler system shall be provided throughout stories containing Group A-1 occupancies and throughout all stories from the Group A-1 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 6,000 square feet (557.5 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multiple-theater complex.

Delete Section 903.2.1.2 and insert in lieu thereof the following new section:

**903.2.1.2 Group A-2.** An automatic sprinkler system shall be provided throughout stories containing Group A-2 occupancies and throughout all stories from the Group A-2 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 1,500 square feet (139 m<sup>2</sup>).
2. The fire area has an occupant load of 50 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multiple-theater complex.

Delete Section 903.2.1.3 and insert in lieu thereof the following new section:

**903.2.1.3 Group A-3.** An automatic sprinkler system shall be provided throughout stories containing Group A-3 occupancies and throughout all stories from the Group A-3 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 6,000 square feet (557.5 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Delete Section 903.2.1.4 and insert in lieu thereof the following new section:

**903.2.1.4 Group A-4.** An automatic sprinkler system shall be provided throughout stories containing Group A-4 occupancies and throughout all stories from the Group A-4 occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 6,000 square feet (557.5 m<sup>2</sup>).
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Delete Section 903.2.2 and insert in lieu thereof the following new section:

**903.2.2 Group B.** An *automatic sprinkler system* shall be provided throughout buildings containing a Group B occupancy where one of the following conditions exists:

1. A Group B *fire area* exceeds 6,000 square feet (557.5 m<sup>2</sup>).
2. A Group B *fire area* is located more than three stories above grade plane.
3. The combined area of all Group B *fire areas* on all floors, including any mezzanines, exceeds 12,000 square feet (1115 m<sup>2</sup>).

Insert New Section 903.2.2.1 with the following language:

**903.2.2.1 Ambulatory care facilities.** An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self-preservation.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility.

In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor as well as all floors below where such care is provided, and all floors between the level of

ambulatory care and the nearest *level of exit discharge*, the *level of exit discharge*, and all floors below the *level of exit discharge*.

**Exception:** Floors classified as an open parking garage are not required to be sprinklered.

Delete Section 903.2.3 and insert in lieu thereof the following new section:

**903.2.3 Group E.** An automatic sprinkler system shall be provided throughout stories containing Group E occupancies and throughout all stories from the Group E occupancy to and including the levels of exit discharge serving that occupancy where one of the following conditions exists:

1. The fire area exceeds 1,500 square feet (139 m<sup>2</sup>).
2. The fire area has an occupant load of 50 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.

Delete Section 903.2.4 and insert in lieu thereof the following new section:

**903.2.4 Group F-1.** An *automatic sprinkler system* shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 *fire area* exceeds 6,000 square feet (557.5 m<sup>2</sup>).
2. A Group F-1 *fire area* is located more than three stories above grade plane.
3. The combined area of all Group F-1 *fire areas* on all floors, including any mezzanines, exceeds 12,000 square feet (1115 m<sup>2</sup>).
4. A Group F-1 occupancy used for the manufacture of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).

Delete Section 903.2.7 and insert in lieu thereof the following new section:

**903.2.7 Group M.** An *automatic sprinkler system* shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exists:

1. A Group M *fire area* exceeds 6,000 square feet (557.5 m<sup>2</sup>).
2. A Group M *fire area* is located more than three stories above grade plane.
3. The combined area of all Group M *fire areas* on all floors, including any mezzanines, exceeds 12,000 square feet (1115 m<sup>2</sup>).
4. A Group M occupancy used for the display and sale of upholstered furniture or mattresses exceeds 5,000 square feet (464 m<sup>2</sup>).

Delete Section 903.2.9 and insert in lieu thereof the following new section:

**903.2.9 Group S-1.** An *automatic sprinkler system* shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 *fire area* exceeds 6,000 square feet (557.5 m<sup>2</sup>).
2. A Group S-1 *fire area* is located more than three stories above grade plane.
3. The combined area of all Group S-1 *fire areas* on all floors, including any mezzanines, exceeds 12,000 square feet (1115 m<sup>2</sup>).
4. A Group S-1 *fire area* used for the storage of commercial motor vehicles where the *fire area* exceeds 5,000 square feet (464 m<sup>2</sup>).
5. A Group S-1 occupancy used for the storage of upholstered furniture or mattresses exceeds 2,500 square feet (232 m<sup>2</sup>).

Insert New Item #6 in Section 903.2.9 with the following language:

6. A Group S-1 occupancy used for Self-Service Storage Facility (mini-storage) exceeds 6,000 square feet (557.5 m<sup>2</sup>).

Delete Section 903.2.9.1 and insert in lieu thereof the following new section:

**903.2.9.1 Repair garages.** An *automatic sprinkler system* shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the *International Building Code*, as shown:

1. Buildings having two or more stories above grade plane, including *basements*, with a *fire area* containing a repair garage exceeding 10,000 square feet (929 m<sup>2</sup>).
2. Buildings not more than one story above grade plane, with a *fire area* containing a repair garage exceeding 3,500 square feet (325 m<sup>2</sup>).
3. Buildings with repair garages servicing vehicles parked in *basements*.
4. A Group S-1 *fire area* used for the repair of commercial motor vehicles where the *fire area* exceeds 3,500 square feet (325 m<sup>2</sup>).

Delete Section 903.2.11.1.3 and insert in lieu thereof the following new section:

**903.2.11.1.3 Basements.** Where any portion of a *basement* is located more than 75 feet (22 860 mm) from openings required by Section 903.2.11.1, the *basement* shall be equipped throughout with an *approved automatic sprinkler system*.

Delete Section 903.3.1.2 and insert in lieu thereof the following new section:

**903.3.1.2 NFPA 13R sprinkler systems.** *Automatic sprinkler systems* in Group R and I occupancies up to and including four stories in height in buildings not exceeding 60 feet (18,288 mm) in height above grade plane shall be installed throughout in accordance with NFPA 13, unless allowed to be sprinklered in accordance with NFPA 13D by the *International Building Code*. The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4 of the *International Building Code* shall be measured from the horizontal assembly creating separate buildings.

Delete Section 903.4.2 and insert in lieu thereof the following new section:



**903.4.2 Alarms.** *An approved weather proof audible device suitable for outdoor use with 110 candela visual signal shall be connected to every automatic sprinkler system. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.*

**Sec. 46-484. Repealed by Ord. No. 15,860.**

**Sec. 46-485. Walking Surface.**

Insert Section 1009.2 Item #11 with the following new language:

11. Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.

Insert Section 1010.1.6.1 with the following new language:

**1010.1.6.1 Frost Protection.** For landings required by Section 1010.1.5 to be at the same elevation on each side of the door exterior landings at doors shall be provided with frost protection.

Insert New Section 1028.5.1 with the following language:

**1028.5.1 Hard Surfaces.** Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.

**Sec. 46-486. Repealed by Ord. No. 15,860.**

**Sec. 46-487. Exit Signs.**

Insert New Section 1013.1.1 with the following language:

**1013.1.1 Additional Exit Signs.** Exit signs may be required at the discretion of the Code Official to clarify an exit or exit access.

**Sec. 46-488. Handrails.**

Insert New Section 1014.4 item #6 with the following language:

6. Handrails within a dwelling unit or serving an individual dwelling unit of groups R-2 and R-3 shall be permitted to be interrupted at one location in a straight stair when the rail terminates into a wall or ledge and is offset and immediately continues.

## **Sec. 46-489. Guards.**

Insert New Section 1015.9 with the following language:

**1015.9 Walking surfaces.** A guard shall be provided along retaining walls where a finished walking surface such as a sidewalk, patio, driveway, parking lot or similar improved area is located on the top side of a retaining wall. The guard shall be installed along any portion of the wall measuring 30 inches or greater in height measured at any point within 36 inches horizontally to the edge of the open side. A guard shall not be required along portions of the retaining wall where the horizontal distance between the edge of the finished walking surface and the face of the wall is greater than 72 inches.

## **Sec. 46-490. Emergency Escape.**

Insert New Section 1030.4.3 with the following language:

**1030.4.3 Window wells drainage.** All window wells shall be provided with approved drainage.

## **Sec. 46-498. Fuel Fired Appliances.**

Insert New Section 1107.1 with the following language:

**1107.1 Protection of Fuel Fired Appliances.** Where required or upon notification from the fire code official an existing building or tenant space containing a fuel fired appliance(s) shall be protected with 1 hour rated construction enclosure or a limited area sprinkler system complying with Section 903.3.8.

**Exception:** Buildings protected by an approved automatic fire sprinkler system complying with Section 903.3.1.1 or 903.3.1.2.

Insert New Section 1107.2 with the following language:

**1107.2 CSST Bonding Requirements in Rental Dwellings.** All rental dwellings shall be bonded in accordance with sections 310.2.1 through 310.2.5 of the International Fuel Gas Code, unless deemed technically infeasible by the Code Official.

Insert New Section 1107.3 with the following language:

**1107.3 CSST Bonding Requirements for Alterations, Repairs, or Additions.** For other than rental dwelling units, where alterations, repairs or additions requiring a permit to occur, CSST shall be bonded in accordance with sections 310.2.1 through 310.2.5 of the International Fuel Gas Code, unless deemed technically infeasible by the Code Official.

## Sec. 46-510. High-piled Storage.

- (a) Insert New Section 3202.1 with the following language:

### **3202.1 Definitions.**

**SPECULATIVE BUILDING.** A Group S, F or M occupancy having an interior clear height greater than 12 feet (3657 mm) where high-piled storage may accrue and the client leasing or the occupant owner does not know the commodity that will be stored or the method of storage.

- (b) Insert new Section 3206.2.2 and insert in lieu thereof the following new section:  
**3206.2.1 Speculative building.** Group S, F and M speculative buildings that have an interior clear height greater than 12 feet where high piled storage may accrue shall comply with this chapter.

- (c) Insert new Section 3206.4.2 and insert in lieu thereof the following new section:

(1) **3206.4.2 Sprinkler design.**

- a. **3206.4.2.1 General.** The design of *automatic sprinkler systems* for the protection of Group M and S occupancies containing high-piled storage or high-challenge commodities over an area equal to or greater than 2,500 ft.<sup>2</sup> (232 m<sup>2</sup>) and designed for the protection of hazardous materials stored more than one pallet high in Group M, S or H occupancies, shall be in accordance with this section. This section does not apply to miscellaneous storage within the scope of NFPA 13.
- b. **3206.4.2.2 Requirements for all plan submittals.** See Section 903.1.9 and 3201.3 for plan submittal requirements.
- c. **3206.4.2.3 Minimum design requirements for speculative warehouses.** The design of the *automatic sprinkler system* for speculative warehouses shall be based on storage of a cartoned Class A non-expanded plastic to the available storage height. The storage height shall be determined by subtracting 48 inches (from the highest point of the roof above each system for ESFR and 30 inches for area density applications.
- d. **3206.4.2.4 Minimum requirements for client leased or occupant-owned warehouses.**
  1. The design of an automatic sprinkler system for client leased or occupant owned buildings containing high piled storage shall be based on the requirements of NFPA 13. The responsible Fire Protection Contractor shall perform a survey of the building to determine commodity classification, storage configuration, building height and other information related to the development of an appropriate sprinkler system design. The Contractor shall also make reasonable efforts to meet with the building owner or operator to understand seasonal or customer related fluctuations to the stored commodities, storage height, and configuration.
  2. The sprinkler design shall be based on the most demanding requirements determined through the on-site survey and discussions

with the building owner or operator. Technical Report shall clearly define the basis for determining the commodity and sprinkler design selection, along with how the commodities will be isolated or separated, and the referenced design document(s), including NFPA 13 or the current applicable Factory Mutual Data Sheets. If a specific fire test is used as the basis of design, a copy of the fire test report shall be provided at the time of plan review.

e. **3206.4.2.5 Required information at plan submittal.** All plans, hydraulic calculations and technical reports shall be submitted with the plan submittal form. The individual submitting the design package shall ensure that all of the required information requested on the plan submittal form is included.

f. **3206.4.2.6 Minimum plan information requirements.** In addition to the requirements of NFPA 13, the following information shall be included in the plans or technical report.

1. **3206.4.2.6.1 Class I-IV and Group A plastic commodities.**

- i. An owner's certificate in accordance with NFPA 13. The design criteria, e.g., NFPA 13, Factory Mutual Data Sheet, or a specific fire test report.
- ii. A Water Supply Flow & Pressure Test Report performed within 90 days of the plan submittal.
- iii. The type of design, e.g., Control Mode Density/Design Area Method; Specific Application Control Mode Method; Suppression Mode Method, including appropriate code references.
- iv. A description of the stored commodities and how the commodity classification was determined.
- v. A layout of the proposed storage arrangement. If the storage is in racks, a plan and elevation detail illustrating rack heights, flue dimensions and arrangement. This detail is not required for speculation warehouses.
- vi. The aisle dimensions between each storage array.
- vii. If a high challenge commodity is separated using fire-resistive construction, the boundary of the fire-resistive construction shall be illustrated.
- viii. A data sheet for the backflow preventer. If a data sheet is not available, the design professional shall include a statement addressing the minimum required pressure loss.
- ix. A data sheet for each installed automatic sprinkler.
- x. A data sheet for each pipe hanger used to hang or support the sprinkler piping.
- xi. If a fire pump will be installed or used, the manufacturer's factory test curve shall be included in the submittal.
- xii. A cross-section view illustrating obstructions to the ceiling sprinklers, e.g., lights, structural members, cable trays, electrical bus ducts and HVAC ductwork.

2. **3206.4.2.6.2 Hazardous materials.** In addition to the requirements of this section, the following information shall be included in a *hazardous materials* technical report:
  - i. A hazardous materials inventory statement
  - ii. For flammable & combustible liquids, an analysis of the miscibility of Class I liquids, the size and type of the packaging, the packaging materials of construction, and if the containers have a pressure relieving mechanism.
  - iii. For Level 2 or 3 aerosols, a statement indicating that the aerosols are cartoned or uncartoned.
- g. **3206.4.2.7 Identification of sprinkler system capabilities and limitations.** A label shall be permanently installed at or adjacent to each sprinkler riser. When a building contains more than four risers, the sign shall be located at an approved location inside the building. The minimum sign dimension is 6-inches (152 mm) high by 4-inches (101 mm) wide. The sign shall specify the capabilities and limitations of the *automatic sprinkler system*. The sign shall include the following information:
  1. The design base or basis, including the edition used.
  2. A statement indicating if the sprinkler design is control mode density area method, control mode specific application, suppression mode, or any combination thereof.
  3. When used, all of the storage conditions stipulated NFPA 13 for Special Designs.
  4. The maximum storage height.
  5. The minimum required aisle width.
  6. If storage is in racks, the maximum rack width and minimum transverse and longitudinal flue widths.
  7. Storage Capabilities: Commodities designed to be protected by the automatic sprinkler system.
  8. Limits on storage heights of idle wood and plastic storage.
  9. Limits on storage heights of miscellaneous Group A plastic, tire and rolled paper storage.
  10. Locations where in-rack sprinklers are required.
  11. Locations where horizontal and/or vertical barriers are required.
  12. Information explaining the manufacturer, sprinkler identification number, k-factor, and operating temperature of the overhead sprinklers protecting the high-piled storage.
  13. Fire Protection Contractor contact information.
- (d) The following example illustrates a suggested label or sign:

## Automatic Sprinkler System Capabilities & Limitations

<b><u>Stored Commodity</u></b>	Class I water miscible flammable liquids in 1 & 5 gallon polyethylene containers in fiberboard cartons
<b>Design Documents</b>	NFPA 13, 2013 edition & NFPA 30
<b>Design Type</b>	Control Mode, Density/Area Method
<b>Max. Storage Height</b>	25 feet
<b>Min. Aisle Width</b>	8 feet
<b>Max. Rack Width</b>	9 feet
<b>Flue Dimensions</b>	Longitudinal: Min. 6 inches Transverse: Min. 3 inches
<b>System Capabilities</b>	Class I-IV commodities, stored commodity, solid pile or palletized Group A plastics to 12 feet; rack storage of Group A plastics to 25 feet.
<b>Idle Pallets</b>	6 feet maximum storage height
<b>Tire Storage</b>	5 feet maximum storage height
<b>Rolled Paper Storage</b>	5 feet maximum storage height
<b>In-rack sprinklers</b>	In-rack sprinklers are required at each of 3 rack tiers containing the stored commodity. In-rack sprinklers are Tyco/Central FS-B, 17/32" orifice, QR 155°F element, SIN TY0041
<b>Horizontal Barriers</b>	Required at each rack tier containing the stored commodity.
<b>Ceiling Sprinkler</b>	Tyco ELO-231B, 3/4" orifice, SR 286°F element, upright, SIN TY0030
<b>FP Contractor</b>	ABC Sprinkler Co. Designer: John Smith

### Sec. 46-522. Stairways.

Delete Section 3311.1 and insert in lieu thereof the following new section:

**3311.1 Stairways required.** Where building construction exceeds 30-feet (9.144 m) in height above the lowest level of fire department vehicle access, two temporary or permanent stairways shall be provided. As construction progresses, such stairways shall be extended to within one floor of the highest point of construction having secured decking or flooring.

### Sec. 46-523. Standpipes.

Delete Section 3313.1 and insert in lieu thereof the following new section:

**3313.1 Where required.** In buildings required to have standpipes by Section 905.3.1, not less than one standpipe shall be provided for use during construction. Such standpipe shall be installed prior to construction exceeding 30-feet (9.144 m) in height above the lowest level of fire department vehicle access. Such standpipe shall be provided with fire

department hose connections at approved locations complying with Section 3311.1. As construction progresses, such standpipes shall be extended to within one floor of the highest of construction having secured decking or flooring.

**Sec. 46-556. Concession stands, food booths, and retail booths.**

- (a) **General.** Concession stands, food booths and retail booths shall be in accordance with Section 3805.4.
  - (1) **Distances.** A minimum of 20 feet (6096mm) shall be provided between every 150 linear feet (45,720mm) of booth space. A minimum of 30 feet (9144mm) shall be provided between booths used for cooking and the vehicles, generators, or any other internal combustion engines. A minimum of 30 feet (9144 mm) shall be provided between booths used for cooking and amusement rides or devices.
- (b) **Cooking appliances or devices.**
  - (1) **Public isolation.** Cooking appliances or devices shall be isolated from the public by not less than 4 feet (1219 mm) or by a non-combustible 3-sided barrier between the equipment and devices and the public.
  - (2) **Protection.** Single-well cooking equipment using combustible oils or solids shall meet the following:
    - a. A noncombustible lid shall be immediately available. The lid shall be of sufficient size to cover the cooking well completely.
    - b. The cooking surface shall not exceed 288 square inches (18,580mm).
    - c. The equipment shall be placed on a noncombustible surface; and
    - d. The equipment shall be separated from each other by a horizontal distance of not less than 2 feet (609mm).
  - (3) **Liquefied petroleum gas (LP-gas).** LP-gas shall be in accordance with Chapter 61 and NFPA 58.
    - a. **Maximum number and quantity.** A maximum of a total aggregate water capacity of 50 gallons (95L) of LP-gas is permitted at one concession stand or booth used for cooking.
    - b. **LP-gas high-pressure cylinder hoses.** Hoses shall be designed for a working pressure of 350 PSIG (2413 kPa) with a safety factor of 5 to 1 and shall be continuously marked with LP-GAS, PROPANE, 350 PSI(2413 kPa) WORKING PRESSURE, and the manufacturer's name or trademark. Hose assemblies, after the application of couplings, shall have a design capability of 700 PSIG (4826 kPa). Hose shall not exceed 12 feet (3638 mm) unless approved by the fire code official.
    - c. **LP-gas low-pressure cylinder hoses.** Hoses with a working pressure of 5 psig shall be allowed when a fix regulator is set a 5 psi and is connected directly to the LP GAS cylinder. The hose shall not exceed 12 feet (3658 mm) unless approved by the fire code official.
  - (4) **Storage of containers.** Containers shall be stored in accordance with Chapter 61.
- (c) **Generators / electrical.** The generators shall be installed at least 10 feet (3048mm) from combustible materials, and shall be isolated from the public by physical guard, fence, or enclosure installed at least 3 feet (914mm) away from the internal combustion power

source, and be provided with a compliant portable fire extinguisher per Section 906 and NFPA 10.

- (d) **Temporary water stations.** When outdoor temperatures are expected to exceed 90°F (35°C), the event sponsor shall provide and maintain a minimum of one water station for each 5,000-projected attendance. The water station shall include adequate water supply, cups, and a means for rapid replenishing of exhausted water. Each water station shall be located as far apart as practicable to allow ease of access for event attendees.

**Sec. 46-581. Access Points.**

Insert New Section D104.5 with the following language:

**D104.5 Fire Department Access Points**

A minimum of two means of *Approved* fire apparatus access points shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. Access points shall have a minimum clear width of 20 feet and shall support an imposed load of 75,000 lbs.

**Exceptions:**

- (1) When alternative fire and life safety measures have been implemented, the number of required access points may be reduced to one.

**Sec. 46-582. Remoteness.**

Insert New Section D104.5.1 with the following language:

**D104.5.1 Remoteness.**

Where two fire apparatus access points are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

**Exceptions:**

- (1) When alternative fire and life safety measures have been implemented, the distance between required access points may be reduced to a distance not less than one quarter of the length of the maximum overall diagonal dimension.

**Sec. 46-584. Commercial and Industrial Access Roads.**

Insert New Section D104.4 with the following language:

**D104.4 Public Streets.** Where two fire apparatus access roads are required, they both shall be public streets. Where public streets are not available, both access roads or private streets shall be designed, constructed and maintained as public streets.



**Sec. 46-585. Multi-family Residential Developments - Access Roads.**

Insert New Section D106.4 with the following language:

**D106.4 Public Streets.** Where two fire apparatus access roads are required, they both shall be public streets. Where public streets are not available, access roads or private streets shall be designed, constructed and maintained as public streets.

**Sec. 46-586. One- or Two-family Residential Developments - Access Roads.**

Insert New Section D107.3 with the following language:

**D107.3 Public Streets.** Where two fire apparatus access roads are required, they both shall be public streets.

Section 2. This ordinance shall be in full force and effect from and after its passage and publication as provided by law.

FORM APPROVED:

Ann DiDonato, Assistant City Attorney

T. M. Franklin Cownie, Mayor

Attest: I, P. Kay Cmelik, City Clerk of the City of Des Moines, Iowa, hereby certify that the above and foregoing is a true copy of an ordinance (Roll Call No. 20-0262), passed by the City Council of said City at a meeting held February 10, 2020 signed by the Mayor on February 10, 2020 and published and provided by law in the Business Record on February 28, 2020. Authorized by Publication Order No. 11053.

P. Kay Cmelik, City Clerk