

ORDINANCE NO. 16,318

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 Chapter 46, Sections 46-1, 46-2, 46-5, 46-7, 46-61, 46-62, 46-63, 46-65, 46-67, 46-69, 46-70, 46-73, 46-215, 46-246, 46-278, 46-279, 46-444, 46-445, 46-456, 46-469, 46-485, 46-498, 46-510, 46-521, 46-522, 46-523, 46-530, 46-532, 46-534, 46-535, 46-538, 46-544, 46-547, 46-553, 46-555, 46-556, 46-557, 46-560, 46-561, 46-566, 46-580, adding Sections 46-68.1, 46-318, 46-475, 46-476, and repealing 46-487, 46-489, 46-490, 46-558, 46-559, 46-581, 46-582, 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 Chapter 46, Sections 46-1, 46-2, 46-5, 46-7, 46-61, 46-62, 46-63, 46-65, 46-67, 46-69, 46-70, 46-73, 46-215, 46-246, 46-278, 46-279, 46-444, 46-445, 46-456, 46-469, 46-485, 46-498, 46-510, 46-521, 46-522, 46-523, 46-530, 46-532, 46-534, 46-535, 46-538, 46-544, 46-547, 46-553, 46-555, 46-556, 46-557, 46-560, 46-561, 46-566, 46-580, adding Sections 46-68.1, 46-318, 46-475, 46-476, and repealing 46-487, 46-489, 46-490, 46-558, 46-559, 46-581, 46-582, 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 105.6.8 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 105.5.9 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 105.5.18 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 105.5.18

Corrosive liquids – 55 gallons
Corrosive solids – 1000 pounds

Flammable liquids - see 105.5.18
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 105.6.24 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 105.6.13 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 105.6.8(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.
- (h) A permit shall be required for open-flame decorative devices/fire pits pursuant to section 46-73. 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.
- (i) 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. 46-2. Fire zones and boundaries.

For the purpose of this chapter, the entire city is declared to be and is established a fire district, and such fire district shall be known and designated as fire zones no. 1, no. 2 and no. 3 and shall include such territory or portions of the city as follows:

- (1) *Fire zone no. 1.* Fire zone no. 1 shall be all that district east and west of the Des Moines River, within the following boundaries.
 - a. *East of Des Moines River.* Beginning on the east bank of the Des Moines River at the projected centerline of East Vine Street, thence along the centerline of East Vine Street to the centerline of East Seventh Street, thence north along the centerline of East Seventh Street to the centerline of East Locust Street, thence east to the centerline of East Sixth Street, thence north along the centerline of East Sixth Street to the centerline of Des Moines Street, thence west along the centerline of Des Moines Street and the westerly projection thereof to the east bank of the Des Moines River, thence south along the east bank of the Des Moines River to the point of beginning.
 - b. *West of Des Moines River.* Beginning on the west bank of the Des Moines River at the centerline of Center Street, thence west along the centerline of Center Street to the centerline of Sixth Avenue, thence south along the centerline of Sixth Avenue to the centerline of Park Street, thence west along the centerline of Park Street and along the centerline of Keosauqua Way to the centerline of Ninth Street, thence south along the centerline of Ninth Street to the centerline of Pleasant Street, thence west along the centerline of Pleasant Street to the centerline of Tenth Street, thence south along the centerline of Tenth Street to the centerline of High Street, thence west along the centerline of High Street to the centerline of the north-south alley between Eleventh and Twelfth Streets, thence south

along the centerline of such alley to the centerline of the east-west alley between Mulberry and Cherry Streets, thence east along the centerline of such alley to the centerline of Tenth Street, thence south along the centerline of Tenth Street to the centerline of Vine Street, thence east along the centerline of Vine Street and the easterly projection thereof to the west bank of the Des Moines River, thence north along the west bank of the Des Moines River to the point of beginning.

(2) *Fire zone no. 2.* Fire zone no. 2 shall be all that district lying outside of fire zone no. 1 but within the boundaries defined as follows:

a. *West Des Moines River.* Beginning on the west bank of the Des Moines River at the centerline of MacVicar Freeway, thence west to the centerline of Fifteenth Street, thence south along the centerline of Fifteenth Street and along the centerline of Sixteenth Street to the intersection of the centerline of Sixteenth Street and main line track of the Chicago, Rock Island & Pacific Railroad Company, thence southeasterly along the tracks to the centerline of Vine Street, thence east along the centerline of Vine Street extended to the west bank of the Des Moines River, thence north along the west bank of the Des Moines river to the point of beginning.

b. *East of Des Moines River.* Beginning on the east bank of the Des Moines River at the centerline of Des Moines Street, east to the centerline of East Sixth Street, thence north to the centerline of MacVicar Freeway, thence west to the east bank of the Des Moines River, thence south along the east bank of the Des Moines River to the point of beginning.

(3) *Fire zone no. 3.* Fire zone No. 3 shall be all that district lying outside of fire zone no. 1 and no. 2 but within the boundaries defined as follows:

a. Commencing at the centerline of Ingersoll Avenue intersecting with the centerline of Fifteenth Street, thence west along the centerline of Ingersoll Avenue to the centerline of Martin Luther King Jr. Parkway, thence south along Martin Luther King Jr. Parkway to the north bank of the Raccoon River, thence east along the Raccoon River to confluence of the Des Moines and Raccoon Rivers, thence north along the west bank of the Des Moines River to the centerline of W. Martin Luther King Jr Parkway, thence east along the centerline of W. Martin Luther King Jr. Parkway and along the centerline of E. Martin Luther King Jr. Parkway to the centerline of Southeast 6th Street, thence north along the centerline of Southeast 6th Street to Des Moines Street to the point of beginning.

(4) *Fire zone no. 4.* Fire zone No. 4 shall include all that part of the city not included in fire zones no. 1 and 2 and 3.

.....

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 certified 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. 46-7. Fire protection system inspection permits.

All fire protection system(s), as defined in the International Fire Code and required by the fire chief, shall be inspected and shall have an approved tag affixed to them showing the date of inspection and the identity of the person inspecting them. No fire protection system shall be inspected by any person unless he or she has first obtained a permit from the fire prevention bureau.

Such permit shall be issued to any person successfully passing a standard qualifying examination for the fire protection system and any other requirements adopted by the bureau.

.....

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

- (a) This chapter shall consist of the International Fire Code, 2021 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 101.1, 107, 510.3, 608.13.4 Item #5, 806.1.1 Exception #2, 5701.4, 5806.2.
- (2) Appendix A.
- (3) Delete Section 5706.2.4.4 (see Section 46-246 of this code).

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 112.4, except section 112.4.1 thereof which is not amended or deleted and remain incorporated in this chapter (see sections 46-3, 46-4, and 46-5 of this chapter.)
 - (4) Section 3501.2 (see section 46-121 of this chapter).
 - (5) Section 5608.2 (see article VI of this chapter).
 - (6) Sections 5001.5, 5001.6.2, 5001.6.3, 5001.6, (see article IV of this chapter).

- (7) 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).
 - (8) Section 308.1.4 (see section 46-66).
 - (9) Section 311.1, 311.1.1, and 311.2 (see section 46-70 of this chapter).
 - (10) Section 1101.4 (see section 46-68 of this chapter).
 - (11) Section 5601.4 Exception (see section 46-218 of this chapter).
 - (12) Section 503.2.1 (see section 46-442 of this chapter).
 - (13) Section 505.1 (see section 46-443 of this chapter).
 - (14) Section 507.5.1.1. (see section 46-445 of this chapter).
 - (15) Section 507.5.5 (see section 46-445 of this chapter).
 - (16) Section 508.1 (see section 46-456 of this chapter).
 - (17) Section 1203.7 (see section 46-457 of this chapter).
 - (18) Section 1203.8 (see section 46-457 of this chapter).
 - (19) Section 903.2.1.1 (see section 46-469 of this chapter).
 - (20) Section 903.2.1.2 (see section 46-469 of this chapter).
 - (21) Section 903.2.1.3 (see section 46-469 of this chapter).
 - (22) Section 903.2.1.4 (see section 46-469 of this chapter).
 - (23) Section 903.2.2 (see section 46-469 of this chapter).
 - (24) Section 903.2.2.1 (see section 46-469 of this chapter).
 - (25) Section 903.2.3 (see section 46-469 of this chapter).
 - (26) Section 903.2.4 (see section 46-469 of this chapter).
 - (27) Section 903.2.7 (see section 46-469 of this chapter).
 - (28) Section 903.2.9 (see section 46-469 of this chapter).
 - (29) Section 903.2.9.1 (see section 46-469 of this chapter).
 - (30) Section 903.3.1.2 (see section 46-469 of this chapter).
 - (31) Section 903.2.11.1.3 (see section 46-469 of this chapter).
 - (32) Section 903.4.2 (see section 46-469 of this chapter).
 - (33) Section 901.4.7.11 (see section 46-469 of this chapter).
 - (34) Section 907.6.6 (see section 46-471 of this chapter).
 - (35) Section 910.2.1 (see section 46-472 of this chapter).
 - (36) Section 914.3.1.2 (see section 46-473 of this chapter).
 - (37) Section 1008.3.3 (see section 46-484 of this chapter).
 - (38) Section 1028.5.1 (see section 46-485 of this chapter).
 - (39) Section 3301.2 (see section 46-520 of this chapter).
 - (40) Section 3311.1 (see section 46-522 of this chapter).
 - (41) Section 3313.1 (see section 46-523 of this chapter).
 - (42) 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, with an added exception to section M102.1 (see section 46-474 of this chapter).
 - (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 1031.5.3 (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.

Group R3 and R-4 (formerly referred to as 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-1 and R-2 (formerly referred to as R division 1) occupancies, except hotels and dormitories. The Neighborhood Inspection Division 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.

.....

Sec. 46-68.1. Group I-2, Condition 2.

The following text shall be added to the end of Section 1103.5.3:

The automatic sprinkler system shall be installed as established by Section 46-68 of the city code.

Sec. 46-69. Securing fire-damaged premises after fire event.

Section 114 of the international fire code is amended by adding a new section 114.8 to read as follows:

Section 114.8 Securing fire-damaged premises after fire event.

- (1) The following definitions apply to this section:
 - “*Fire event*” means a response by the Des Moines Fire Department to extinguish a fire within a building, dwelling or other structure that commences with the dispatching of fire department resources and concludes with the fire officer in charge terminating the incident.
 - “*Fire-damaged structure*” means a building, dwelling or other structure within the corporate limits of the city that has been partially burned during a fire event.
 - “*Nuisance*” means injurious or dangerous to public safety and constituting an emergency requiring immediate abatement pursuant to article VI, chapter 42 of the city code and/or other applicable city code section(s).
 - “*Property owner*” means the record titleholder(s) and/or contract purchaser(s) of the real property upon which a fire-damaged structure is located.
- (2) A fire-damaged structure in an unsecured condition may be determined by a designated fire department official, in his or her sole discretion, to constitute a nuisance.
- (3) The designated fire department official may but is not required to give notice to the property owner(s) of such a determination of nuisance requiring immediate abatement, and a hearing regarding the existence of the nuisance pursuant to section 42-358.02(c) of this code may be held if practical under the circumstances, but shall not be required to be held if impractical under the circumstances, prior to abatement of the nuisance by the property owner or the city.
- (4) A fire-damaged structure determined to constitute a nuisance shall be secured by the property owner(s), at the property owner’s sole expense, in accordance with this section and within the time allowed by the designated fire department official, in

- his or her sole discretion, unless the designated fire official determines that securing of the fire-damaged structure during the fire event is required.
- (5) Prior to securing a fire-damaged structure determined to constitute a nuisance, the property owner(s) shall remove or cause to be removed all living beings from such structure.
 - (6) The property owner(s) shall secure all windows, doors, and other structural openings of the fire-damaged structure determined to constitute a nuisance to prevent access by unauthorized persons.
 - (7) A fire-damaged structure determined to constitute a nuisance which cannot be properly secured from access to the interior by the use of window locks, door locks, padlocks, or other appropriate locking mechanisms, shall be secured by the property owner(s) as follows:
 - a. Completely enclosing over all structural openings (windows, doors, roof openings) on the exterior of such fire-damaged structure with plywood; or
 - b. Completely enclosing such fire-damaged structure with a temporary snow fence of not less than forty-eight (48”) inches in height; or
 - c. By any different and/or additional measures set forth in any written notice given by the designated fire department official to the property owner(s).
 - (8) If the property owner(s) fails to secure a fire-damaged structure determined to constitute a nuisance in accordance with the requirements of this section, or if the designated fire official determines that securing of the fire-damaged structure during the fire event is required, the fire chief or his or her designee, which designee may include the community development department director or his or her designee, may cause such fire-damaged structure to be secured and assess the costs thereof against the real property upon which such fire-damaged structure is located for collection in the same manner as a property tax, following hearing in accordance with article VI, chapter 42 of the city code and/or other applicable city code sections.
 - (9) Property owner(s) shall be joint and severally liable for performing the actions required by this section and for any property assessments arising from failure to perform such actions.

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 311.6.

- (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. 46-73. 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.

Insert New Section 308.5.2 with the following language:

Section 308.5.2. Gas Fired Open-flame Decorative Devices/Fire Pits. An approved emergency shut-off valve designed to close in the event of a fire or other emergency shall be provided. The valve shall be capable of being activated by a switch within 75-feet of

the fueled device. The switch shall be labeled “EMERGENCY FUEL SHUT-OFF” and shall be provided with ready access.

.....

Sec. 46-215. Permits required.

- (a) For the purpose of this article, a permit shall be obtained to:
 - (1) Use or explode Display Fireworks, except for Display Fireworks at the Iowa State Fairgrounds by the Iowa State Fair Board.
 - (2) Compound, store or use pyrotechnic special effects material.
 - (3) Conduct a display involving fire, open flames or flammable material other than Fireworks or pyrotechnic special effects material.
- (b) Application for a permit required by this article shall be made through the city’s permitting process to the fire prevention bureau at least 14 days in advance of the display, use storage, or compounding.

.....

Sec. 46-246. Special liquid tank requirements.

The storage of class I or II flammable or combustible liquids in aboveground tanks is prohibited in fire zones 1 and 2 and 3, as defined in section 46-2 of this chapter; an exception may be made at a construction site if requested in writing and approved by the fire chief.

.....

Sec. 46-278. Permit and reports of installations.

- (a) A permit shall be obtained for each installation of liquefied petroleum gas employing one or more container(s) in the individual or aggregate amount of equal to or more than 150 gallons or 636 pounds aggregate. Prior to making such an installation, an installer shall submit plans to the fire prevention bureau, and if compliance with the requirements of the fire prevention code is shown by such plans, a permit shall be issued.
- (b) An annual permit shall be obtained for the operation and maintenance of a liquefied petroleum gas installation for each year after the system has been installed and approved, as required in subsection (a) of this section.
- (c) Installers shall maintain a record of all installations for which a permit is not required by subsection (a) of this section, but not including installation of gas-burning appliances and replacing of portable cylinders, and shall have it available for inspection by the fire prevention bureau.

Sec. 46-279. Location of containers.

- (a) No liquefied petroleum gas installation shall be permitted in fire zone nos. 1 and 2 and 3 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. 46-318. Approval required.

Insert New Exception #3 in Section 3103.2 with the following language:

3103.2 Approval Required.

Exceptions:

....

- 3. Individual 10' X 10' tents arranged in a linear row no wider than 10'.

Secs. 46-319-46-429. Reserved.

.....

Sec. 46-444. Fire and Emergency Vehicle Access.

Insert New Section 511 with the following language:

Section 511 Fire and Emergency Vehicle Lanes.

Section 511.1. General. Fire and emergency vehicle lanes shall be provided and maintained in accordance with section 511.1 through 511.6, and referred to as fire lanes in this ordinance.

.....

Sec. 46-445. Fire Hydrants.

Delete Section 507.5.1.1 and insert in lieu thereof the following new section:

507.5.1.1 Hydrant for fire department connections. Buildings equipped with a fire department connection installed in accordance with Section 912 shall have a fire hydrant located on a fire access road within 100 feet (30 m) of the fire department connection as measured by an approved route around the exterior of the building.

Exceptions:

1. The distance shall be permitted to exceed 100 feet (30 m) where approved by the *fire code official*.
2. Buildings without standpipes and having a floor area less than 40,000 square feet.
3. Existing buildings without standpipes.

Delete Section 507.5.5 and insert in lieu thereof the following new section:

507.5.5 Clear space around hydrants. A 5-foot (1524 mm) horizontal clear space shall be maintained around the circumference of fire hydrants, as measured from the center-point of the hydrant, except as otherwise required or approved.

Insert New Section 507.5.7 with the following language:

507.5.7 Fire Hydrant Markers and Identification Color. When required by the Fire Code Official, hydrant locations shall be identified by the installation of an approved reflective marker. Both public and private hydrants shall comply with and be painted to Local Water Utility specifications.

Insert New Section 507.5.8 with the following language:

507.5.8 Fire Hydrant Installation. Fire hydrants shall be installed with the grade mark on the fire hydrant at the level of finished grade. The large diameter connection shall be installed such that the connection is oriented facing the fire department access road.

.....

Sec. 46-456. Fire Command Centers.

Delete Section 508.1 and insert in lieu thereof the following new section:

508.1 General. Where required by other sections of this code, Table 508.1, and in all buildings classified as high-rise buildings by the *International Building Code*, a *fire command center* for fire department operations shall be provided and shall comply with Sections 508.1.1 through 508.1.6.

Insert New Section Table 508.1 with the following language:

Table 508.1 Fire Command Center Thresholds.

Occupancy	Threshold Requiring a Fire Command Center
Group A	1,000 occupants
Group E	100,000 gross square feet
Group F	200,000 gross square feet
Group H	100,000 gross square feet
Group I-2 or I-3	100,000 gross square feet
Group M	100,000 gross square feet
Group R1	Greater than 200 <i>dwelling units or sleeping units</i>
Group S	200,000 gross square feet

Delete Section 508.1.3 and insert in lieu thereof the following new section:

508.1.3 Size. The fire command center shall be not less than 0.015 percent of the total building area of the facility served or 200 square feet (19 m²) in area, whichever is greater, with a minimum dimension of 0.7 times the square root of the room area or 10 feet (3048 mm), whichever is greater.

Exception:

1. Where a fire command center is required by Table 508.1, the fire command center shall have a minimum size of 96 square feet (9 m²) with a minimum dimension of 8 feet (2348 mm) only where approved by the fire code official.

.....

Sec. 46-469. Automatic Fire Sprinkler Requirements.

Insert New Section 901.4.7.1.1 with the following language:

901.4.7.1.1 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 903.2.4 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 m²).
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 m²).

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 m²).
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 m²).

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 m²).
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 m²).
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 m²).
5. A Group S-1 occupancy used for Self-Service Storage Facility (mini-storage) exceeds 6,000 square feet (557.5 m²).

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 m²).
2. Buildings not more than one story above grade plane, with a *fire area* containing a repair garage exceeding 3,500 square feet (325 m²).
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 m²).

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. A weather-proof horn-strobe shall be installed on a separate Notification Appliance Circuit (NAC) or shall be installed as an addressable device that is able to function as if the alarm is on a separate NAC. This alarm shall be included in any battery and voltage drop calculations. This device shall only operate on active water flow from the sprinkler system, shall not be able to be silenced, and shall continue to be active until water flow has stopped and the fire alarm panel has been reset. Alarm devices shall be provided on the exterior of the building in an *approved* location adjacent to each fire department connection. Where a fire alarm system is installed, actuation of the *automatic sprinkler system* shall actuate the building fire alarm system.

.....

Sec. 46-475. Initiating Device Identification.

Delete Exception #1, 2 and 4 of Section 907.6.3.

Sec. 46-476. Monitoring.

Delete Section 907.6.6 and insert in lieu thereof the following new section:

907.6.6 Monitoring. Fire alarm systems required by this chapter or by the International Building Code shall be monitored by a central station approved and listed under UL 827 in accordance with NFPA 72. Information required to be transmitted to the central station shall be as set forth in Section 907.6.3

Exception:

Monitoring station is not required for:

1. Automatic sprinkler and fire alarm systems in one- and two- family dwellings.

Secs. 46-477—46-483. Reserved.

.....

Sec. 46-485. Walking 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.

.....

Sec. 46-487. Repealed by Ord. No. 16,318.

.....

Sec. 46-489. Repealed by Ord. No. 16,318.

Sec. 46-490. Repealed by Ord. No. 16,318.

.....

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 NFPA 54, 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 NFPA 54, unless deemed technically infeasible by the Code Official.

.....

Sec. 46-510. High-piled Storage.

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.

Insert New Section 3206.2.2 with the following language:

3206.2.2 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.

Insert New Section 3206.4.2 with the following language:

(1) **3206.4.2 Sprinkler design.**

- a. **3206.4.2.1 General.** The design of *automatic sprinkler systems* for the protection of Group F, H, M or S occupancies containing high-piled storage or high-challenge commodities over an area equal to or greater than 2,500 ft.² (232 m²) and designed for the protection of hazardous materials stored more than one pallet high in Group F, H, M, or S 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

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

.....

Sec. 46-521. Access.

Insert New Section 3311.1.1 with the following language:

Section 3311.1.1 Construction Site Access. *Approved* fire apparatus access roads shall be provided for every facility, building or portion of a building as soon as construction commences. The fire apparatus access road shall comply with the requirements of Section 503.2 and this section and shall extend to within 100 feet (45 720 mm) of all portions of the facility and all portions of the exterior walls of the first story of the building as measured by an *approved* route around the exterior of the building or facility.

Exception: The *fire code official* is authorized to increase the dimension of 100 feet (45 720 mm) where:

- (1) The building is equipped throughout with an *approved automatic sprinkler system* that is fully functional and installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3.

- (2) Fire apparatus access roads cannot be installed because of location on property, topography, waterways, nonnegotiable grades or other similar conditions, and an *approved* alternative means of fire protection is provided.

Sec. 46-522. Stairways.

Delete Section 3312.1 and insert in lieu thereof the following new section:

3312.1 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 3314.1 and insert in lieu thereof the following new section:

3314.1 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. 46-530. Scope.

Special events including trade shows and exhibitions, outdoor assembly events, outdoors mazes, special amusement buildings, and special scaffolding structures shall comply with this chapter and Section 1032. Temporary indoor vehicle displays and vehicle competition or demonstrations shall comply with this chapter and Section 314.

.....

Sec. 46-532. Access for firefighting and medical services.

Approved vehicle access for fire fighting and medical services shall be provided in accordance with Sections 503 of the International Fire Code and 46-444 of this code.

.....

Sec. 46-534. Crowd managers.

Crowd managers shall be provided where the fire code official determines that an indoor or outdoor gathering warrants crowd control. Crowd managers shall be in accordance with Section 403.11.3.1.

Sec. 46-535. Decorative materials and furnishings.

Curtains, drapes and decorations including, but is not limited to drapes, signs, banners, acoustical materials, cotton, hay, fabric, paper, straw, moss, split bamboo, and wood chips shall be flame resistant as demonstrated by testing in accordance with NFPA 701, or provide documentation of flame retardancy. Field flame test shall be in accordance with Section 807. Materials that cannot be treated for flame retardancy shall not be used unless approved by the fire code official. This includes but is not limited to oilcloth, tarpaper, nylon, plastic cloth, and other plastic materials.

.....

Sec. 46-538. Fire watch.

Fire watch shall be in accordance with Section 403.11.1.

.....

Sec. 46-544. General.

Trade shows and exhibitions conducted within any occupancy shall comply with Chapter 31.

.....

Sec. 46-547. Exhibit construction and materials.

The materials used for an exhibit shall comply with Section 3104 and Chapter 8:

- (1) **Materials. Shall be one of the following:**
 - a. Noncombustible or limited-combustible materials.
 - b. Wood that is greater than ¼-inch (6mm) nominal thickness.
 - c. Wood ¼-inch (6mm) nominal thickness or less that is pressure-treated fire-retardant wood meeting the requirements of NFPA 703, Standard for Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials. The product shall be marked or labeled by the manufacturer. The product shall not be painted or similarly modified until the material has been inspected and the marking or labeling verified, or provide documentation acceptable to the fire code official.
- (2) **Flame retardant materials.** Materials shall comply with Chapter 8.
- (3) **Wall and ceiling coverings.** Textile wall coverings, such as carpeting and similar products used as wall or ceiling finishes shall comply with Chapter 8.

- (4) **Other Materials.** Materials not listed above shall be limited to those that comply with Chapter 8. Plastics used in trade shows and exhibitions with an occupant load of 300 or more shall be Class A or Class B. Plastics used in trade shows and exhibitions with an occupant load of less than 300, shall be Class A, Class B or Class C.

.....

Sec. 46-553. General.

Outdoor assembly events shall be in accordance with Section 3106 and Chapter 10 of the International Fire Code.

.....

Sec. 46-555. Exits.

Exits shall comply with Chapter 10 of the International Fire Code and be as remote from each other as practical and shall be provided as follows:

Occupant Load	Minimum Number of Exits
1 to 500	2
501 to 1,000	3
1,001 or 1,500	4
each additional 500 persons	36 additional inches of exit width

- (1) **Width.** The aggregate clear width of exits shall be a minimum of 36 inches wide (914mm) for each 500 persons to be accommodated.
- (2) **Signs.** Exits shall be identified with signs that read “EXIT”. The signs shall be weather-resistant with lettering on a contrasting background. The lettering shall be of sufficient height and brush stroke to be immediately visible from 75 feet (22,860mm). Placement of the exit signs shall be approved by the fire code official.

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 of the International Fire Code 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 of the International Fire Code.
- (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 of the International Fire Code 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. 46-557. General.

Mobile food vehicles which are temporarily or permanently stored on a property where food items are processed or prepared and sold to the public shall comply with Section 319 of the International Fire Code.

Exception: Food peddlers operating a retail food establishment from a vehicle designated to be readily movable in which food is sold or given away but not composed, compounded, thawed, reheated, cut, cooked, processed or prepared.

Sec. 46-558. Repealed in Ord. No. 16,318.

Sec. 46-559. Repealed in Ord. No. 16,318.

Sec. 46-560. Liquefied petroleum gas (LP-gas).

LP-gas shall be in accordance with Section 319 and Chapter 61 of the International Fire Code and NFPA 58.

(1)

LP-gas 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 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 assemblies shall be leak tested at the time of installation at not less the operating pressure of the system in which they are installed.

Sec. 46-561. Location.

Mobile food vehicles shall not be located inside of or within 20 feet (6096 mm) of buildings, tents, canopies or membrane structures.

.....

Sec. 46-566. Temporary special amusement buildings.

Where the special amusement building is temporary, the sprinkler water supply shall be of an approved temporary means.

.....

Sec. 46-580. Aerial Access.

Delete Section D105.3 and insert in lieu thereof the following new section:

D105.3 Proximity to building.

At least one of the required access routes meeting this condition shall be positioned along a minimum of ¼ of the building perimeter and located within the minimum and a maximum dictated by the table below, Table D105.3. The arrangement of the aerial fire apparatus access road shall be approved by the fire code official and may be discontinuous with approval.

Building Height (ft)		Distance from Building (ft)	
Minimum	Maximum	Minimum	Maximum
30	40	15	50
40	50	15	40
50	N/A	15	30

Sec. 46-581. Repealed by Ord. No. 16,318.

Sec. 46-582. Repealed by Ord. No. 16,318.

.....

Section 2. This ordinance shall be in full force and effect on March 1, 2024, subject to and after its passage and publication as provided by law.

FORM APPROVED:

/s/ Glenna K. Frank

Glenna K. Frank, Assistant City Attorney

Ordinance No. 16,318

Connie Boesen, Mayor

Attest: I, Laura Baumgartner, 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. 24-0078), passed by the City Council of said City at the meeting held on January 8, 2024 and signed by the Mayor on January 8, 2024 and published and provided by law in the Business Record on January 26, 2024. Authorized by Publication Order No. 12543.

Laura Baumgartner, City Clerk