#### **ORDINANCE NO.15,546**

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 repealing Chapter 46 thereof, and enacting a new Chapter 46 to provide for the protection of the public health and safety by: adoption of the international fire code and amendments and additions thereto; and repealing conflicting ordinances.

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 repealing Chapter 46 thereof, and enacting a new Chapter 46 to provide for the protection of the public health and safety by: adoption of the international fire code and amendments and additions thereto; and repealing conflicting ordinances, as follows:

## **Chapter 46 FIRE PREVENTION AND PROTECTION\***

## ARTICLE I. IN GENERAL

## 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 105.7.8 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).
- (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 105.6.4 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 display (see section 46-214 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 105.6.17

Corrosive liquids – 55 gallons Corrosive solids – 1000 pounds

Flammable liquids - see 105.6.17 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).
- 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 105.6.45 and chapter 31 of the fire code and article X 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 105.6.23 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.
- (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 105.7.8(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 section 46-61. 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. 46-2. 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. Commencing on the east bank of the Des Moines River at the projected centerline of Vine Street, thence along the centerline of 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 Pennsylvania Avenue, thence north along the centerline of Pennsylvania Avenue 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.
  - b. West of Des Moines River. Commencing 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 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 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 to the centerline of Vine Street, thence east 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.

- (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. Commencing 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 to the intersection of Fifteenth 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.
  - b. Commencing 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.
- (3) Fire zone no. 3. Fire zone No. 3 shall include all that part of the city not included in fire zones no. 1 and 2.

#### Sec. 46-3. Violations.

- (a) Any person who fails to perform an act required by the provisions of this chapter, or who commits an act prohibited by the provisions of this chapter, shall be guilty of a misdemeanor punishable by fine or imprisonment as provided by section 1-15, or shall be guilty of a municipal infraction punishable by a civil penalty as provided by section 1-15.
- (b) The fire department may also proceed under public nuisance provisions set forth in this code, and/or pursue any other remedy available at law, to address any failure to perform an act required by the provisions of this chapter or any action prohibited by the provisions of this chapter.

## Sec. 46-4. Municipal infractions.

(a) The first violation of chapter 46 within the calendar year shall be deemed the first offense punishable by a civil penalty not to exceed \$750.00, plus inspection fees where

- applicable. The second and each subsequent violation of Chapter 46 within a calendar year shall be a repeat offense, punishable by a civil penalty not to exceed \$1,000.00, plus inspection fees where applicable.
- (b) When enforcement is sought through a municipal infraction proceeding, the fire chief or the chief's authorized representative may enter into consent orders, assurances of voluntary compliance or other similar documents establishing an agreement with the person responsible for the violation. Such orders will include specific action to be taken by the person responsible for the violation to correct said violation within a time period specified by the order.

# 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 shall include a statement of the administrative penalties imposed. Such notice 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.
- (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 46-3.05, 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 46-3.05, 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. 46-6. Liability for damages.

(a) The city or any employee is not liable for damages to a person or property as a result of any act or failure to act in the enforcement of this chapter, unless the act of enforcement constitutes false arrest.

(b) This chapter shall not be construed to relieve from or lessen the responsibility of any person owning, operating or controlling any equipment or structure regulated in this chapter for damages to a person or property caused by its defects nor shall the city or any city employee be held as assuming any such liability because of the inspections authorized by this chapter or any approvals issued under this chapter.

# Sec. 46-7. Fire appliance inspection permits.

All fire appliances, as 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 appliance 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 appliance and any other requirements adopted by the bureau.

## Secs. 46-8--46-30. Reserved.

#### ARTICLE II. FIRE DEPARTMENT\*

\*Cross reference(s)--Departments, § 2-536 et seq.

## Sec. 46-31. Title; references.

Except for purposes of administration and organization, this article shall be known and may be cited as "fire department." For the purpose of this article, the term "fire division" shall be synonymous with and refer to the fire department.

#### Sec. 46-32. Chief.

- (a) Appointment; responsibility. The chief of the fire department, also known as the fire chief, shall be appointed by the city manager and responsible to the manager for the functions of the fire department.
- (b) Supervision of department. The chief of the fire department shall supervise and direct the fire department.
- (c) Absence or disability. In the absence or disability of the chief of the fire department, the city manager shall designate an assistant fire chief to act as chief of the fire department during such absence or disability.
- (d) *Powers and duties generally.* The chief of the fire department shall be responsible for the protection of life and property against fire, prevention and extinguishment of fires, and the removal of fire hazards. The chief of the fire department shall see that all provisions of law or ordinance passed for the protection of the city against fire are enforced.

- (e) Authority to prescribe rules and regulations. The fire chief shall have the power to promulgate and establish, with the approval of the city manager, rules and regulations for the government of the fire department.
- (f) *Property and equipment*. The fire chief shall be responsible for the care, maintenance and custody of all property and equipment of the fire department.

# 46-33. Copies of fire and medical records and reports.

- (a) The fire chief is authorized to prepare and deliver upon request copies or printouts of fire and medical incident reports by the fire department and to charge a fee to cover the cost of copying or printing such reports. The fee to be charged for such copies and printouts shall be the amount set forth in the schedule of fees adopted by the city council by resolution. However, copies or printouts of the reports required by state law and designated confidential shall not be made available to the public.
- (b) The fire chief is further authorized to prepare and deliver upon request copies or printouts of investigation reports and to charge a fee to cover the cost of copying or printing such reports. The fee to be charged for such copies and printouts shall be the amount set forth in the schedule of fees adopted by the city council by resolution.
- (c) The fire chief is further authorized to release to the police department photographic negatives, which may be reproduced to requesting persons. Any fees associated with the reproduction of the photographs shall be paid to the police department by the requesting person.
- (d) The fire chief is further authorized to prepare and deliver upon request copies or printouts of fire department records or reports and to charge a fee to cover the cost of copying or printing such reports. The fee to be charged for such copies and printouts shall be the amount set forth in the schedule of fees adopted by the city council by resolution.
- (e) The fire chief is authorized to deliver upon request photographic copies of fire investigative scenes and to charge a fee for such service. The fee to be charged for such copies shall be the amount set forth in the schedule of fees adopted by the city council by resolution.
- (f) All such copies and printouts shall be furnished to the federal, state or municipal governments or their agencies without charge.
- (g) The fire chief shall permit persons to view fire reports and investigations under supervision for a reasonable period of time, and there shall be no charge for such viewing. Persons viewing such records or reports shall be permitted to make notes on their own paper from such records and reports, but no person shall be permitted to make notes, marks or erasures on any such reports or records. However, reports required by state law and designated confidential shall not be made available to the public.
- (h) The fire chief shall have authority, subject to the approval of the city manager, to prescribe rules and regulations relating to the furnishing, making and handling of all such copies, printouts and reproductions and the terms and conditions upon which they shall be made available.

## Sec. 46-34. Organization base of geographical districts.

The fire department shall be organized on the basis of geographical districts of the city. Its personnel and equipment shall be assigned by the chief of the fire department, with the approval of the city manager, to the various geographical districts. Insofar as possible, these assignments shall be made in such a manner that all areas of the city have adequate fire protection.

## Secs. 46-35--46-60. Reserved.

#### ARTICLE III. CODE

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

- (a) This chapter shall consist of the International Fire Code, 2015 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 113, 510.3, 606.12.5 Item #5, 806.1 Exception #2, 1013.5, 1013.6, 1013.6.1, 1013.6.2, 1013.6.3,
- (2) Appendix A.

# Sec. 46-63. Amendments and additions.

- (a) Article I of this chapter and the remaining sections in this chapter and in division 2 of article III of chapter 38 of the city code 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 and in division 2 of article III shall prevail.
- (b) The deleted sections and the corresponding amendments and additions to those sections are as follows:
  - (1) Section 108 (see section 46-64 of this chapter).

- (2) Section 105, except sections 105.1, 105.6.10, 105.6.16, 105.6.22 and 105.7.8 .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 VII of this chapter).
- (5) Section 5701.4 (see section 46-246 of this chapter).
- (6) Sections 5001.5, 5001.6.2, 5001.6.3, 5001.6, 5001.5.1 and 5001.5.2 (see article IV of this chapter).
- (7) Section 6104, except Table 6104.3 which is not amended or deleted and remains incorporated in this chapter (see section 46-281 of this chapter).
- (8) Section 308.1.4 (see section 46-66).
- (9) Section 311, except sections 311.2.1, 311.2.2, 311.2.3, 311.5.1, 311.5.2, 311.5.3, 311.5.4, 311.5.5, and 311.6 thereof which are not amended or deleted and remain incorporated in this chapter (see section 46-75 of this chapter).
- (10) Section 1101.4 (see section 46-73 of this chapter).
- (c) The addition of the following sections/appendices:
  - (1) Appendices B, C, D, I, K and M.
  - (2) Section 110.5 (see section 46-74 of this chapter).
  - (3) Section 311.7 (see section 46-75 of this chapter).

# **Sec. 46-64. Appeals.**

- (a) Other than notices of immediate enforcement action by misdemeanor or municipal infraction prosecution or other remedies at law, or public nuisance violations addressed through procedures set forth elsewhere in this code, any person affected by a decision of the building official or fire chief or their designee may request and shall be granted a hearing before the building and fire code board of appeals on the decision, provided that the person shall file in the permit and development center a written petition requesting a hearing and setting forth a brief statement of the grounds within 15 days after receiving notice of the decision. Upon receipt of the petition, the permit and development center shall set a time and place for the hearing and shall give the petitioner written notice thereof at least three days before the hearing, unless such notice requirement is waived in writing by the petitioner. The hearing shall be commenced not later than thirty days after the day on which the petition was filed, unless for good cause shown the building official grants a postponement in writing.
- (b) At the hearing the petitioner shall be given an opportunity to be heard to show why the decision of the building official or fire chief or designee should be modified or withdrawn. The building official or fire chief or designee shall have the opportunity to be heard to show why their decision should be affirmed.
- (c) After the hearing as provided in this section, the building and fire code board of appeals shall affirm, modify or withdraw the decision of the building official or fire chief or designee. The decision of the building and fire code board of appeals is the final administrative decision.
- (d) The proceedings at any hearing before the board, including the findings and decision of the building official or fire chief or designee, if applicable, shall be summarized, reduced

to writing, and entered as a matter of public record in the permit and development center. This record shall include a copy of every notice or order issued in connection with the matter.

## Sec. 46-65. Scope of code.

- (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. 46-66. Open flame cooking devices.

Delete Section 308.1.4 and insert in lieu thereof the following new section:

**308.1.4 Open-flame cooking devices.** Charcoal burners, other open-flame cooking devices, and other devices that produce ashes or embers shall not be operated on balconies or within 20 feet (3048 mm) of combustible construction. Location of LP containers shall comply with Section 6104.

## **Exceptions:**

- 1. One- and two-family *dwellings*, constructed in accordance with the *International Residential Code*.
- 2. LP-gas cooking devices having LP-gas container with a water capacity not greater than 20 pounds.

## 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 46-71 only applies to the R-1, R-2, R-4 and I-1 districts 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.

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

Section 110 of the international fire code is amended by adding a new section 110.5 to read as follows:

## Section 110.5 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.

#### Section 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 311.1.2 of the international fire code is amended to read as follows:
  - **311.1.2 Tenant spaces**. Storage and lease plans required by this code shall be revised and updated by the persons owning or in charge of control of tenant spaces to reflect temporary or partial vacancies.
- (d) 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.
- (e) Section 311.3 of the international fire code is amended to read as follows:
  - **311.3 Removal of combustibles**. Persons owning, or in charge or control of, a vacant building, structure, premises or portion thereof (collectively "premises"), shall remove therefrom all accumulations of combustible materials, flammable or combustible waste or rubbish and shall securely lock or otherwise secure doors, windows and other openings to prevent entry by unauthorized persons. The premises shall be maintained clear of waste or hazardous materials.

## **Exceptions**:

- (1) Buildings or portions of buildings undergoing additions. alterations, repairs or change of occupancy in accordance with the International Building Code, where waste is controlled and removed as required by Section 304.
- (2) Seasonally occupied buildings.
- (f) Section 311.4 of the international fire code is amended to read as follows:
  - **311.4 Removal of hazardous materials**. Persons owning or having charge or control of a vacant building, structure, premises or portion thereof containing hazardous materials regulated by Chapter 50 shall comply with the facility closure requirements of Section 5001.6.
- (g) Section 311.5 of the international fire code is amended to read as follows:
  - **311.5 Placards**. Any vacant or abandoned buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards may be marked as required by Sections 311.5.1 through 311.5.5.
- (h) 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.

#### Secs. 46-71—46-90. Reserved

#### ARTICLE IV. HAZARDOUS SUBSTANCES

# Sec. 46-91. Scope.

This article shall apply to the release of hazardous substances and the notification, cleanup and recovery of costs associated with the mitigation of hazardous conditions.

#### Sec. 46-92. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Assisted political entity means any city, county, township or the state entering into an I.C. ch. 28E agreement with the city, the purpose of which is to render assistance to such political entity in cases of hazardous conditions within its jurisdiction or affecting the environment of its jurisdiction as defined in this chapter creating a hazardous substance emergency.

Cleanup means the removal of the hazardous substances to a place where the waste will not cause any danger to persons or the environment, in accordance with the state statutes, rules and regulations therefor, or the treatment of the material as defined in this article to eliminate the hazardous condition, including the restoration of the area to a general good appearance without noticeable odor as far as practicable. The term "cleanup" includes all actions necessary to contain, collect, identify, analyze, treat, disperse, remove or dispose of a hazardous substance and to restore the situs from which such hazardous substance was cleaned up.

*Hazardous condition* means any situation involving the actual, imminent or probable spillage, leakage, or release of a hazardous substance:

- (1) Within the city or onto city property located outside the city which, because of the quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate or potential danger to the public health or safety; or
- Onto land, into the waters within the state or into the atmosphere, but outside the city, which, because of the quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates an immediate or potential danger to the public health or safety of persons or property within the city.

The term "hazardous condition" includes any accident involving hazardous materials required to be reported under I.C. § 321.266(4).

Hazardous substance means any substance or mixture of substances that presents a danger to the public health or safety or environment and includes but is not limited to a substance that is toxic, corrosive, or flammable or that is an irritant or that, in confinement, generates pressure through decomposition, heat, or other means. The following are examples of substances which, in sufficient quantity, may be hazardous: acids; alkalis; explosives; fertilizers; heavy metals such as chromium, arsenic, mercury, lead and cadmium; industrial chemicals; paint thinners; paints; pesticides; petroleum products; poisons; radioactive materials; sludges; and organic solvents. The term "hazardous substance" includes any hazardous waste identified or listed by the administrator of the United States Environmental Protection Agency under the Solid Waste Disposal Act as amended by the Resource Conservation and Recovery Act of 1976; any toxic pollutant listed under section 307 of the federal Water Pollution Control Act of 1976 as amended to January 1, 1977; any hazardous substance designated under section 311 of the federal Water Pollution Control Act as amended to January 1, 1977; any hazardous material designated by the Secretary of Transportation under the Hazardous Materials Transportation Act; or any

hazardous substance listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980.

*Person* means a natural person, his or her heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns or any other similar legal entity or the agent of any of such.

*Responsible person* means the person, whether the owner, agent, lessor or tenant, in charge of the hazardous substance being stored, processed or handled or the owner or bailee transporting hazardous wastes or substances, whether on public ways or grounds or on private property, where the spill would cause danger to the public or to any person or to the environment.

Treatment means a method, technique, or process, including neutralization, designed to change the physical, chemical or biological character or composition of a hazardous substance so as to neutralize it or to render the substance nonhazardous, safer for transport, amenable for recovery, amenable for storage, or to reduce it in volume. Treatment includes any activity or processing designed to change the physical form or chemical composition of hazardous substance to render it nonhazardous.

**Cross reference(s)--**Definitions generally, § 1-2.

## Sec. 46-93. Notifications.

When a hazardous condition is created, the responsible person shall notify the fire department immediately upon discovery of the condition but in no instance later than 30 minutes after the discovery of the hazardous condition.

## Sec. 46-94. Cleanup required.

Whenever a hazardous condition is created by the deposit, injection, dumping, spilling, leaking or placing of a hazardous substance so that the hazardous substance or a constituent of the hazardous substance may enter the environment or be emitted into the air or discharged into any waters, including groundwaters, the fire chief or the chief's designee may remove or provide for the removal and disposal of the hazardous substance at any time, unless the fire chief or the chief's designee determines such removal will be properly and promptly accomplished by the responsible person. If the responsible party does not initiate and complete cleanup within the time designated by the fire department, the city may proceed to remedy the hazardous condition by performing the necessary cleanup services.

## Sec. 46-95. Loss, burden or costs and charges.

(a) A responsible person, except as otherwise provided in this article, shall be liable to the city for all cleanup costs incurred by the city, including but not limited to chemical damage, contamination of equipment, and the use of consumable materials, but shall not be liable for those losses, burdens or costs normally associated with response to fire emergencies which do not involve hazardous conditions. Charges for such cleanup costs shall be billed and collected by the city unless otherwise provided by an I.C. ch. 28E

- agreement or other contract. However, the costs of any cleanup requiring less than one hour of emergency service shall not be charged against the responsible person.
- (b) An assisted political entity shall be liable to the city for all costs incurred by the city, including but not limited to use of personnel, chemical damages, contamination of equipment and the use of consumable materials, the amount of such costs to be determined by a per-hour fee based on actual costs to the city approved by the city council. These costs shall be billed directly to the assisted political entity by the city.
- (c) The city manager shall determine the costs to the city of providing the services of the city in an amount equal to the actual costs to the city expended in responding to hazardous conditions. The costs as determined by the city manager shall be promulgated as a schedule of fees which the city manager shall review and revise not less than once a year. Fees established by the city manager shall be charged to and collected from the responsible person as provided in this section.

#### Secs. 46-96--46-120. Reserved.

# ARTICLE V. WELDING AND CUTTING, CALCIUM CARBIDE AND ACETYLENE

## Sec. 46-121. Permits required.

- (a) A permit shall be required to store or keep calcium carbide in excess of 100 pounds, the calcium carbide to be in approved containers.
- (b) A permit shall be required to operate an acetylene generator having a carbide capacity of five pounds or greater. Acetylene generators shall be of approved type.
- (c) No permit shall be required for welding and cutting operations, but such operations shall be in accord with nationally recognized safe practice, as well as the provisions of this article, and only approved equipment such as blowpipes, torches, regulators and acetylene generators shall be used.
- (d) All cylinders or containers used for the storage of compressed gases shall be constructed, charged and marked in accordance with nationally recognized safe practices.

## Secs. 46-122--46-210. Reserved.

# ARTICLE VI. FIREWORKS AND PYROTECHNIC SPECIAL EFFECTS MATERIAL

#### Sec. 46-211. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

*Fireworks* does not include certain types of sparklers and snakes containing no poisonous form or mercury as defined in I.C. § 727.2.

## **Cross reference(s)--**Definitions generally, § 1-2.

#### Sec. 46-212. Prohibitions.

It shall be unlawful to manufacture fireworks within the corporate limits, and, except as provided in this article, it shall be unlawful for any person to possess, store, offer for sale, expose for sale, sell at retail, or use or explode any fireworks.

## Sec. 46-213. Exception.

Nothing in this article shall be construed to prohibit any resident wholesaler, dealer, or jobber to sell at wholesale such fireworks as are not prohibited in this article or the sale of any kind of fireworks, provided the fireworks are to be shipped directly out of the state; or the use of fireworks by railroad or other transportation agencies for signal purposes or illumination; or the sale or use of blank cartridges for a show or theater, or for signal or ceremonial purposes in athletics or sports, or for use by military organizations.

# Sec. 46-214. Permits required.

For the purpose of this article, a permit shall be obtained to:

- (1) Conduct a fireworks display.
- (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.

# Sec. 46-215. Application for permit.

Application for a permit required by this article shall be made in writing to the fire prevention bureau at least 14 days in advance of the display or use.

## Sec. 46-216. Insurance and indemnification for display.

(a) Unless otherwise specified in this section, the applicant for the permit required by this article shall, at the time application is made for a permit, attach thereto a certificate of insurance naming the applicant as insured and showing liability insurance coverage with a limit of not less than \$5,000,000.00, provided that the fire chief or finance director at his or her discretion or the city council may at its discretion require a greater amount. The type of liability insurance to be required shall be determined by the city's finance director or designee. The insurance shall inure to the use and benefit of any person who suffers damage either to person or property because of the display of fireworks, the compounding, storage or use of pyrotechnic special effects material, or the display involving fire, open flames or other flammable material other than fireworks or pyrotechnic special effects material. The applicant shall further comply with all insurance and indemnification provisions set forth in the permit required by this article.

(b) Notwithstanding the foregoing, if a display involving fire, open flames or other flammable material other than fireworks or pyrotechnic special effects material is to be held outside in an open area using non-detonating materials and is determined by the fire chief to be a low-hazard display, then the applicant for the permit required by this article for such a display shall, at the time application is made for a permit, attach thereto a certificate of insurance naming the applicant as insured and showing liability insurance coverage with a limit of not less than \$2,000,000.00, provided that the fire chief or finance director at his or her discretion may require a greater amount. The type of liability insurance to be required shall be determined by the city's finance director or designee. The insurance shall inure to the use and benefit of any person who suffers damage either to person or property because of the display involving fire, open flames or other flammable material other than fireworks or pyrotechnic special effects material. The applicant shall further comply with all insurance and indemnification provisions set forth in the permit required by this article.

## Sec. 46-217. Seizure of fireworks.

The fire chief shall seize, take, remove or cause to be removed at the expense of the owner all stocks of fireworks offered or exposed for sale, stored or held in violation of this article.

## Sec. 46-218. Firework operator certification.

Add the following exception to Section 5601.4:

**Exception:** Persons in charge of fireworks display or pyrotechnic special effect operations may be less than 21 years of age if they possess a valid PGI display fireworks operator certification or equivalent certification approved by the fire code official.

Secs. 46-219—46-245. Reserved.

## ARTICLE VII. FLAMMABLE AND COMBUSTIBLE LIQUIDS

## 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, 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.

Secs. 46-247—46-275. Reserved.

## ARTICLE VIII. LIQUEFIED PETROLEUM GASES

Sec. 46-276. Scope.

This article shall apply to all storage and handling of liquefied petroleum gas and the installation of all equipment pertinent to systems for such uses.

## Sec. 46-277. Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Liquefied petroleum gas means any material which is composed predominantly of any of the following hydrocarbons or mixtures of them: propane, propylene, butane (normal butane or isobutane) and butylenes.

Liquefied petroleum gas equipment means all containers; apparatus; safety devices; piping, not including utility distribution piping systems; and equipment pertinent to the storage and handling of liquefied petroleum gas. Gas-consuming appliances shall not be considered as being liquefied petroleum gas equipment.

**Cross reference(s)--**Definitions generally, § 1-2.

## 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 150 gallons or more. 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 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.

Insert New Section 6104.3.3 with the following language:

**6104.3.3 LP Gas Containers in Group R Occupancies.** LP Gas shall not be stored or used inside of a building.

Delete Section 6104.2 and insert in lieu thereof the following new section:

6104.2 Maximum capacity within established limits. Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the installation of liquefied petroleum gas shall be prohibited unless specifically approved by the fire code official, and in that case the aggregate capacity of any one installation shall not exceed a water capacity of 1,000 gallons (3785 L) (see Section 3 of the Sample Legislation for Adoption of the International Fire Code on page xxi).

**Exception:** Containers shall not exceed a water capacity of 20 gallons, must be located outside of the building, and used for cooking purposes only.

Secs. 46-280--46-315. Reserved.

#### ARTICLE IX. TENTS

## Sec. 46-316. Distance.

The distance requirements in Chapter 31 of the International Fire Code may be lowered if approved in advance and in writing by the fire chief or designee.

# Sec. 46-317. Permit requirements.

- (a) It shall be the tent owner's responsibility to provide a certificate of flame resistance to the lessee and fire department before a permit is issued.
- (b) The owner shall ensure an application for a tent has been submitted to and approved by the bureau of fire prevention before the tent is erected and placed in service.

Secs. 46-318--46-429. Reserved.

## ARTICLE X. FIRE DEPARTMENT INSPECTIONS

# Sec. 46-430. Fire department permit inspections; cost of initial inspection included in permit fee; fee for follow-up inspections.

Whenever the provisions of this chapter require the issuance of a permit and payment of a permit fee in connection with the operation or maintenance of any facility, the permit fee for such activity shall be deemed to include payment of all costs incurred by the fire department for the initial routine inspection which it conducts in connection with the issuance of said permit. Permit fees shall not be deemed to include payment of costs incurred by the fire department for follow-up inspections deemed necessary by the department to obtain or confirm compliance with the requirements of this chapter for the issuance of such permits. The fees for follow-up inspections shall be in the amounts and calculated as provided in the schedule of fees adopted by the city council by resolution. The fee for a follow-up inspection conducted to obtain or confirm compliance with a specification, regulation, permit condition or fire department order, after a permittee is informed of a violation thereof, shall be expressed in such schedule as hourly rates which are to be based on the average salary, benefit, and overhead costs to the city of the inspectors providing follow-up inspection services. Follow-up inspection services shall be charged on the basis of the number of hours of inspector time spent providing follow-up inspection services, multiplied by the applicable hourly rates in the schedule.

# Sec. 46-431. Fee for follow-up inspection to be charged to persons violating provisions of this chapter.

Any person who is notified of or charged with a violation of any provision of this chapter or of a fire department order shall pay a fee for follow-up inspections deemed necessary by the department to obtain or confirm compliance with such provision or order. The fees for follow-up inspections shall be in the amounts and calculated as provided in the schedule of fees adopted by the city council by resolution. The fee for a follow-up inspection conducted to obtain or confirm compliance with a specification, regulation, permit condition or fire department order, after the responsible person is informed of a violation thereof, shall be expressed in such schedule as hourly rates which are to be based on the average salary, benefit, and overhead costs to the city of the inspectors providing follow-up inspection services. Follow-up inspection services shall be charged on the basis of the number of hours of inspector time spent providing follow-up inspection services, multiplied by the applicable hourly rates in the schedule.

#### Secs. 46-432—46-441 Reserved.

#### ARTICLE XI. ACCESS AND IDENTIFICATION

## Sec. 46-442. Fire Access Road Clear Height.

Delete Section 503.2.1 and insert in lieu thereof the following new section:

**503.2.1 Dimensions.** Fire apparatus access roads shall have a minimum unobstructed width of not less than 20 feet (6096 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than 14 feet (4268 mm).

## Sec. 46-443. Premise Identification.

Delete Section 505.1 and insert in lieu thereof the following new section:

**505.1 Address identification.** New and existing buildings shall have *approved* address numbers, building numbers or *approved* building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall be black or white and shall contrast with their background. Where required by the *fire code official*, address numbers shall be provided in greater dimension or additional *approved* locations to facilitate emergency response. Address numbers shall be Arabic numbers or alphabetical letters. Numbers and letters shall be a minimum height and a minimum stroke width as dictated by Table 505.1. Where access is by means of a private road and the building cannot be viewed from the *public way*, a monument, pole or other sign or means shall be used to identify the structure. Address numbers shall be maintained.

Table 505.1 Minimum Height and Stroke Width<sup>a</sup> b

Distance from the		Minimum	Minimum
centerline of the		Height	Stroke
Public Way (ft)		(in)	Width (in)
Less than 100		4	1/2
100	199	6	3/4
200	299	8	1
For each additional			Increase
100		Increase 2	1/2

<sup>&</sup>lt;sup>a</sup> Exterior suite identification, minimum height shall be 4 inches and stroke width shall be ½ inch.

<sup>&</sup>lt;sup>b</sup> Interior suite identification, minimum height shall be 2 inches and stroke width shall be <sup>1</sup>/<sub>4</sub> inch.

# 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.

**Section 511.2 Purpose.** The requirement that Fire Lanes be established in certain parking areas and the enforcement of restrictions on parking in such Fire Lanes established in this Chapter are designed to ensure adequate access to commercial, office, multi-family, and other high density use facilities by fire-fighting and other emergency vehicles.

**Section 511.3. Designation.** The Fire Code Official may designate fire lanes on private and public property as deemed necessary for the protection of life and property.

**Section 511.4 Obstruction.** No person shall park or place a vehicle or other obstruction in a designated fire lane that would prevent such fire lane from being immediately accessible to emergency vehicles, or deter or hinder emergency vehicles from gaining immediate access to the fire lane. A written request to the jurisdictional Fire Code Official for temporary obstruction of a fire lane shall be submitted for approval.

Section 511.5 Signs and markings. Wherever a fire lane has been designated, the Code Official shall cause appropriate signs and markings to be placed identifying such fire lanes. Signs or markings shall be maintained in a clean and legible condition at all times and shall be replaced or repaired when necessary to provide adequate visibility. Fire lanes may be established or relocated at the time of plan review, pre-construction site inspection, and/or post construction site inspection, as well as any time during the life of the occupancy as needed to provide and maintain emergency vehicle access. All designated fire lanes shall be clearly marked in the following manner:

- (1) Vertical curbs shall be painted red on the top and side, extending the length of the designated fire lane. Rolled curbs or surfaces without curbs shall have a red (6) inch wide stripe painted the length of the designated fire lane. One of the following identification lettering methods shall be utilized:
  - a. The words "NO PARKING FIRE LANE (Except for Emergency Vehicles)" shall be stenciled with three (3) inch white letters and a minimum three quarter (3/4) inch stroke on the face of the curbing, or in the absence of vertical curbing, on the red stripe, and spaced at fifty (50) foot intervals or portions thereof, or

- b. The pavement adjacent to the painted curbs shall be marked with minimum eighteen (18) inch in height block lettering with a minimum three (3) inch brush stroke reading: "NO PARKING FIRE LANE." Lettering shall be red and spaced at fifty (50) foot intervals or portions thereof.
- Signage identifying fire lanes shall conform to the following: Fire lane signs shall be 18 inches tall x 12 inches wide with red letters on a white reflective background to read "Fire Lane No Parking Except For Emergency Vehicles" or similar verbiage as approved by the code official. Fire lane signs shall be placed 2 4 feet from the edge of the Fire Lane. The bottom of fire lane signs shall be between five (5) and seven (7) feet from the ground. Intermediate fire lane signs shall be set every one hundred (100) feet in a continuous fire lane. The BEGINS sign shall mark the beginning of a fire lane and shall be mounted below the first fire lane sign. The ENDS sign shall mark the ending of a fire lane and shall be mounted below the last fire lane sign. The BEGINS and ENDS signage may be omitted by the Code Official due to the location of the fire lane. Signs may be placed on a building when approved by the Fire Code Official.

**Section 511.6 Maintenance.** The owner, manager, or person in charge of any property upon which designated fire lanes have been established shall provide marking as required above and, shall maintain fire lanes at their expense as often as needed to clearly identify the designated area as being a fire lane.

## 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.

**Exception:** The distance shall be permitted to exceed 100 feet (30 m) where approved by the *fire code official*.

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 centerpoint 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.

#### Secs. 46-446—455. Reserved.

## ARTICLE XII. SPECIAL OCCUPANCY REQUIREMENTS

## 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 dwelling units or sleeping units	
Group S	200,000 gross square feet	

## Sec. 46-457. Emergency Power.

Insert New Section 604.8 with the following language:

**Section 604.8 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 604.9 with the following language:

**Section 604.9 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. Fire Doors.

Delete Section 703.2.3 and insert in lieu thereof the following new section:

## 703.2.3 Door Operation.

Swinging fire doors shall close from the full open position and latch automatically. The door closer shall:

- (1) Exert enough force to close and latch the door from any partially open position.
- (2) Be UL listed and of hydraulic type, spring type shall not be allowed.

## Secs. 46-459—46-468 Reserved.

# ARTICLE XIII. FIRE PROTECTION SYSTEMS

## 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 903.2.11.1.3 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 903.4.2 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. 46-470. Standpipe Requirements.

Insert New Section 905.3.9 with the following language:

**905.3.9 Building Footprint and Access.** Where the most remote portion of a floor or story is more than 400 feet from a hose connection or fire department access road the fire code official is authorized to require standpipes to be provided in *approved* locations. Class I manual standpipes shall be allowed.

# Sec. 46-471. Fire Alarm Requirements.

Insert New Section 907.1.4 with the following language:

**907.1.4 FACP** (Fire Alarm Control Panels). Each building shall have no more than 1 FACP. Installation of fire alarm panel shall be not exceed six feet in height measured from the floor to the top of the unit.

Exception: Suppression system releasing panels are not required to meet the height requirement or the limitation in the number of panels.

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.

**Exception:** Monitoring station is not required for:

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

## Sec. 46-472. Smoke and Heat Vent Requirements.

Delete Section 910.2.1 and insert in lieu thereof the following new section:

**910.2.1 Group F-1 or S-1.** Smoke and heat vents installed in accordance with Section 910.3 or a mechanical smoke removal system installed in accordance with Section 910.4 shall be installed in buildings and portions thereof used as a Group F-1 or S-1 occupancy having more than **30,000** square feet (2787 m<sup>2</sup>) of undivided area. In occupied portions of a building equipped throughout with an automatic sprinkler system in accordance with 903.3.1.1, where the upper surface of the story is not a roof assembly, a mechanical smoke removal system in accordance with Section 910.4 shall be installed.

**Exception:** Group S-1 aircraft repair hangars.

## Sec. 46-473. Fire Pump Requirements.

Delete Section 914.3.1.2 and insert in lieu thereof the following new section:

**914.3.1.2** Water supply to required fire pumps. Required fire pumps shall be supplied by connections to a minimum of two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

**Exception:** Two connections to the same main shall be permitted provided the main is valved such that an interruption can be isolated so that the water supply will continue without interruption through at least one of the connections.

Secs. 46-474—46-483. Reserved.

## ARTICLE XIV. EGRESS

#### Sec. 46-484. Exit Illumination.

Delete Section 1008.3.1 and insert in lieu thereof the following new section:

**1008.3.1 General.** In the event of the power supply failure in rooms and spaces that require two or *means of egress* or are 400 square feet or greater, an emergency electrical system shall automatically illuminate all of the following areas:

- (1) Aisles.
- (2) *Corridors.*
- (3) Exit access stairways and ramps.

Delete Section 1008.3.2 and insert in lieu thereof the following new section:

- **1008.3.2 Buildings.** In the event of the power supply failure in rooms and spaces that require two or *means of egress* or are 400 square feet or greater an emergency electrical system shall automatically illuminate all of the following areas:
  - (1) Interior exit access stairways and ramps.
  - (2) *Interior* and *exterior exit stairways* and *ramps*.
  - (3) Exit passageways.
  - (4) Vestibules and areas on the *level of exit discharge* used for *exit discharge* in accordance with Section 1028.1.
  - (5) Exterior landings as required by Section 1010.1.6 for exit doorways that lead directly to the *exit discharge*.

Delete Section 1008.3.3 Item #5 and insert in lieu thereof the following new section:

5. Restrooms containing more than one water closet/urinal or that are accessible.

## Sec. 46-485. Walking Surface.

Delete Section 1009.2 Item #11 and insert in lieu thereof the following new section:

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

Delete Section 1010.1.6.1 and insert in lieu thereof the following new section:

**1010.1.6.1** 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** Components of exterior walking surfaces shall be concrete, asphalt, or other approved hard surface.

#### Sec. 46-486. Locks.

Delete Section 1010.1.9.1 and insert in lieu thereof the following new section:

Thumb Turn Locks shall not be allowed.

## **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.

Delete Section 1013.3 and insert in lieu thereof the following new section:

**1013.3 Exit Sign Illumination.** Exit signs shall use an LED lighting system and be illuminated internally. Exit signs are required to have battery backup unless an onsite generator is used. Luminance on the face of an exit sign shall have an intensity of not less than 5.0 footcandles (53.82 lux).

**Exception**: Tactile Exit signs required by Section 1013.4 need not be provided with illumination.

Insert New Section 1030.5.3 with the following language:

**1030.5.3 Window wells drainage.** All window wells shall be provided with approved drainage.

Secs. 46-488—46-497. Reserved.

# **ARTICLE XV. Fuel Fired Appliances**

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.

Secs. 46-499—46-509 Reserved.

## **ARTICLE XVI. Speculative Buildings**

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) Delete Section 3206.2.1 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) Delete 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 occupantowned 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 fireresistive 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.** An 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**

Stored Commodity 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 Height25 feetMin. Aisle Width8 feetMax. Rack Width9 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 Pallets6 feet maximum storage heightTire Storage5 feet maximum storage heightRolled Paper Storage5 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, <sup>3</sup>/<sub>4</sub>" orifice, SR 286°F element, upright, SIN

TY0030

**FP Contractor** ABC Sprinkler Co. Designer: John Smith

### Secs. 46-511—46-519 Reserved.

## **ARTICLE XVII.** Construction and Remodeling

# Sec. 46-520. Purpose.

Delete Section 3301.2 and insert in lieu thereof the following new section:

**3301.2 Purpose.** This chapter prescribes minimum safeguards for construction, *alteration* and demolition operations to provide reasonable safety to life and property from fire and other emergencies during such operations.

#### Sec. 46-521. Access.

Insert New Section 3310.1.1 with the following language:

**Section 3310.1.1 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.

#### Secs. 46-522—46-529 Reserved.

#### ARTICLE XVIII. SPECIAL EVENTS

#### Division 1. General

## 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 1028. Temporary indoor vehicle displays and vehicle competition or demonstrations shall comply with this chapter and Section 314.

## Sec. 46-531. Site plans.

A detailed site plan shall be submitted to the fire code official with each permit application for approval.

- (1) **Outdoor events:** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:
  - a. The means of egress.
  - b. Location and width of exits and aisles.
  - c. Location of exit signs.
  - d. Location of fencing or means used to confine attendees.
  - e. Total square footage of enclosed space.
  - f. Location and arrangement of all tents, booths or cooking equipment.
  - g. Locations of fire apparatus access roads.
  - h. Location of fire protection equipment.
  - i. Type and location of heating and electrical equipment where applicable.
  - j. Location of temporary staffed water stations and permanent water fountains.
- (2) **Trade shows and exhibitions:** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:
  - a. The means of egress.
  - b. Location and width of exits and aisles.
  - c. Location of exit signs.
  - d. Total square footage of space.
  - e. Location and arrangement of all booths and cooking equipment.
  - f. Location of all fire protection equipment.
  - g. Type and location of heating and electrical equipment where applicable.
  - h. Location of covered or multi-level exhibits or booths.
- (3) **Mazes.** The permit application and site plan shall be submitted a minimum of 30 business days prior to the event. Site plans shall include, but not be limited to:
  - a. Means of egress.
  - b. Location and width of exits and aisles.
  - c. Location of exit signs.

- d. Total square footage of space.
- e. Location and arrangement of all booths and cooking equipment.
- f. Location of all fire protection equipment.
- g. Location of means to confine attendees.
- h. Locations of *fire apparatus access roads*.
- i. Type and location of heating and electrical equipment where applicable.
- j. Locations of structures.

At time of permit application, the event coordinator shall submit a letter from the property owner authorizing the use of the site, the address of the site, dates and hours of operation and names and 24-hour phone numbers of at least two principals.

- (4) **Temporary indoor vehicle displays:** The permit application and site plan shall be submitted a minimum of 10 business days prior to the display of electric, liquid- or gas-fueled vehicles, boats or other motor craft. Floor plans shall include, but not be limited to:
  - a. The means of egress.
  - b. Location and width of exits and aisles.
  - c. Location of exit signs.
  - d. Total square footage of space.
  - e. Location and arrangement of all booths and cooking equipment.
  - f. Location of all fire protection equipment.
  - g. Type and location of heating and electrical equipment where applicable.
  - h. Location and size of exhibits and booths.
  - i. Location of structures.

# **Exception:** Auto dealerships.

- (5) **Vehicle competition or demonstration.** The permit application and site plan shall be submitted a minimum of 10 business days prior to the competition or demonstration of electric, liquid- or gas-fueled vehicles, boats or other motor craft. A floor plan shall include, but not be limited to:
  - a. The means of egress.
  - b. Location and width of exits and aisles.
  - c. Location of exit signs.
  - d. Total square footage of space.
  - e. Location and arrangement of all booths and cooking equipment.
  - f. Location of all fire protection equipment.
  - g. Type and location of heating and electrical equipment where applicable.
  - h. Location and size of exhibits and booths.
  - i. Location of structures.
  - j. Location of *fire apparatus access roads* where applicable.

### Division 2. General Requirements

### 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 and 512.

# Sec. 46-533. Combustible storage.

Combustible materials stored at special events shall be stored in approved locations and containers.

## 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 403.3.

## 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 320. 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. 46-536. Fire protection equipment clearance.

Clearance around all fire protection equipment shall be in accordance with Section 901.4.6.

# Sec. 46-537. Fire extinguishers.

Fire extinguishers shall be in accordance with Section 906 and NFPA 10.

## **Sec. 46-538. Fire watch.**

Fire watch shall be in accordance with Section 403.12.1.

## Sec. 46-539. Fireworks, pyrotechnics.

Fireworks and pyrotechnics shall comply with Chapter 56.

# Sec. 46-540. Housekeeping.

The special event area and related areas shall be kept free from combustible debris at all times.

# Sec. 46-541. LP-gas heaters.

Fuel supplies for liquefied-petroleum gas-fired heaters shall comply with Chapter 61 of the International Fire Code.

# Sec. 46-542. Open flame devices.

Open flame devices shall comply with Section 308.

## Sec. 46-543. Waste disposal.

Combustible debris shall not be accumulated at special events. Combustible debris, rubbish and waste material shall be removed from special events at the end of each shift of work. Combustible debris, rubbish and waste material shall not be disposed of by burning on the site unless approved.

#### Division 3. Trade Shows and Exhibitions.

#### Sec. 46-544. General.

Trade shows and exhibitions conducted within any occupancy shall comply with Chapter 38.

#### Sec. 46-545. Vehicles.

Liquid- and gas-fueled and electric vehicles, boats or other motor-craft and equipment used for display, competition or demonstration within a building shall be in accordance with Section 314.

### Sec. 46-546. Means of egress.

*Means of egress* shall comply with this section and the requirements of Chapter 10.

- (1) **Travel distance.** The maximum travel distance from any point in an exhibit to an exit access aisle shall not exceed 50 feet (15240mm).
- (2) Aisles.
  - a. **Aisle width.** Minimum aisle width inside a trade show or exhibition shall comply with the following:
  - b. Square Footage of Trade Show or Exhibition Minimum Aisle Width

Greater than 15,000 square feet (1393m²) 10 feet (3048mm) 5,000 square feet (465 square meters) to 15,000 square feet (1393m²) 8 feet (2438mm) Less than 5,000 square feet (465 m²) 6 feet (1829mm)

(3) **Obstructions.** Aisles shall be kept clear of all obstructions, including but not limited to, fixtures and displays of goods for sale, chairs, tables, product, displays, vehicles, and trailer tongues.

(4) **Exit signs.** Exit signs shall be visible from all locations in the occupancy.

#### Sec. 46-547. Exhibit construction and materials.

The materials used for an exhibit shall comply with Section 3804.4 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) **Plastics.** Plastics 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. 46-548. Combustible materials storage.

- (a) **Quantity.** Combustible materials shall be limited to a one-day supply.
- (b) **Location.** Storage of combustible materials behind exhibits, booths, or tents is prohibited. Combustible materials, including but not limited to wood crates, paper and cardboard boxes, shall be stored outside the building in an approved area or in a storeroom having a fire-resistance rating of at least one hour and protected by an approved automatic fire-extinguishing system.

### Sec. 46-549. Covered exhibits and booths.

Fire Protection - Automatic sprinkler systems. An approved sprinkler system shall be provided in covered exhibits and booths exceeding 300 square feet (2787 m²). Each level of multi-level exhibit booths shall be protected throughout, including the uppermost level where the uppermost level is covered with a ceiling.

## Sec. 46-550. Multi-level booths.

Construction documents for all multi-level exhibits shall be approved and stamped by a licensed structural engineer or architect and shall be submitted with the permit application. This includes any exhibit where a live load is proposed above the exhibit area floor level, regardless of

the accessibility of the area to the public. Upper levels of multi-level booths with an occupant load greater than 10 persons shall have at least 2 remote exits.

### Sec. 46-551. Hazardous Materials.

Hazardous materials shall comply with this section and Chapters 50 through 67.

- (1) **Specific prohibitions.** The following hazardous materials shall not be stored, handled or used in trade shows and exhibitions:
  - a. Division 1.1, 1.2, 1.3, and 1.5 explosives as classified by the U.S. Department of Transportation.
  - b. Detonable, Class I and Class II organic peroxides.
  - c. Class I-A flammable liquids.
  - d. Class 4 and Class 3 oxidizers.
  - e. Class 4 and Class 3 (unstable) reactive materials.
  - f. Class 3 water-reactive materials.
  - g. Pyrophoric materials.
  - h. Highly toxic materials.
  - i. Toxic gases.
  - j. Fueling or defueling of flammable or combustible that are stored or used as liquids, cryogenics or compressed gases.

# Sec. 46-552. Demonstration cooking and warming equipment or devices.

- (a) **General.** Cooking and warming devices for demonstration purposes only shall be in accordance with Section 3804.9.
- (b) **Public Isolation.** Equipment and devices shall be isolated from the public by not less than 4 feet (1219 mm) or by a noncombustible 3-sided barrier between the equipment and devices and the public.
- (c) **Protection.** Single-well cooking equipment using combustible oils or solids shall meet the following:
  - (1) A noncombustible lid shall be immediately available. The lid shall be of sufficient size to cover the cooking well completely.
  - (2) The cooking surface shall not exceed 288 square inches (1858 cm<sup>2</sup>).
  - (3) The equipment shall be placed on a noncombustible surface.
  - (4) The equipment shall be separated from each other by a horizontal distance of not less than 2 feet (609mm).
- (d) Cooking equipment shall be separated from combustible materials by a horizontal distance of at least 2 feet (609mm).
- (e) **Butane.** Butane for cooking equipment shall be limited to one 10 oz cylinder and one spare in storage, of the same size, per appliance. Storage location shall be approved by the fire code official.
  - (1) **Portable butane-fueled appliances.** Portable butane-fueled appliances are allowed in restaurants and in attended commercial food catering operations where fueled by not more than two 10 oz (284gL) LP-gas capacity, nonrefillable butane containers that have a water capacity not exceeding 1.08 lb (0.5 kg) per container.

The containers shall be directly connected to the appliance, and manifolding of containers is not permitted. Storage of cylinders is limited to 24 containers, with an additional 24 permitted where protected by a 2-hour fire-resistance—rated barrier.

## Division 4. Outdoor Assembly Events.

#### Sec. 46-553. General.

Outdoor assembly events shall be in accordance with this Section 3805 and Chapter 10.

## Sec. 46-554. Occupant load.

The fire code official shall establish an occupant load for the event site.

### Sec. 46-555. Exits.

Exits shall comply with Chapter 10 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 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 staffed water station for each 1,000-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.

### Division 5. Mobile Food Vehicles.

### 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 this section.

**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. Hoods.

A Type I hood shall be installed at or above all commercial cooking appliances and domestic cooking appliances used for commercial purposes that produce grease vapors. Commercial kitchen exhaust hoods shall comply with the requirements of the *International Mechanical Code*.

- (1) **Maintenance.** Hoods shall be inspected, tested, and maintained in accordance with this code and the *International Mechanical Code*.
- (2) **Inspections and tests.** Kitchen hood extinguishing systems shall be inspected and tested every six months by a state of Iowa licensed fire protection contractor.

# Sec. 46-559. Fire extinguishers.

Portable fire extinguishers shall be provided within a 30-foot (9144 mm) travel distance of commercial-type cooking equipment. An approved 2A:20B:C rated dry chemical fire extinguisher shall be provided within 30 feet (9144 mm) of any commercial cooking equipment. Additionally, cooking equipment involving solid fuels or vegetable or animal oils and fats shall be protected by a Class K rated portable extinguisher in accordance with Section 904.12.5.1 or 904.12.5.2, as applicable.

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

LP-gas shall be in accordance with Chapter 61 and NFPA 58.

- (1) **Maximum number and quantity**. A maximum of two LP-gas containers with a total aggregate propane capacity of 50 gallons (190 L) is permitted at one mobile food vehicle.
- (2) **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 within 20 feet (6096 mm) of buildings, tents, canopies or membrane structures.

# Division 6. Special Amusement Buildings.

#### Sec. 46-562. General.

Special amusement buildings shall be in accordance with this section and Section 411 of the International Building Code.

**Exception:** Amusement buildings or portions thereof, which are without walls or a roof and are constructed to prevent the accumulation of smoke.

#### Sec. 46-563. Use of combustible decorative materials.

Use of combustible decorative materials shall be in accordance with Chapter 8.

### Sec. 46-564. Assistance.

Adult monitors with flashlights shall be available to provide assistance in the event someone becomes lost or disoriented. One adult monitor shall be provided for every 60 persons.

## Sec. 46-565. Automatic sprinkler system.

Special amusement buildings shall be equipped throughout with an automatic sprinkler system in accordance with Chapter 9.

# 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. The sprinkler piping shall be connected to a temporary water supply having sufficient capacity (flow and pressure) to supply residential or standard quick spray response sprinkler heads at a minimum design density of 0.15 gpm (.57 LPM) per square foot of protected floor area. The design shall be based on flowing the six most hydraulically remote sprinkler heads. Should the temporary amusement building contain less than six heads, the design shall assume that all heads are flowing simultaneously.

The temporary water supply may be connected to a domestic water line, a fire line, or temporary on-site storage tank as long as the minimum design densities are met. An indicating type control valve shall be installed in an accessible location between the sprinkler system and the connection to the water supply.

#### Division 7. Mazes.

#### Sec. 46-567. General.

Mazes including, but not limited to corn stalk or hedge mazes, shall be in accordance with Section 3808.

- (1) **Safe refuge areas.** Safe refuge areas shall be established outside of the maze or building and structure, and shall not be closer than 50 feet (15240mm).
- (2) **Paths.** Paths throughout the maze shall be a minimum of 36 inches (914mm) in width and shall be clear and unobstructed width.
- (3) **Separation.** A minimum of 20 feet (6096mm) shall be provided between mazes and buildings and structures. The 20-foot (6096mm) clearance shall be free from vegetation and obstructions.
- (4) **Means of egress.** Each exit shall be a minimum of 6 feet (1828mm) wide.
  - a. **Travel distance.** The maximum travel distance to reach an exit access shall not exceed 75 feet (22,860mm). The travel distance shall be determined by using the maze path.
  - b. **Number.** The travel distance required to reach an exit access shall determine the number of exits required. Locking devices shall remain unlocked on exits when the maze is occupied.
  - c. **Exit signs.** Exit signs shall be provided next to or above each exit. The lettering shall be a minimum of 12 inches (305mm) high with 2-inch (51mm) brushstroke. The signs shall read EXIT with lettering in a color contrasting to the sign's background.

# Sec. 46-568. Event plans. The following plans shall be submitted to the fire code official.

- (a) **General fire safety plan.** The plan shall include, but not be limited to procedures that shall be used to prevent over-drying of vegetation throughout the site, documentation of decorative materials flame-retardancy, the maximum number of attendees.
- (b) **Security plan.** The plan shall document who shall provide security (e.g., off-duty police officers, sheriff's posse, employees). All security personnel shall be provided with a 2-way radio and flashlight.
- (c) **Evacuation plans.** The plan shall document the responsibilities of all on-site employees. The plan shall also document how attendees will be evacuated, and where they will be evacuated.
- (d) **Maze rules.** Maze rules shall be posted at maze entrance.

## Sec. 46-569. Employee responsibilities.

Each employee shall be familiar with the evacuation plan and with fire extinguisher locations. Documentation of training shall be provided to the fire code official.

- (1) **Guides.** An employee shall be responsible for guiding a group of not more than 14 attendees through the maze. Each employee shall be provided with a minimum of one flashlight and two-way radio. The employees shall be responsible for detecting and reporting fire or smoke to a competent person posted at the maze main entrance and begin evacuation procedures.
- (2) **Main entrance employee.** Each maze shall be manned by an employee at the entrance. The employee shall be capable of communicating with the employees and shall be provided with a cellular telephone. When the main entrance employee receives a report of smoke, fire or injury, the employee shall immediately call 9-1-1.

## **Sec. 46-570. Watering.**

Corn stalk and hedge mazes shall be provided with sufficient water and at a frequency that prevents the vegetation from becoming dry or brittle. Failure to comply with this provision is an imminent hazard and the fire code official shall issue a stop order.

## Sec. 46-571. Buildings and structures.

When buildings and structures are intended to be occupied by attendees, the building and structure shall comply with Section 3807.

### Division 8. Covered Mall Buildings

**Sec. 46-572. General.** Temporary use of the common pedestrian area within a covered mall building for promotional, Group A, Group E, Group M or similar activities shall be in accordance with Section 3809.

# Sec. 46-573. General requirements.

- (a) **Main aisle width.** Main aisles shall be a minimum of 10 feet (3048mm) in width or the minimum required means of egress width, whichever is greater, and shall be maintained in accordance with Chapter 10. Main aisles shall not be obstructed.
- (b) **Cross aisle width.** Cross aisles shall be a minimum of 15 feet (4572mm) in width or the required means of egress width, whichever is greater, and shall be maintained in accordance with Chapter 10.
- (c) **Fueled equipment.** Liquid- or gas-fueled, or electric appliances, tools, apparatus, craft or vehicles shall be displayed in a mall in accordance with Section 314. LP-gas powered floor maintenance machines may be used when in accordance with Chapter 61.

#### Sec. 46-574. Combustible decorative materials.

Combustible decorative materials shall be in accordance with Chapter 8.

#### Secs. 46-575—579. Reserved

### ARTICLE XIX. FIRE DEPARTMENT ACCESS

### 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 total 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. Access Points.

Insert New Section D104.4 with the following language:

### **D104.4 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 D104.4.1 with the following language:

#### D104.4.1 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. 46-583. One and Two Family Dwellings on a Single Access Road.

Delete Section D107.1 Exception #2 and insert in lieu thereof the following new section:

2. The number of *dwelling units* on a single fire apparatus access road shall not be increased unless alternative fire and life safety measures have been provided, as determined by the *fire code official*. When alternative fire and life safety measures have been implemented, at no time shall the number of dwelling units on a single fire apparatus access road exceed 60 units.

Section 2. This ordinance shall be in full force and effect from and after March 1, 2017 as provided by law.

FORM APPROVED:

Jessica D. Spoden, Assistant City Attorney

T. M. Franklin Cownie, Mayor

### Attest:

I, Diane Rauh, 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. 16-2181), passed by the City Council of said City at a meeting held December 19, 2016 signed by the Mayor on December 19, 2016 and published and provided by law in the Business Record on January 13, 2017. Authorized by Publication Order No. 9887.

