

Legislation Details (With Text)

File #:	100308	Version:	0	Name:	
Type:	Bill	Status:		ENACTED	
File created:	5/6/2010	In control:		Committee on Licenses and Inspections	
On agenda:		Final action:			
Title:	Amending Subcode "F" of Title 4 of The Philadelphia Code, entitled "The Philadelphia Fire Code," by adopting the 2009 edition of the International Code Council Fire Code, with certain amendments thereto, all under certain terms and conditions.				
Sponsors:	Councilmember Sanchez				
Indexes:	FIRE CODE				
Code sections:					
Attachments:	1. CertifiedCopy10030800.pdf				

Date	Ver.	Action By	Action	Result	Tally
6/23/2010	0	MAYOR	SIGNED		
6/17/2010	0	CITY COUNCIL	PASSED	Pass	17:0
6/17/2010	0	CITY COUNCIL	READ		
6/10/2010	0	CITY COUNCIL	ORDERED PLACED ON THIS DAY'S FIRST READING CALENDAR		
6/10/2010	0	CITY COUNCIL	SUSPEND THE RULES OF THE COUNCIL	Pass	
6/10/2010	0	CITY COUNCIL	ORDERED PLACED ON NEXT WEEK'S SECOND READING CALENDAR		
6/9/2010	0	Committee on Licenses and Inspections	HEARING NOTICES SENT		
6/9/2010	0	Committee on Licenses and Inspections	HEARING HELD		
6/9/2010	0	Committee on Licenses and Inspections	REPORTED FAVORABLY, RULE SUSPENSION REQUESTED		
5/6/2010	0	CITY COUNCIL	Referred		
5/6/2010	0	CITY COUNCIL	Introduced	Pass	

Amending Subcode "F" of Title 4 of The Philadelphia Code, entitled "The Philadelphia Fire Code," by adopting the 2009 edition of the International Code Council Fire Code, with certain amendments thereto, all under certain terms and conditions.

THE COUNCIL OF THE CITY OF PHILADELPHIA HEREBY ORDAINS:

SECTION 1. Amend the introductory provisions and Chapter 1 of Subcode "F" of Title 4 of The Philadelphia Code as follows (matter added to The Philadelphia Code is in **bold**; matter deleted from The Philadelphia Code is in ~~strikethrough~~):

SUBCODE "F" (THE PHILADELPHIA FIRE CODE)

ARTICLE F-1.0 Adoption of the 2006 **2009** International Fire Code, with additions, deletions and amendments.

§F-1.1 The “~~2006~~ **2009** International Fire Code” as published by the International Code Council is hereby adopted as the Fire Code of the City of Philadelphia, with such additions, deletions and amendments as set forth in §F-1.2.

§F-1.2 The ~~2006~~ **2009** International Fire Code, copies of which are on file with the Department of Licenses and Inspections, is incorporated as if fully set forth herein, subject to the following additions, deletions and amendments, including errata issued by the International Code Council.

§F-1.2.1 [Brackets] indicate matter deleted. *Italics* indicate matter added.

§F-1.2.2 The numbers of all sections and subsections shall be preceded with the prefix “F-.”

§F-1.2.3 Throughout the code, references to “International” codes or ICC codes shall be deemed to refer to the “Philadelphia” codes of the same name.

§F-1.2.4 THE ~~2006~~ **2009** INTERNATIONAL FIRE CODE:

CHAPTER 1 ADMINISTRATION

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SECTION F-105 PERMITS

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F-105.6 Required Operational Permits. The fire code official is authorized to issue Operational Permits for the operations set forth in Sections F-105.6.1 through F-105.6.47 15.

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F-105.6.2 Amusement buildings. An Operational Permit is required to operate a special amusement building.

F-105.6.3 Aviation facilities. An Operational Permit is required to use a Group H or Group S occupancy for aircraft servicing or repair and aircraft fuel-servicing vehicles. Additional permits required by other Sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.

F-105.6.4 Carnivals and fairs. An Operational Permit is required to conduct a carnival or fair.

*F-105.6.5 **105.6.2** Battery systems. An Operational Permit is required to install stationary lead-acid battery systems having a liquid capacity of more than 50 gallons (189 L).*

F-105.6.6 Cellulose nitrate film. An Operational Permit is required to store, handle or use cellulose nitrate film in a Group A occupancy.

F-105.6.7 Combustible dust-producing operations. An Operational Permit is required to operate a grain elevator, flour starch mill, feed mill, or a plant pulverizing aluminum, coal, cocoa, magnesium, spices or

~~sugar, or other operations producing combustible dusts as defined in Chapter 2.~~

~~F-105.6.8 Combustible fibers. An Operational Permit is required for the storage and handling of combustible fibers in quantities greater than 100 cubic feet (2.8 m³).~~

~~Exception: A permit is not required for agricultural storage.~~

~~F-105.6.9~~ **105.6.3** Compressed gases. An Operational Permit is required for the storage, use or handling at normal temperature and pressure (NTP) of compressed gases in excess of the amounts listed in Table F--105.6.9 **105.6.3**.

~~Exception: Vehicles equipped for and using compressed gas as a fuel for propelling the vehicle.~~

TABLE F-~~105.6.9(1)~~ **105.6.3**
PERMIT AMOUNTS FOR COMPRESSED GASES

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~~F-105.6.10 Covered mall buildings. An Operational Permit is required for:~~

~~1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.~~

~~2. The display of liquid or gas-fired equipment in the mall.~~

~~3. The use of open flame or flame-producing equipment in the mall.~~

~~F-105.6.11~~ **105.6.4** Cryogenic fluids. An Operational Permit is required to produce, store, transport on site, use, handle or dispense cryogenic fluids in excess of the amounts listed in Table F-~~105.6.11~~ **105.6.4**.

~~Exception: Permits are not required for vehicles equipped for and using cryogenic fluids as a fuel for propelling the vehicle or for refrigerating the lading.~~

TABLE F-~~105.6.11~~ **105.6.4**
PERMIT AMOUNTS FOR CRYOGENIC FLUIDS

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~~F-105.6.12~~ **105.6.5** Cutting and welding (**hot work**). An Operational Permit is required to conduct cutting or welding operations. **The permit that is issued is valid for up to one year and includes all cutting and welding operations that are performed.**

~~F-105.6.13~~ **105.6.6** Dry cleaning plants. An Operational Permit is required to engage in the business of dry cleaning or to change to a more hazardous cleaning solvent used in existing dry cleaning equipment.

~~F-105.6.14 Exhibits and trade shows. In lieu of an Operational Permit, exhibits and trade shows shall comply with Section F-408.2 specifically, and other applicable provisions of this code generally.~~

~~F-105.6.15~~ **105.6.7** Explosives. An Operational Permit is required for the manufacture, storage,

handling, sale or use of any quantity of explosive, explosive material, fireworks, or pyrotechnic special effects within the scope of Chapter 33. For the display of fireworks, in lieu of an Operational Permit, an Assisted Operation Permit shall be required in accordance with Sections **F-105.8.1**, **F-105.8.2** and **F-3308.2**.

~~F-105.6.16 Fire hydrants and valves. An Operational Permit is required to use or operate fire hydrants or valves intended for fire suppression purposes which are installed on water systems and accessible to a fire apparatus access road that is open to or generally used by the public.~~

~~Exception: A permit is not required for authorized employees of the Water Department or the Fire Department to use or operate fire hydrants or valves.~~

~~F-105.6.17~~ **105.6.8** Flammable and combustible liquids. An Operational Permit is required:

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3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons (227 L) outside a building, except for fuel oil used in connection with oil-burning equipment. **To ensure compliance with F-603.3.1 and F-603.3, an Operations Permit is required for Class II and Class IIIA fuel oil storage tanks used in connection with oil -burning equipment where the storage exceeds 660 gallons.**

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~~F-105.6.18 Floor finishing. An Operational Permit is required for floor finishing or surfacing operations exceeding 350 square feet (33 m2) using Class I or Class II liquids.~~

~~F-105.6.19 Fruit and crop ripening. An Operational Permit is required to operate a fruit or crop-ripening facility or conduct a fruit-ripening process using ethylene gas.~~

~~F-105.6.20 Fumigation and thermal insecticidal fogging. An Operational Permits is required to operate a business of fumigation or thermal insecticidal fogging and to maintain a room, vault or chamber in which a toxic or flammable fumigant is used.~~

~~F-105.6.21~~ **105.6.9** Hazardous materials. An Operational Permit is required to store, transport on site, dispense, use or handle hazardous materials in excess of the amounts listed in Table ~~F-105.6.21~~ **105.6.9** and for extremely hazardous substances in accordance with Section ~~F-105.6.21.1~~ **105.6.9.1**.

~~TABLE F-105.6.21~~ **105.6.9**
PERMIT AMOUNTS FOR HAZARDOUS MATERIALS

TYPE OF MATERIAL	AMOUNT
Combustible liquids	See Section F-105.6.17 105.6.8
Corrosive materials Gases Liquids Solids	See Section F-105.6.9 105.6.3 55 gallons 1000 pounds
Explosive materials	See Section F-105.6.15 105.6.7
Flammable materials Gases Liquids Solids	See Section F-105.6.9 105.6.3 See Section F-105.6.17 105.6.8 100 pounds

Highly toxic materials Gases Liquids Solids	See Section F- 105.6.9 105.6.3 Any Amount Any Amount
Oxidizing materials Gases Liquids Class 4 Class 3 Class 2 Class 1 Solids Class 4 Class 3 Class 2 Class 1	See Section F- 105.6.9 105.6.3 Any Amount 1 gallon ^a 10 gallons 55 gallons Any Amount 10 pounds ^b 100 pounds 500 pounds

Organic peroxides Liquids Class I Class II Class III Class IV Class V Solids Class I Class II Class III Class IV Class V Any Amount Any Amount 1 gallon 2 gallons No Permit Required Any Amount Any Amount 10 pounds 20 pounds No Permit Required	
Pyrophoric materials Gases Liquids Solids	Any Amount Any Amount Any Amount
Toxic materials Gases Liquids Solids	See Section F- 105.6.9 105.6.3 10 gallons 100 pounds
Unstable (reactive) materials Liquids Class 4 Class 3 Class 2 Class 1 Solids Class 4 Class 3 Class 2 Class 1	Any Amount Any Amount 5 gallons 10 gallons Any Amount Any Amount 50 pounds 100 pounds
Water-reactive materials Liquids Class 3 Class 2 Class 1 Solids Class 3 Class 2 Class 1	Any amount 5 gallons 55 gallons Any amount 50 pounds 500 pounds

For SI: 1 gallon = 3.785 L, 1 pound = 0.454 kg.

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~~F-105.6.21.1~~ **105.6.9.1** * * *

~~F-105.6.22 HPM facilities: An Operational Permit is required to store, handle or use hazardous production materials.~~

~~F-105.6.23 High-piled storage: An Operational Permit is required to use to use a building or portion thereof as a high-piled storage area exceeding 500 square feet (46 m²).~~

~~F-105.6.24 Hot work operations: An Operational Permit is required for hot work including, but not limited to:~~

- ~~1. Public exhibitions and demonstrations where hot work is conducted.~~
- ~~2. Use of portable hot work equipment inside a structure.~~

~~Exception: Work that is conducted under a construction permit.~~

- ~~3. Fixed-site hot work equipment such as welding booths.~~

4. ~~Hot work conducted within a hazardous fire area.~~
5. ~~Application of roof coverings with the use of an open flame device.~~

6. ~~When approved by the Department, the fire code official shall issue a permit to carry out a Hot Work Program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this Chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 26. These permits shall be issued only to their employees or hot work operations under their supervision.~~

~~F-105.6.25 Industrial ovens. An Operational Permit is required for operation of industrial ovens regulated by Chapter 21.~~

~~F-105.6.26 Lumber yards and woodworking plants. An Operational Permit is required for the storage or processing of lumber exceeding 100,000 board feet (8,333 ft³) (236 m³).~~

~~F-105.6.27 Liquid- or gas-fueled vehicles or equipment in assembly buildings. An Operational Permit is required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings.~~

~~F-105.6.28 LP-gas. An Operational Permit is required for the following to the extent the activity is not regulated by the Pennsylvania "Propane and Liquefied Petroleum Gas Act".~~

~~1. Storage and use of LP-gas where a container or containers exceed 60 gallons (227 L) water capacity (nominal 200 pounds LP-gas capacity).~~

~~2. Operation of cargo tankers that transport LP-gas.~~

~~F-105.6.29 105.6.10 * * *~~

~~F-105.6.30 Miscellaneous combustible storage. An Operational Permit is required to store in any building or upon any premises in excess of 2,500 cubic feet (71 m³) gross volume of combustible empty packing cases, boxes, barrels or similar containers, rubber tires, rubber, cork or similar combustible material.~~

~~F-105.6.31 Open burning. An Operational Permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.~~

~~F-105.6.32 Open flames and torches. An Operational Permit is required to remove paint with a torch; or to use a torch or open-flame device in a hazardous fire area.~~

~~F-105.6.33 Open flames and candles. An Operational Permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants or drinking establishments.~~

~~Exceptions:~~

- ~~1. Candles used during religious services.~~
- ~~2. Candles having protected flames and securely supported on substantial noncombustible bases so located as to avoid danger of ignition of combustible materials.~~

~~3. Approved small heating sources, such as alcohol burning devices in spill-proof containers or chaffing-dish holders, used for warming food.~~

~~4. Open flames other than pyrotechnic used in theatrical performances, where approved by the Department.~~

~~F-105.6.34 Organic coatings. An Operational Permit is required for any organic-coating manufacturing operation producing more than 1 gallon (4 L) of an organic coating in one day.~~

~~F-105.6.35 Places of assembly. An Operational Permit is required to operate a place of assembly. The Certificate of Occupancy shall be deemed to be the permit in this instance.~~

~~F-105.6.36 Private fire hydrants. An Operational Permit is required for the removal from service, use or operation of private fire hydrants.~~

~~Exception: A permit is not required for private industry with trained maintenance personnel, private fire brigade or fire departments to maintain, test and use private hydrants.~~

~~F-105.6.37 Pyrotechnic special effects material. An Operational Permit is required for use and handling of pyrotechnic special effects material.~~

~~F-105.6.38 Pyroxylin plastics. An Operational Permit is required for storage or handling of more than 25 pounds (11 kg) of cellulose nitrate (pyroxylin) plastics and for the assembly or manufacture of articles involving pyroxylin plastics.~~

~~F-105.6.39 Refrigeration equipment. An Operational Permit is required to operate a mechanical refrigeration unit or system regulated by Chapter 6.~~

~~F-105.6.40 105.6.11 * * *~~

~~F-105.6.42 Spraying or dipping. An Operational Permit is required to conduct a spraying or dipping operation utilizing flammable or combustible liquids or the application of combustible powders regulated by Chapter 15.~~

~~F-105.6.43 105.6.12 Storage of scrap tires and tire byproducts. An Operational Permit is required to establish, conduct or maintain storage of scrap tires and tire byproducts that exceeds 2,500 cubic feet (71 m³) of total volume of scrap tires and for indoor storage of tires and tire byproducts. **The Operational Permit that is required for this operation shall be the same that is required for waste handling facilities.**~~

~~F-105.6.44 105.6.13 * * *~~

~~F-105.6.44.1 105.6.13.1 * * *~~

~~F-105.6.14. Reserved.~~

~~F-105.6.45 Tire-rebuilding plants. An Operational Permit is required for the operation and maintenance of a tire-rebuilding plant.~~

~~F-105.6.46 105.6.15 Waste handling. An Operational Permit is required for the operation of wrecking~~

and salvage yards, junk yards and waste material-handling facilities.

~~F-105.6.47 Wood products. An Operational Permit is required to store chips, hogged material, lumber or plywood in excess of 200 cubic feet (6 m³).~~

~~F-105.7 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections F-105.7.1 through F-105.7.12~~ **105.7.11.**

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~~F-105.7.8 LP gas. A construction permit is required for installation of or modification to an LP-gas system.~~

~~F-105.7.9~~ **105.7.8** * * *

~~F-105.7.10~~ **105.7.9** * * *

~~F- 105.7.11~~ **105.7.10** * * *

~~F- 105.7.12~~ **105.7.11** * * *

~~F-105.8 Required Assisted Operation Permits. The fire code official is authorized to issue construction permits for work as set forth in Sections F-105.8.1 through F-105.8.2~~

F-105.8.1 Transportation of explosives. An Assisted Operation Permit is required for the transportation of explosives of 1000 pounds (454 kg) or more into or through the City of Philadelphia. A separate permit is required for each movement.

F-105.8.1 Pyrotechnic special effects material. An Assisted Operation Permit is required for use and handling of pyrotechnic special effects material.

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SECTION F-107 BOARD OF SAFETY AND FIRE PREVENTION

F-107.1 Board of Safety and Fire Prevention authorized. Pursuant to Section 3-100(h) and Section 3-917 of the Philadelphia Home Rule Charter, the Mayor may, upon the recommendation of the Fire Commissioner or of his/her own volition, appoint a board to act in an advisory capacity to the Fire Department. This board shall be known as the Board of Safety and Fire Prevention and shall consist of a representative of the Fire Department, a representative of the Department of Licenses and Inspections, and five other members appointed by the Mayor. One of the five shall be a qualified fire protection engineer and another shall be a qualified fire protection specialist **with a background in hazardous materials or in the petroleum industry.** The remaining members shall be persons who are qualified by experience and training to deliberate matters pertaining to hazards of fire, explosion, hazardous conditions, fire protection systems and life safety.

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SECTION 2. Delete Chapters 2 through the end (including Appendix H), of Subcode “F” of The Philadelphia Code, the Philadelphia Fire Code, in its entirety and replace with the following:

CHAPTER 2
DEFINITIONS

* * *

SECTION F-202
GENERAL DEFINITIONS

* * *

DEPARTMENT. For the purpose of this code, the words *Department* and *fire department* shall mean the *Philadelphia Fire Department*.

* * *

FIRE CODE OFFICIAL. The fire chief or other designated authority charged with the administration and enforcement of the code, or a duly authorized representative. *For the purpose of this code, members of the fire department and the Department of Licenses and Inspections are fire code officials.*

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REGULATED FACILITY. See Section F-2702.1.

RELEASE. See Section F-2702.1.

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REPORTABLE QUANTITY. See Section F-2702.1.

* * *

SOCIAL ENTERTAINMENT PURPOSES. Dancing, entertainment by live music or a disc jockey, observing a theatrical or other performance or similar activities. The term shall not include the consumption of food or beverages, listening to a speaker or lecture, watching television, watching or participating in athletic events, or other similar activities.

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SPECIAL ASSEMBLY OCCUPANCY. One of the following if 50 or more people congregate primarily for social entertainment purposes at such location at one or more times during the course of a year: bar, banquet hall, cabaret, discotheque, nightclub, private club, restaurant, tavern and similar places of assembly without primarily fixed seating.

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CHAPTER 3
GENERAL REQUIREMENTS

SECTION 301
GENERAL

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[301.2 Permits. Permits shall be required as set forth in Section 105.6 for the activities or uses regulated by Sections 306, 307, 308 and 315.]

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SECTION F-302
DEFINITIONS

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OPEN BURNING. The burning of materials wherein products of combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. Open burning does not include road flares, smudgepots and similar devices associated with safety or occupational uses typically considered open flames, [recreational fires] *the outdoor cooking of food in appliances designed and manufactured for that purpose*, or use of portable outdoor fireplaces *meeting the requirements of Section 307.1.2*. [For the purpose of this definition, a chamber shall be regarded as enclosed when, during the time combustion occurs, only apertures, ducts, stacks, flues or chimneys necessary to provide combustion air and permit the escape of exhaust gas are open.]

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SECTION 305
IGNITION SOURCES

F-305.1 Clearance from ignition sources. *Clearance of at least 3 feet (914 mm), or greater where required by another section of this code or the manufacturer's instructions*, between ignition sources, such as luminaries, heaters, flame-producing devices and combustible materials, shall be maintained in an approved manner.

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SECTION 307
OPEN BURNING, RECREATIONAL FIRES AND PORTABLE OUTDOOR FIREPLACES

F-307.1 General. A person shall not kindle or maintain or authorize to be kindled or maintained any open burning unless conducted and approved in accordance with this section. *Approval shall mean receiving written approval from the fire department.*

* * *

F-307.1.2. Appliances or containers. Any appliance or container used for open burning shall be constructed of a non-combustible material that is completely enclosed by solid or mesh material. The maximum openings of the mesh material shall not exceed 1 inch (25.4 mm) measured diagonally.

F-307.2 [Permit] *Approval* required. [A permit] *Written approval from the fire department* shall be obtained

[from the *fire code official* in accordance with Section 105.6] prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention or control of disease or pests, or a bonfire. Application for such approval shall only be presented by and [permits] *approval* issued to the owner of the land upon which the fire is to be kindled.

* * *

F-307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet ([3048] 4572 mm) of a structure or combustible material. Outdoor fireplaces shall be constructed of a non-combustible material that is completely enclosed by solid or mesh material. The maximum openings of the mesh material shall not exceed 1 inch (25.4 mm) measured diagonally.

[Exception: Portable outdoor fireplaces used at one- and two-family dwellings.]

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SECTION 308 OPEN FLAMES

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F-308.1.3 Torches for roofing or removing paint. Persons utilizing a torch or other flame-producing device for roofing or removing paint from a structure shall provide a minimum of one portable fire extinguisher complying with Section 906 and with a minimum 4-A rating, two portable fire extinguishers, each with a minimum 2-A rating, or a water hose connected to the water supply on the premises where such burning is done. The person doing the torch work or burning shall remain on the premises 1 hour after the torch or flame-producing device is utilized. Roofing work utilizing a torch or hot-air gun shall be in accordance with NFPA 241.

F-308.1.4 Open-flame cooking devices. Charcoal burners, barbecue grills and other open-flame cooking devices shall not be operated on [combustible] balconies or within 10 feet (3048 mm) of combustible construction.

Exception[s]: [1.] One- and two-family dwellings *provided that LP gas (propane) containers used with cooking devices are at least 5 feet from any building openings.*

[2. Where buildings, balconies and decks are protected by an automatic sprinkler system.

3. LP-gas cooking devices having LP-gas containers with a water capacity not greater than 2-1/2 pounds (nominal 1 pound (0.454 kg) LP-gas capacity).]

F-308.1.5 Location near combustibles. Open flames such as from candles, lanterns, kerosene heaters and gas-fired heaters shall not be located on or near decorative material or [similar] combustible materials. Open flame devices, with the exception of candles, shall be in accordance with Section F-305.1

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F-308.1.9 Portable heating and cooking equipment in buildings. Portable heating and cooking equipment that produces a flame is not permitted in a building.

Exceptions:

1. *Portable heating equipment is permitted in buildings undergoing construction or temporarily without*

heat with written approval from the fire department and in accordance with Section 1403.

2. *Listed and approved portable kerosene heaters are permitted in one- and two-family dwellings when used in accordance with the manufacturer's instructions and Sections 2.1 through 2.4.*

2.1 Heaters shall be located at least 3 feet (914 mm) from combustible materials.

2.2 Heaters shall not be left unattended and shall be shut off before sleeping.

2.3 Heaters shall be refueled outdoors with the heater not in operation.

2.4 Fuel containers for refueling heaters shall be stored outdoors in secure location.

3. *Small containers of a heating source, such as alcohol or paraffin, used for warming food when in spill proof containers or placed in a chaffing dish holder designed for that purpose.*

F-308.2 [Permits] Approval required. [Permits] Written approval from the fire department shall be obtained [from the fire code official in accordance with Section 105.6] prior to engaging in [the following] activities involving open flame, fire and burning[:].

- 1. Use of a torch or flame-producing device to remove paint from a structure.*
- 2. Use of open flame, fire or burning in connection with Group A or E occupancies.*
- 3. Use or operation of torches and other devices, machines or processes liable to start or cause fire in or upon wildfire risk areas.]*

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F-308.3.2 Theatrical performances. Where approved, in writing from the fire department, open-flame devices used in conjunction with theatrical performances are allowed to be used when adequate safety precautions have been taken in accordance with NFPA 160.

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SECTION 311 VACANT PREMISES

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F-311.2.2 Fire protection. Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times.

Exceptions:

- 1. When the premises have been cleared of all combustible materials and debris and, in the opinion of the fire department [code official], the type of construction, fire separation distance and security of the premises do not create a fire hazard.*
- 2. When approved by the fire department [chief], buildings that will not be heated and where fire protection systems will be exposed to freezing temperatures, fire alarm and sprinkler systems are permitted to be placed out of service and standpipes are permitted to be maintained as dry systems (without an automatic water supply), provided the building has no contents or storage, and windows, doors and other openings are secured to prohibited entry by unauthorized persons. During the period a sprinkler system is out of service a sign shall be placed at the fire department connection that states: "Sprinkler System: No Automatic Water Supply."*

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SECTION 315 MISCELLANEOUS COMBUSTIBLE MATERIALS STORAGE

F-315.1 General. Storage, use and handling of miscellaneous combustible materials shall be in accordance with this section. [A permit shall be obtained in accordance with Section 105.6.]

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F-315.2.4 R-2 storage areas, [A]attic, under-floor and concealed spaces. Storage areas of Group R-2 occupancies, [A]attic, under-floor and concealed spaces used for storage of combustible materials shall be protected on the storage side as required for 1-hour fire resistance-rated construction. Openings shall be noncombustible construction or solid wood core not less than 1 ¾ inches (44.5 mm) in thickness. Storage shall not be placed on exposed joists.

Exceptions:

1. Areas protected by approved automatic sprinkler systems.
2. Group R-3 and Group U occupancies.

F-315.3 Outside storage. Outside storage of combustible materials shall not be located within 10 feet (3048 mm) of a property line. *Individual storage piles shall not exceed 5,000 square feet (465 m²) and shall be provided with a fire access lane at least 15 feet (4572 mm) wide between piles.*

Exceptions:

1. The separation distance is allowed to be reduced to 3 feet (914 mm) for storage not exceeding 6 feet (1829 mm) in height.
2. The separation distance is allowed to be reduced when the fire code official determines that no hazard to the adjoining property exists.

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CHAPTER 4 EMERGENCY PLANNING AND PREPAREDNESS

SECTION 401 GENERAL

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F-401.3.2 Alarm activations. Upon activation of a fire alarm signal, employees, [or] staff, *tenants or occupants and the fire alarm signal supervising station* shall immediately notify the fire department.

F-401.3.2.1 Resetting of fire alarm systems. Where a building fire alarm system activates for other than tests or maintenance, owners or occupants shall not reset the system until the fire department arrives and verifies the location of the activated device(s).

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SECTION 404 FIRE SAFETY AND EVACUATION PLANS

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F-404.2 Where required. A[n approved] fire safety and evacuation plan shall be prepared and maintained for

the following occupancies and buildings. *Plans, including voice fire alarm messages, for Groups I-1, I-2 and I-4 occupancies and high-rise buildings shall be approved by the fire department.*

1. Group A, other than Group A occupancies used exclusively for purposes of religious worship that have an occupant load less than 2,000.
2. Group B buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
3. Group E.
4. Group F buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
5. Group H.
6. Group I.
7. Group R-1.
8. Group R-2 college and university buildings.
9. Group R-4.
10. High-rise buildings.
11. Group M buildings having an occupant load of 500 or more persons or more than 100 persons above or below the lowest level of exit discharge.
12. Covered malls exceeding 50,000 square feet (4645 m²) in aggregate floor area.
13. Underground buildings.
14. Buildings with an atrium and having an occupancy in Group A, E or M.

* * *

F-404.3.3 [Lockdown] Shelter-in-place (AKA lockdown) plans All occupancy groups and buildings that are required to have a fire safety and evacuation plan shall also prepare and maintain a shelter-in-place (AKA lock down) plan for sheltering occupants inside the building in the event of an outdoor hazard. The plan shall be placed into effect when notified by local, state or federal officials that an outdoor hazardous materials or biological emergency exists that makes it unsafe for occupants to leave a building. Where facilities develop a [lockdown] shelter-in-place plan, the [lockdown] plan shall be in accordance with Sections F-404.3.3.1 through 404.3.3.3.

F-404.3.3.1 [Lockdown] Shelter-in-place plan contents. [Lockdown] Shelter-in-place plans shall provide for the safety of building occupants from outdoor hazards. Building managers shall identify suitable pre-determined shelter rooms or areas with as few windows, vents and doors as possible. Shelter areas shall contain a water supply for both drinking and toilet facilities. Plans shall require that all doors and windows be shut (and locked where locking provides a tighter seal) and all air handling equipment (heating, ventilation and air conditioning systems) be shut down. [Lockdown] Shelter-in-place plans shall [be approved by the fire code official and shall] include the following:

1. Initiation. The plan shall include instructions for reporting an emergency that requires [a lockdown] sheltering in place.
2. Accountability. The plan shall include accountability procedures for staff to report the presence or absence of occupants.
3. Recall. The plan shall include a prearranged signal for returning to normal activity.
4. Communication and coordination. The plan shall include an approved means of two-way communication between a central location and each secured area.

F-404.3.3.2 Training [frequency] and drills. [The training frequency shall be included in the lockdown plan.] A copy of the shelter-in-place plan shall be given to all employees and tenants. Employees required to assist in carrying out the plan shall receive training at least annually. A shelter-in-

place drill shall be conducted once annually for all occupancies required to have a plan. The [lockdown] shelter-in-place drills shall not substitute for any of the fire and evacuation drills required in Section 405.2. A record of training and drills shall be maintained.

F-404.3.3.3 [Lockdown] *Shelter-in-place* notification. The method of notifying building occupants of a [lockdown] *shelter-in-place* shall be included in the plan. The method of notification shall be separate and distinct from the fire alarm signal.

* * *

SECTION 408 USE AND OCCUPANCY-RELATED REQUIREMENTS

* * *

F-408.2 Group A occupancies. Group A occupancies shall comply with the requirements of Sections 408.2.1 and F-408.2.2 and Sections 401 through 406. *Conventions, trade shows and exhibition events shall be conducted in accordance with fire safety requirements of the fire department and the Department of Licenses and Inspections.*

* * *

F-408.2.2 Announcements. In theaters, motion picture theaters, auditoriums, *Special Assembly Occupancies* and similar assembly occupancies in Group A used for noncontinuous programs, an audible announcement shall be made not more than 10 minutes prior to the start of each program to notify the occupants of the location of the exits to be used in the event of a fire or other emergency. *Places of assembly having continuous entertainment, music or other programs, shall make the announcement at the change of each entertainment set, but no less frequently than every 90 minutes.*

* * *

F-408.12 High-rise buildings. *The fire code official shall inspect high-rise buildings for compliance with this code. The owner, manager or operator of high-rise buildings shall pay an annual inspection fee based on the gross square footage of floor area as set forth in the Philadelphia Administrative Code.*

Exception: Buildings or portions of buildings that are classified as Group R-2 occupancies are subject to the housing inspection license in lieu of the high-rise annual inspection fee.

SECTION F-409 FAMILY CHILD DAY CARE FACILITIES

F-409.1 Family child day care facilities. *Family child day care facilities, as defined in this section, shall conform to Sections F-409.1.1 through F-409.6.2.*

F-409.1.1 Facilities not within a dwelling unit. *A facility that is not located within and accessory to a one- or two-family dwelling in which child day care services are provided for five or fewer children for periods of less than 24 consecutive hours is classified as a Family Child Day Care Facility. Such facilities shall be operated in accordance with The Philadelphia Code and Sections F-409.2 through F-409.4. Additionally, such a Family Child Day Care Facility shall conform to the requirements of*

the occupancy group in which the Family Child Day Care Facility is located.

F-409.1.2 Facilities within a dwelling unit. A dwelling unit where child day care services are provided for 12 or fewer children shall be classified as an R-3 occupancy and as a Family Child Day Care Facility provided that it is in accordance with 1 through 4.

- 1. The dwelling unit is contained within a one- or two-family dwelling.*
- 2. Child day care services are provided for less than 24 hours.*
- 3. The dwelling unit is used primarily as a private residence.*
- 4. The provision of day care services is accessory to the principal use of the dwelling unit as a residence. Such facilities shall be operated in accordance with The Philadelphia Code and Sections F-409.2 through F-409.4 and either F-409.5 or F-409.6 as applicable.*

F-409.2 License. A license to operate a Family Child Day Care Facility shall be obtained from the Department of Licenses and Inspections, which includes an annual fire safety inspection. No license shall be issued under this section unless the applicant has secured a Business Privilege License to the extent required by Title 19 of The Philadelphia Code.

F-409.3 Portable heating devices. Portable heating devices that produce an open flame shall not be used in buildings during the operating hours of a Family Child Day Care Facility.

F-409.4 Fire extinguisher. At least one portable fire extinguisher with a minimum rating of 2-A:10-B:C shall be mounted in the portion of the building used for the Family Child Day Care Facility and in kitchens and other cooking areas used by the Family Child Day Care Facility.

F-409.5 Six or fewer children. Child day-care facilities that are classified as a Group R-3 occupancy pursuant to Section B-310.1 of the Building Code and that provide day-care services to 6 or fewer children within and accessory to a one- or two-family dwelling shall comply with Sections F-409.2 through F-409.5.2.

F-409.5.1 Smoke alarms. A single-station smoke alarm shall be installed in each story including basements. The smoke alarms shall be powered by the building wiring system or lithium batteries listed by Underwriters Laboratories® that are warranted for 10 years and shall sound an alarm when activated that is audible to persons in the dwelling unit's indoor child care spaces with all intervening doors closed. Where battery powered smoke alarms are used, the building owner shall keep the proof and date of purchase of the smoke alarms in the unit's fire drill logs.

F-409.5.2 Means of egress. The dwelling unit and the accessory child day-care facilities shall comply with the means of egress requirements for an R-3 occupancy and licensure under 55 Pa Code Chapter 3290 (relating to family child day care homes).

F-409.6 Seven to 12 children. Child day-care facilities that are classified as Group R-3 occupancies pursuant to Section B-310.1 of the Philadelphia Building Code and that provide day-care services to more than six but no more than 12 children within and accessory to a one- or two-family dwelling shall comply with Sections F-409.2 through F-409.4, F-409.6.1 and F-409.6.2.

F-409.6.1 Smoke alarms. Interconnected multiple-station smoke alarms shall be installed in each story including basements. The smoke alarms shall be powered by the building wiring system and shall sound an alarm when activated that is audible to persons in the dwelling unit's indoor child care spaces with all intervening doors closed.

F-409.6.2 Means of egress. The dwelling unit and the accessory child day-care facilities shall comply with the means of egress requirements for an R-3 occupancy and licensure under 55 Pa Code Chapter 3280 (relating to group child day care homes).

CHAPTER 5 FIRE SERVICE FEATURES

* * *

SECTION 503 FIRE APPARATUS ACCESS ROADS

F-503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3. Deviations from these requirements shall be approved by the fire department.

* * *

F-503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times. Where fencing or other security barricades are erected, an emergency means of access, approved by the fire department, shall be provided.

* * *

F-503.2.3 Surface. Fire apparatus roads shall be designed and maintained to support the imposed loads of fire apparatus (60,000 pounds) and shall be surfaced so as to provide all-weather driving capabilities.

* * *

SECTION 507 FIRE PROTECTION WATER SUPPLIES

* * *

F-507.3 Fire flow. Fire flow [requirements for buildings or portions of buildings and facilities shall be determined by an approved method] (fire fighting water supply via fire hydrants) quantities for new and existing buildings or portions of buildings shall be provided in accordance with Section 507.5.

* * *

F-507.5.1 Where required. Where a portion of the facility or building is located or hereafter constructed or moved into or within the jurisdiction is more than 400 feet (122 m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, the distance requirement shall be 600 feet (183 m).

F-507.5.1.1 Number and location of private fire hydrants. Where private fire hydrants are required by this chapter, one fire hydrant is required for the first 20,000 square feet (1860 m²) or fraction thereof of the gross floor area at grade (footprint) of a building, plus one fire hydrant for each additional 50,000 square feet (4650 m²) or fraction thereof of gross floor area at grade. Where a property has multiple buildings requiring fire hydrants, for those buildings with a gross floor area per building not exceeding 20,000 square feet (1860m²), one fire hydrant is sufficient for that group of buildings provided that each exterior point of a building is within 400 feet (122 m) of a fire hydrant. The exact location of the fire hydrants shall be specified by the fire department after survey of the site or review of building plans to determine the most advantageous locations for fire fighting.

F-507.5.1.2 Water main size. Newly installed water mains that supply private fire hydrants shall not be less than 6 inches (152 mm) in diameter.

F-507.5.1.3 Flow and pressure requirements. Private fire service mains shall provide a minimum flow of 600 gallons per minute (2271 l/min) at a minimum residual pressure of 20 pounds per square inch (138 kPa).

F-507.5.1.4 Type of private fire hydrants. Newly installed private fire hydrants shall be Philadelphia standard fire hydrants as specified by the Philadelphia Water Department. Existing private fire hydrants are acceptable provided the outlets and operating stems are the same as those on a Philadelphia standard fire hydrant. Existing pentagonal (5 sided) operating stems corresponding in dimensions to fire department fire hydrant wrenches are also acceptable.

F-507.5.1.5 Color coding of private fire hydrants. To assist the fire department in quickly locating private fire hydrants during a fire emergency and in identifying those connected to non-potable (untreated) water supplies, the fire hydrants shall be color coded consistent with the Water Department's color coding of municipal fire hydrants in accordance with Sections F-507.5.1.5.1 and F-507.5.1.5.2.

F-507.5.1.5.1 Fire hydrants connected to potable water supplies. Private fire hydrants connected to potable water supplies shall be painted orange, with the bonnet (top portion) color coded to identify the diameter of the water main feeding the fire hydrant as follows:

- 1. Bonnets shall be painted orange for fire hydrants connected to water mains 8 inches (203 mm) or smaller in diameter.*
- 2. Bonnets shall be painted green for fire hydrants connected to water mains 10 inches (254 mm) to 14 inches (356 mm) in diameter.*
- 3. Bonnets shall be painted red for fire hydrants connected to water mains 16 inches (406 mm) or larger in diameter.*

F-507.5.1.5.2 Fire hydrants connected to nonpotable water supplies. Private fire hydrants connected to non-potable water supplies shall be painted entirely red.

F-507.5.2 Inspection, testing and maintenance. Private [F]fire hydrant systems shall be subject to periodic tests as required by [the fire code official] Section 507.5.3. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired where defective. Additions, repairs, alterations and servicing shall comply with approved standards. Annual test records and certifications of private fire hydrants shall contain the name, address and license number of the person performing the test and

shall be submitted in an approved form to the Department of Licenses and Inspections.

* * *

F-507.5.7 Fire apparatus access to private fire hydrants. Private fire hydrants shall be located within 3 feet (914 mm) of a hard, all-weather surface, at least 12 feet (3657 mm) wide, capable of supporting the weight of a fire department pumper at 40,000 pounds (18,160 kg). A clearance of at least 20 feet (6096 mm) on each side of the fire hydrant shall be maintained along the hard, all-weather surface adjoining the fire hydrant.

F-507.5.8 Fire apparatus access to public fire hydrants. A clearance shall be maintained along public streets of 20 feet (6096 mm) on each side of public fire hydrants and vertically to a height of 13 feet, 6 inches (4115 mm). Public fire hydrants shall not be obstructed and shall be maintained in accordance with Section 507.5.4

* * *

SECTION 510 EMERGENCY RESPONDER RADIO COVERAGE

F-510.1 Emergency responder radio coverage in buildings. All buildings shall have approved radio coverage for emergency responders within the building based upon the existing coverage levels of the public safety communication systems of the jurisdiction at the exterior of the building. The radio coverage shall be approved by the fire department. This section shall not require improvement of the existing public safety communication systems.

Exceptions:

1. Where approved by the [building official and the] fire [code official] *department*, a wired communication system in accordance with Section 907.2.13.2 shall be permitted to be installed or maintained in lieu of an approved radio coverage system.
2. Where it is determined by the fire [code official] *department* that the radio coverage system is not needed.

* * *

F-510.3 Emergency responder radio coverage in existing buildings. Existing buildings that do not have approved radio coverage for emergency responders within the building shall be equipped with such coverage according to one of the following:

1. Wherever existing wired communication system cannot be repaired or is being replaced, or where not approved in accordance with Section *F-510.1*, Exception 1.
2. Within a time frame established by the [adopting authority] *fire department*.

CHAPTER 6 BUILDING SERVICES AND SYSTEMS

* * *

SECTION 603 FUEL-FIRED APPLIANCES

* * *

F-603.1.3.1 Oil burner operating controls. Oil burners shall have an electrical means to manually stop the flow of oil to the burner for maintenance and during an emergency at the following locations. The device for maintenance work shall be located at the burner. A secondary emergency device shall be readily accessible a safe distance from the burner (immediately outside the room to the heater or at the top of the stairway where a heater is installed in a basement, but not in a room). All devices shall be labeled.

* * *

F-603.4 Portable unvented heaters. Portable unvented fuel-fired heating equipment shall be prohibited [in occupancies in Groups A, E, I, R-1, R-2, R-3 and R-4] except as permitted by Section F-308.1.9.

[Exceptions:

1. Listed and approved unvented fuel-fired heaters, including portable outdoor gas-fired heating appliances, in one- and two-family dwellings.
2. Portable outdoor gas-fired heating appliances shall be allowed in accordance with Section 603.4.2.]

* * *

SECTION 604 EMERGENCY AND STANDBY POWER SYSTEMS

* * *

F-604.1.1.1 Gas generators. Generators employing natural gas as a fuel shall have the supply equipped with a separate shutoff valve. The valve shall be tagged "Emergency Power Supply - Not to be Shut off During an Emergency."

F-604.1.2 Battery-powered emergency lighting units. Battery-powered emergency lighting units shall be listed for emergency egress lighting and installed in accordance with NFPA 70.

F-604.1.2.1 Testing. Battery-powered emergency lighting units shall be tested monthly for 30 seconds and annually for 90 minutes (or equivalent or unit self-diagnostic testing) while maintaining at least 87-1/2 percent of the rated battery voltage for the duration of the test. A record of all tests shall be maintained and made available upon request of the fire code official.

* * *

SECTION 607 ELEVATOR RECALL AND MAINTENANCE

* * *

F-607.2 Emergency signs. An approved pictorial sign of a standardized design, as indicated in Appendix K, shall be posted adjacent to each elevator call station on all floors instructing occupants to use the exit stairways and not to use the elevators in case of fire. The sign shall read: IN FIRE EMERGENCY, DO NOT USE ELEVATOR. USE EXIT STAIRS (or FIRE STAIRS). The emergency sign shall not be required for elevators that are part of an accessible means of egress complying with Section 1007.4.

* * *

F-607.4 Elevator keys. Keys for the elevator car doors and fire-fighter service keys shall be kept in an approved location for immediate use by the fire department. Elevator keys for emergency use for door access (shaftway door access) and override of normal operations (Phase I recall and Phase II firefighter use) shall be marked as such and readily available at the fire command center or main lobby desk for use by the fire department and other emergency personnel. In buildings without a fire command center or main lobby desk, the keys shall be stored in a break-glass container at the main entrance. There shall be at least two door access keys and at least 6 override keys available for emergency use.

* * *

CHAPTER 7 FIRE-RESISTANCE-RATED CONSTRUCTION

* * *

SECTION 703 FIRE-RESISTANCE-RATED CONSTRUCTION

* * *

F-703.5 Fire resistance rating of existing construction. The following existing construction materials shall be permitted where a 1-hour fire resistance rating is required by this code:

- 1. Wood or metal studding with 5/8-inch fire rated (Type X) gypsum wall board on each side.*
- 2. Wood lathe and plaster.*
- 3. Six-inch or greater hollow or solid CMU (cinder block).*
- 4. Construction having a 1-hour listing by Underwriters Laboratories or other approved testing agency.*

* * *

CHAPTER 8 INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS

* * *

SECTION 805 UPHOLSTERED FURNITURE AND MATTRESSES IN NEW AND EXISTING BUILDINGS

* * *

F-805.2.1.1 Ignition by cigarettes. Newly introduced upholstered furniture shall be shown to resist ignition by cigarettes as determined by tests conducted in accordance with one of the following: (a) mocked-up composites of the upholstered furniture shall have a char length not exceeding 1½ inches (38 mm) when tested in accordance with NFPA 261 or (b) the components of the upholstered furniture shall meet the requirements for Class I when tested in accordance with NFPA 260.

Exception: Upholstered furniture belonging to the patients in sleeping rooms of nursing homes (Group I-

2), provided that a smoke detector *that is part of a fire alarm system or sprinkler system* is installed in such rooms. [Battery-powered, single-station smoke alarms shall be allowed.]

* * *

SECTION 806 DECORATIVE VEGETATION IN NEW AND EXISTING BUILDINGS

* * *

F-806.1.1 Restricted occupancies. Natural cut trees shall be prohibited in [Group A, E, I-1, I-2, I-3, I-4, M, R-1, R-2 and R-4 occupancies] all buildings.

Exceptions: One- and two-family dwellings.

[1. Trees located in areas protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 shall not be prohibited in Groups A, E, M, R-1 and R-2.

2. Trees shall be allowed within dwelling units in Group R-2 occupancies.]

* * *

CHAPTER 9 FIRE PROTECTION SYSTEMS

SECTION 901 GENERAL

* * *

F-901.6 Inspection, testing and maintenance. Fire detection, alarm and extinguishing systems shall be maintained in an operative condition at all times, and shall be replaced or repaired where defective. Nonrequired fire protection systems and equipment shall be inspected, tested and maintained or shall be removed upon obtaining the required permit from the Department of Licenses and Inspections. Periodic testing of fire protection systems shall be in accordance with Section F-915.

* * *

F-901.6.3 Test responsibility and notification. The fire code official shall not be held responsible for any damages incurred during any test required under the provisions of this chapter. When the fire code official requests to be present for a test, the fire code official shall be notified not less than 48 hours before said test is conducted.

F-901.7 Systems out of service. Where a required fire protection system is out of service, the fire department [and the fire code official] shall be notified immediately in accordance with, and under conditions specified in Section F-107.4.1. [and, w]Where required by the fire code official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires. *In the event that the fire watch observes smoke or fire, the fire department shall be notified*

immediately. The fire department shall be notified upon the return of the system to service.

Where a fire watch is required the following are the requirements and duties of the fire watch:

- 1. An adequate number of fire watch personnel shall be on duty to ensure that all areas of a property are inspected every 30 minutes. In multi-story buildings there shall be at least one fire watch for every five floors.*
- 2. At the beginning of the fire watch, fire watch personnel shall notify occupants of the temporary means by which they will be notified of the need to evacuate.*
- 3. Fire watch personnel shall inspect for smoke and fire, and when found, immediately notify the fire department (by telephone or through communication by portable radio to a constantly attended location from which notification to the fire department can be made) and conduct the evacuation of the property. A compressed air horn or other loud sounding device shall be used to alert occupants to evacuate the building if the fire alarm system is out of service.*
- 4. Fire watch personnel shall carry a flashlight where areas of the building are not lighted.*
- 5. Fire watch personnel shall be trained in their duties in accordance with Section 406.3.*
- 6. A log shall be maintained of fire watch activities, including patrols of assigned areas.*

* * *

F-901.7.7 Fire protection systems in vacant buildings. Fire protection systems in vacant buildings shall be maintained in accordance with Section F-311.2.2.

* * *

F-901.10 Certification and licensing. No person shall install, alter, repair, service or test fire alarm systems, automatic fire extinguishing systems or standpipe systems unless that person is certified or licensed as required by the Philadelphia Administrative Code, this code and the regulations issued pursuant thereto.

* * *

SECTION 903 AUTOMATIC SPRINKLER SYSTEMS

* * *

F-903.2.11.1.1.1 Acceptable coverings for openings in windowless stories. Materials for coverings of openings in windowless stories that will not impede fire department fire fighting and rescue are as follows:

- 1. Door openings - doors of metal or wood.*
- 2. Window and other openings:*
 - Wood not exceeding ¾ inches in thickness.*
 - Glass, Plexiglas, fiberglass or plastic not exceeding 1/4 inches in thickness.*
 - Metal sheeting not exceeding 1/8 inches in thickness.*

* * *

F-903.3.7 Fire department connections. The location of fire department connections shall be approved by the fire [code official] department and shall be in accordance with Section 912.

* * *

F-903.6.3 Other existing occupancies. Other existing occupancies and buildings shall have automatic sprinkler systems installed in accordance with F-4603.4.

* * *

SECTION 905 STANDPIPE SYSTEMS

* * *

F-905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14.

Exception: Water supply test data used for the purpose of system design shall not be older than 3 years from the date of submission of the installation plans.

F-905.3.1 Height. Class III standpipe systems shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access. *Buildings not exceeding 75 feet above the lowest level of fire department vehicle access shall have manual wet, automatic wet, automatic dry or semiautomatic dry systems. Buildings exceeding 75 feet above the lowest level of fire department vehicle access shall have automatic wet, automatic dry or semiautomatic dry systems.*

Exceptions:

1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.
2. Class I manual standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet (45 720 mm) above the lowest level of fire department vehicle access.
3. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided that the hose connections are located as required for Class II standpipes in accordance with Section 905.5.
4. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.
5. In determining the lowest level of fire department vehicle access, it shall not be required to consider:
 - 5.1. Recessed loading docks for four vehicles or less, and
 - 5.2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

* * *

F-905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations: *The hose connections shall have a minimum clearance of 8 inches measured from the center of the hose connection in at least one plane to permit the fire department the option of attaching a wye fitting to use two 1-1/2 inch hose lines in lieu of one 2-1/2 inch hose line.*

1. In every required stairway, a hose connection shall be provided for each floor level above or below grade. Hose connections shall be located at an intermediate floor level landing between floors, unless otherwise approved by the fire [code official] department.

Where a building contains stairways in addition to the required exit stairways, the additional stairways are subject to this section where they meet the criteria for exit stairways, including the exit discharge criteria.

Where an additional stairway discharges in accordance with Section F-1027.1, it is subject to the provisions of this section.

2. On each side of the wall adjacent to the exit opening of a horizontal exit.
Exception: Where floor areas adjacent to a horizontal exit are reachable from exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal exit.
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.
Exception: Where floor areas adjacent to an exit passageway are reachable from exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.
4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall.
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a hose connection located either on the roof or at the highest landing of a stairway with stair access to the roof. An additional hose connection shall be provided at the top of the most hydraulically remote standpipe for testing purposes.
6. Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.

* * *

F-905.8 Drystandpipes. Dry standpipes shall not be installed.

Exception: Where subject to freezing and in accordance with NFPA 14, except that manual dry systems are only permitted in accordance with F-905.3.1, Exception #3.

* * *

SECTION 906 PORTABLE FIRE EXTINGUISHERS

* * *

F-906.2 General requirements. Portable fire extinguishers shall be selected, installed and maintained in accordance with this section and NFPA 10. A tag shall be attached to each fire extinguisher indicating inspections and maintenance performed during the past 12 months.

Exceptions:

1. The travel distance to reach an extinguisher shall not apply to the spectator seating portions of Group A-5 occupancies.
2. Thirty-day inspections shall not be required and maintenance shall be allowed to be once every three years for dry-chemical or halogenated agent portable fire extinguishers that are supervised by a listed and approved electronic monitoring device, provided that all of the following conditions are met:
 - 2.1. Electronic monitoring shall confirm that extinguishers are properly positioned, properly charged and unobstructed.
 - 2.2. Loss of power or circuit continuity to the electronic monitoring device shall initiate a trouble signal.
 - 2.3. The extinguishers shall be installed inside of a building or cabinet in a noncorrosive

environment.

- 2.4. Electronic monitoring devices and supervisory circuits shall be tested every three years when extinguisher maintenance is performed.
- 2.5. A written log of required hydrostatic test dates for extinguishers shall be maintained by the owner to verify that hydrostatic tests are conducted at the frequency required by NFPA 10.
3. In Group I-3, portable fire extinguishers shall be permitted to be located at staff locations.

F-906.3 Size and distribution. The size and distribution of portable fire extinguishers shall be in accordance with Sections 906.3.1 through 906.3.4.

Exception: In Group R-2 occupancies, one portable fire extinguisher with a minimum rating of 2-A:10-B:C mounted in each dwelling unit shall be permitted in lieu of mounting them in the common corridors.

* * *

SECTION 907 FIRE ALARM AND DETECTION SYSTEMS

* * *

F-907.1.1 Construction documents. Construction documents for fire alarm systems shall be of sufficient clarity to indicated the location, nature and extend of the work proposed and show in detail that it will conform to the provisions of this code, the International Building Code, and relevant laws, ordinances, rules and regulations, as determined by the [fire] code official.

* * *

F-907.2.1 Group A. A manual fire alarm system that activates the occupant notification system [in] accordance with Section 907.6 shall be installed in Group A occupancies having an occupant load of 300 or more, *and in all Special Assembly Occupancies*. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exceptions:

1. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.
2. *Manual fire alarm boxes are not required in Special Assembly Occupancies where the occupancy is protected throughout with a rate-of-rise heat detection system, provided one manual fire alarm box is installed in a location that is constantly attended by staff during periods of occupancy by the public.*

* * *

F-907.2.1.2 Special Assembly Occupancies. In Special Assemblies Occupancies, a shut-off (shunt trip) device shall be provided to automatically shut off electricity to the circuits controlling audio equipment in the facility upon the activation of the fire alarm system or automatic sprinkler system.

* * *

F-907.2.3 Group E. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group E occupancies. When automatic sprinkler systems or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm.

Exceptions:

1. A manual fire alarm system is not required in Group E occupancies with an occupant load of less than 50, *provided that interconnected smoke alarms are installed in accordance with Section 907.2.11 and a minimum of one smoke alarm is installed in each classroom or child care room.*
2. Manual fire alarm boxes are not required in Group E occupancies where all of the following apply:
 - 2.1. Interior corridors are protected by smoke detectors.
 - 2.2. Auditoriums, cafeterias, gymnasiums and similar areas are protected by heat detectors or other approved detection devices.
 - 2.3. Shops and laboratories involving dusts or vapors are protected by heat detectors or other approved detection devices.
 - 2.4. The capability to activate the evacuation signal from a central point is provided.
 - 2.5. In buildings where normally occupied spaces are provided with a two-way communication system between such spaces and a constantly attended receiving station from where a general evacuation alarm can be sounded, except in locations specifically designated by the fire code official.

* * *

F-907.2.5 Group H. A manual fire alarm system that activates the occupant notification system shall be installed in Group H[-5] occupancies and in occupancies used for the manufacture of organic coatings. An automatic smoke detection system that activates the occupant notification system shall be installed for highly toxic gases, organic peroxides and oxidizers in accordance with Chapters 37, 39 and 40 respectively.

* * *

F-907.2.9 Group R-2. Fire alarm systems and smoke alarms shall be installed in Group R-2 occupancies as required in Sections *F-907.2.9.1* and *F-907.2.9.2*.

F-907.2.9.1. Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.6 shall be installed in Group R-2 occupancies. [where:

1. Any dwelling unit or sleeping unit is located three or more stories above the lowest level of exit discharge;
2. Any dwelling unit or sleeping unit located more than one story below the highest level of exit discharge of exits serving the dwelling unit or sleeping unit; or
3. The building contains more than 16 dwelling units or sleeping units.]

Exceptions:

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, exit court or yard.
2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1026.6, Exception 4.

* * *

F-907.2.11.2 Groups R-2, R-3[,] and R-4 [and I-1]. Single or multiple-smoke alarms shall be installed and maintained in Group R-2, R-3[,] and R-4 [and I-1] regardless of occupant load at all of the following locations:

1. On the ceiling or wall outside of each separate sleeping area in the immediate vicinity of bedrooms.
2. In each room used for sleeping purposes.
[Exception: Single- or multiple-station smoke alarms in Group I-1 shall not be required where smoke detectors are provided in the sleeping rooms as part of an automatic smoke detection system.]
3. In each story within a dwelling unit, including basements but not including crawl spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full story below the upper level.

* * *

F-907.5.2.4 Signs at manual fire alarm boxes. [Where fire alarm systems are not monitored by a supervising station, an approved permanent sign shall be installed adjacent to each manual fire alarm box that reads: WHEN ALARM SOUNDS-CALL FIRE DEPARTMENT] At each manual fire alarm box a sign shall be mounted near the box that states: IN CASE OF FIRE - SOUND ALARM AND CALL FIRE DEPARTMENT (OR 911).

* * *

SECTION 908 EMERGENCY ALARM SYSTEMS

* * *

F-908.7 Carbon monoxide alarms. Carbon monoxide alarms, capable of detection and alarm, shall be installed and maintained, in accordance with the provisions of this section, in any new or existing building with a Group R-3 or Group R-4 occupancy where one or more fossil fuel or wood burning appliances is installed in the building or where a garage is attached to the building. For purposes of this section, a new Group R-3 or Group R-4 occupancy includes any newly constructed building within such classification or any existing building where the classification is changed to an R-3 or R-4 occupancy.

F-908.7.1 Definition of fossil fuel burning appliance. A fossil fuel burning appliance is any appliance or equipment that uses a fuel that produces, among other things, carbon monoxide during the combustion (burning) process. Examples of types of fossil fuel include, but are not limited to coal, charcoal, kerosene, building heating oil, natural (methane) gas and liquefied petroleum gas, such as propane. Examples of fossil fuel burning appliances include, but are not limited to, building heaters, portable kerosene heaters, fireplaces, wood burning stoves, cooking appliances, hot water heaters, or dryers that use one of the fossil fuels.

F-908.7.2 Standards. Every carbon monoxide alarm shall bear the label of a nationally recognized standard testing laboratory, such as Underwriter's Laboratories, indicating that it is appropriate for its intended use. Combination smoke and carbon monoxide alarms shall be permitted.

F-908.7.3 Location. A carbon monoxide alarm shall be installed within 15 feet of the entrance to every

bedroom or within 15 feet of a bed in sleeping areas where there is no enclosed bedroom. It shall be centrally located on a wall or the ceiling, but not directly in front of a door to a bathroom or within 5 feet of a cooking appliance, to prevent false alarms. (Mounting the alarm at eye level accommodates reading the digital display, if the device is so equipped, and changing batteries.) If the alarm is a combination smoke and carbon monoxide alarm, it shall be located in accordance with the installation requirements for smoke alarms.

F-908.7.4 Power source. In all Group R-3 and Group R-4 occupancies, carbon monoxide alarms shall be hard-wired (receiving power from building electricity) and fed from an unswitched portion of a branch circuit. All hard-wired alarms shall have a battery back-up in the event of a power failure. Where more than one hard-wired carbon monoxide alarm is required to be installed in a dwelling unit, rooming unit or sleeping area, the alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit or throughout the Group R-3 or Group R-4 occupancy. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exception: In existing Group R-3 and Group R-4 occupancies, carbon monoxide alarms may be powered by batteries or be plug-in types of alarms powered by building electricity and are not required to be interconnected.

F-908.7.5 Information to tenants. Building owners, having tenants in the building, shall post a notice in a common area of the building informing tenants that the owner of the building is required by law to supply and install carbon monoxide alarms in accordance with Section 908 of the Philadelphia Fire Code, and shall provide at least one tenant per dwelling unit or rooming unit with a copy of the manufacturer's instructions for the alarm to ensure that tenants understand the purpose of carbon monoxide alarms, how they operate and appropriate action to take when an alarm sounds.

F-908.7.6 Installation and maintenance of carbon monoxide alarms. Building owners shall supply and install carbon monoxide alarms. Tenant of a building, or the owner, if a building has no tenants, shall be responsible for the periodic testing and replacement of any batteries for alarms within their dwelling or rooming units, except that the owner shall ensure that the batteries are in operating condition at the time the tenant take possession of the unit. Tenants shall be responsible for notifying the building owner when an alarm is damaged, not operating properly or missing. Carbon monoxide alarms shall be tested in accordance with the manufacturer's instructions, at least monthly. When such alarms are powered by batteries, the batteries shall be replaced in accordance with the manufacturer's instructions and shall not exceed 12 months of use. Alarms indicating low power or having no power shall have the batteries replaced within 2 days.

F-908.7.7 Replacement. The building owner shall replace a carbon monoxide alarm with a new alarm within 30 days of notice that the alarm is damaged, not operating properly or missing. All carbon monoxide alarms shall automatically be replaced by the building owner at the expiration of the manufacturer's life expectancy period as indicated in the manufacturer's instructions or on the back of the device.

F-908.7.8 Tampering, abuse or removal of carbon monoxide alarms. It shall be unlawful for any person to tamper with, damage, render inoperable, or remove and not replace a carbon monoxide alarm required under this section.

F-908.7.9 Verification of carbon monoxide alarms upon sale of building. Upon sale of a building containing a Group R-3 or R-4 occupancy, the seller shall certify to the buyer that carbon monoxide alarms required by Section F-908.7 are installed and in proper operating condition.

* * *

SECTION 912 FIRE DEPARTMENT CONNECTIONS

F-912.1 Installation. Fire department connections shall be installed in accordance with the NFPA standard applicable to the system design and shall comply with Sections *F-912.[2].1.1* through *F-912.6*.

F-912.1.1 Hose connections. Fire department connections shall be based on the system demand and shall include one 2½-inch (64 mm) inlet per every 250 gpm with a minimum of two 2½-inch (64 mm) internal threaded swivel fittings having National Hose standard threads with caps.

Exceptions:

- 1. Manual dry standpipe systems with 6-inch (152 mm) or larger risers shall have three 2½-inch (64 mm) internal threaded swivel fittings having National Hose standard threads with caps.*
- 2. Limited area sprinkler systems installed pursuant to Section 903.3.5.1.1, in other than basements and stories without openings, are not required to have a fire department connection.*
- 3. National Fire Protection Association Standard 13R systems shall have a fire department connection with one 2-1/2-inch (64 mm) internal threaded swivel fitting have National Hose standard threads with a cap, and NFPA 13D systems are not required to have a fire department connection.*

* * *

F-912.2.2 Existing buildings. On Existing building, wherever the fire department connection is not visible to approaching fire apparatus, the fire department connection shall be indicated by an approved sign mounted on the street front or on the side of the building. Such sign shall have the letters “FDC” (Existing signs with the words sprinkler connection or standpipe connection or the words abbreviated are also acceptable.) at least 6 inches (152 mm) high and words in letters at least 2 inches (51 mm) high or an arrow to indicate the location. All such signs shall be subject to the approval of the fire [code official] department.

* * *

F-912.4 Signs. [A metal sign with raised letters at least 1 inch (25 mm) in size shall be mounted on all fire department connections serving automatic sprinklers, standpipes or fire pump connections. Such signs shall read: AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION or a combination thereof as applicable. Where the fire department connection does not serve the entire building, a sign shall be provided indicating the portions of the building served.] *A durable, weather resistant sign shall be mounted at each fire department connection that indicates the type of system (sprinkler, standpipe or combined sprinkler and standpipe). Wording on signs indicating the type of system shall be a minimum 1-inch (25 mm) high. Other information shall be a minimum ½-inch (13 mm) high.*

Where a sprinkler system is not installed throughout a building, the floor or floors where the sprinklers are installed shall be indicated on the sign.

Where standpipe risers are not interconnected, the sign shall indicate in which stairway the standpipe riser that the connection feeds is located. The sign shall also indicate the pressure required at the fire department connection to deliver the system demand.

Where a fire department connection services multiple buildings, structures or locations, the sign shall indicated

the buildings, structures or locations served.

* * *

F-912.6 Inspection, testing and maintenance. All fire department connections shall be periodically inspected, tested and maintained in accordance with NFPA 25. To ensure there is no debris in the piping, the check valve shall be removed annually and the piping back-flushed with water to achieve a full flow through the fire department connection.

SECTION 913 FIRE PUMPS

* * *

F-913.5.5 Lack of suction pressure during the 150 percent test. Where available suction supplies do not allow flow at 150 percent of the rated pump capacity during an annual pump test, the fire pump shall be operated at the maximum allowable discharge. This reduced capacity shall constitute acceptable test criteria, provided the pump is tested to a minimum of 100 percent of its rated capacity before imposing a 10 psi (69 kPa) suction pressure on the city water main.

* * *

SECTION F-915 PERIODIC TESTING OF FIRE PROTECTION SYSTEMS

F-915.1 Periodic testing. Fire protection systems, standby/emergency generators and other emergency electrical systems shall be inspected, tested and maintenance performed in accordance with this code and the referenced standards. Annually the owner of each building that contains standby/emergency generators, automatic fire extinguishing systems, standpipe systems or fire alarm systems shall have such systems certified as operating properly by a person certified or licensed by the Department of Licenses and Inspections to provide such certifications in accordance with regulations promulgated pursuant to this code. Inspection and testing certification forms shall be maintained on the property and made available for inspection upon the request of a fire code official. Systems with deficiencies shall be corrected within the annual certification time frame or comply with Section F-915.1.1.

Exceptions:

- 1. Smoke alarms in residential occupancies provided that they are tested by the building owner in accordance with the manufacturer's instructions.*
- 2. Automatic sprinkler systems in one- and two-family dwellings.*
- 3. Battery-powered emergency lighting units shall be tested in accordance with Section F-604.1.2.1.*

F-915.1.1 Submission of deficiencies. When deficiencies of a fire protection system are not corrected within the annual certification time frame, the contractor performing the annual certification shall submit a list of deficiencies, that precludes certification of the system, in approved form to the Department of Licenses and Inspections.

F-915.1.2 Seal on annual certifications. Certification forms shall be embossed with the impression seal of the company that performed the certification.

F-915.1.3 Intent of annual certifications. The requirement for annual certification is to confirm the proper function of the system(s) previously installed in a building in accordance with the provisions of the referenced codes and standards applicable to existing buildings. This requirement shall not be construed as requiring existing systems to comply with the provisions of codes and standards applicable to new buildings or new systems.

F-915.1.4 Partial certification. When a fire suppression system is repaired, altered or extended between periodic testing dates, the modified portion of the system is required to be certified upon a return to service. When the entire system is certified upon return to service at the owner's discretion, the date of certification will become the new periodic test date.

F-915.1.5 Annual certification of fire suppression system during period of retrofit or new installation. During the period of sprinkler and/or standpipe retrofit or new installation, the normal certification procedures shall continue to apply to existing systems and to completed portions of new installations.

F-915.2 Consistency of required test dates. To ensure consistency of required tests for fire alarm, sprinkler and standpipe systems, tests shall be conducted in accordance with the dates indicated in Sections F-915.2.1 through F-915.2.5.

F-915.2.1 Dry pipe valves. Full flow tests of dry pipe valves shall be required in 2011 and every 3 years thereafter, except those protecting areas that are constantly maintained below a freezing temperature.

F-915.2.2 Standpipe pressure reducing valves. Flow tests of standpipe pressure reducing valves shall be required in 2010 and every 5 years thereafter.

F-915.2.3 Dry standpipe system hydrostatic test. Hydrostatic tests of dry standpipe systems and dry portions of wet standpipe systems shall be required in 2010 and every 5 years thereafter.

F-915.2.4 Standpipe flow test. Standpipe flow tests conducted at the hydraulically most remote hose connection shall be required in 2010 and every 5 years thereafter.

F-915.2.5 Alternate year smoke detector sensitivity testing. Alternate year sensitivity testing shall begin in the odd-number years. When the one-year sensitivity test occurs in an even-numbered year, the next sensitivity test is not due until the second subsequent odd-numbered year. Results of sensitivity tests shall be listed on the annual inspection and certification form.

F-915.3 Annual audibility testing in Groups I-1, R-1, R-2 and R-4. In Group I-1, R-1, R-2 and R-4 occupancies, the annual certification of the fire alarm systems shall contain the results of audibility tests performed in accordance with NFPA 72 in the sleeping rooms of a representative sample of units contained within the building. The specific units tested and the audibility readings taken shall be entered on the annual certification form. The sample shall include as a minimum 1 through 4:

- 1. One of each type of unit contained in the building.*
- 2. The unit or units most remote from the audible alarm notification appliances.*
- 3. Any unit or units with sleeping rooms that are separated from the corridor by building cores, such as elevator cores, stairways, etc.*
- 4. One unit per floor.*

F-915.3.1 Audibility in Group R-2 occupancies. In Group R-2 occupancies where the audibility of existing fire alarm notification devices installed prior to March 1, 1991, does not meet the required audibility within each dwelling unit, the installation of supplemental sounding devices within such dwelling units shall be acceptable as herein provided. The supplemental system shall be a power line carrier system with sounding devices installed in the dwelling units connected to the building's alternating current (ac) power supply. The following shall be required in order for the supplemental sounding device system to be accepted:

- 1. Underwriters Laboratories (UL) listed interface(s) to the existing approved fire alarm system shall accept a dry contact closure or a 6-30 volt ac or direct current (dc) input as a trigger for supplemental alarm transmission. Transmission shall consist of a modulated radio frequency (RF) which shall be determined by a tone/code definition.*
- 2. UL listed amplifier(s) shall couple the modulated RF signal generated by the interface onto all phases of the electrical distribution system and shall have the ability to be adjusted to the impedance of the electrical system in order to maximize modulated RF signal amplitude.*
- 3. UL listed ac plug-in receiver(s) shall detect and decode the modulated RF signal as well as receive power from the ac electrical line(s). When the modulated RF signal is present, an internal 85-decibel (dBA) at 10 feet sounding device shall be activated.*
- 4. Interfaces and amplifiers shall be housed in tamper-proof enclosures.*
- 5. All interconnecting wire from the alarm panel, interface(s), amplifier(s), overload protective devices and electrical connections to the existing electrical system shall be in conduit using tamper-proof boxes as needed.*
- 6. All overload protective devices such as fused safety switches or circuit breakers shall be locked in the "ON" position.*
- 7. Screw tab retainers on the receivers (supplemental sounding devices) shall be present and the use of tamper-proof screws shall be required to reduce the chance of removal of the receiver(s) from the ac outlet.*
- 8. Installation shall be in accordance with the manufacturer's specifications and instructions.*

CHAPTER 10 MEANS OF EGRESS

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SECTION 1004
OCCUPANT LOAD

* * *

F-1004.3.1 Posting of outdoor assembly spaces. Outdoor areas of Group A occupancy on piers, decks, or similar spaces in which the means of egress is restricted by return through a building, passageways, gates, or similar components such that the immediate dispersal of occupants is not possible, shall be posted for the maximum occupant load based on the available width of such egress restrictions at 0.2 inches per occupant, but not exceeding an occupant density of five square feet per person.

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SECTION 1008
DOORS, GATES AND TURNSTILES

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F-1008.1.9.3 Locks and latches. Locks and latches shall be permitted to prevent operation of doors where any of the following exists:

1. Places of detention or restraint.
2. In buildings in occupancy Group A having an occupant load of 300 or less, Groups B, F, M and S, and in places of religious worship, the main exterior door or doors are permitted to be equipped with key-operated locking devices from the egress side provided[.] *that they are in accordance with 2.1 through 2.3.*
 - 2.1. The locking device is readily distinguishable as locked[;].
 - 2.2. A readily visible durable sign is posted on the egress side on or adjacent to the door stating: THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED. The sign shall be in letters 1 inch (25 mm) high on a contrasting background[; and].
 - 2.3. The use of the key-operated locking device is revokable by the building official for due cause.
3. Where egress doors are used in pairs, approved automatic flush bolts shall be permitted to be used, provided that the door leaf having the automatic flush bolts has no doorknob or surface-mounted hardware.
4. Doors from individual dwelling or sleeping units of Group R occupancies having an occupant load of 10 or less are permitted to be equipped with a night latch, dead bolt or security chain, provided such devices are openable from the inside without the use of a key or tool.
5. Fire doors after the minimum elevated temperature has disabled the unlatching mechanism in accordance with listed fire door test procedures.
6. *Where an elevator lobby is separated from the remainder of the floor by partitions and doors and where the elevator lobby does not provide access to the required exits, the doors in the lobby partitions are permitted to be locked from the lobby side provided that the doors conform to Section 1008.1.4.4 or Section 1008.1.9.7.*

* * *

F-1008.1.9.10 Stairway doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
2. This section shall not apply to doors arranged in accordance with Section 403.5.3 of the International Building Code.
3. [In s]Stairway[s serving not more than four stories,] doors are permitted to be locked from the side opposite the egress side, provided they are openable from the egress side and capable of being unlocked simultaneously without unlatching upon [a signal from the fire command center, if present, or a signal by emergency personnel from a single location inside the main entrance to the building] *the activation of the fire alarm system, by a signal from a constantly attended location or a power failure to the locking device.*

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SECTION 1022
EXIT ENCLOSURES

* * *

F-1022.8.1 Signage requirements. Stairway identification signs shall comply with all of the following requirements:

1. The signs shall be a minimum size of 18 inches (457 mm) by 12 inches (305 mm).
2. The letters designating the identification of the stair enclosure shall be a minimum of 1 1/2 inches (38 mm) in height.
3. The number designating the floor level shall be a minimum of 5 inches (127 mm) in height and located in the center of the sign.
4. All other lettering and numbers shall be a minimum of 1 inch (25 mm) in height.
5. Characters and their background shall have a nonglare finish. Characters shall contrast with their background, with either light characters on a dark background or dark characters on a light background.
6. When signs required by Section 1022.8 are installed in interior exit enclosures of buildings subject to Section 1024, the signs shall be made of the same materials as required by Section 1024.4.
7. *Where access to the roof from the exit stair enclosure is not direct, but is available through a room or corridor accessed from the exit stair enclosure, the sign shall include the words "Indirect Roof Access." A properly oriented floor diagram shall be provided at the exit stair landing at the floor level that provides the indirect roof access. The floor diagram shall indicate the route to the door, stair or ladder that leads to the roof and be located at approximately eye level near the stair floor landing sign.*

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SECTION 1030 MAINTENANCE OF THE MEANS OF EGRESS

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F-1030.7 Emergency escape openings. Required emergency escape openings shall be maintained in accordance with the code in effect at the time of construction, *but at a minimum in accordance with Sections 1029.1* and the following: Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Bars, grilles, grates or similar devices are allowed to be placed over emergency escape and rescue openings provided the minimum net clear opening size complies with the code that was in effect at the time of construction and such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the escape and rescue opening.

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CHAPTER 11 AVIATION FACILITIES

SECTION 1101 GENERAL

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F-1101.3 Permits. [For p]Permits [to operate aircraft-refueling vehicles, application of flammable or combustible finishes and hot work, see] *shall be required as set forth in Section 105.6.*

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CHAPTER 13 COMBUSTIBLE DUST-PRODUCING OPERATIONS

SECTION 1301 GENERAL

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F-1301.2 Permits. Permits shall be required [for combustible dust-producing operations] as set forth in Section 105.6.

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CHAPTER 14

FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

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SECTION 1414
AUTOMATIC SPRINKLER SYSTEM

F-1414.1 Completion before occupancy. In buildings where an automatic sprinkler system is required by this code or the International Building Code, it shall be unlawful to occupy any portion of a building or structure until the automatic sprinkler system installation has been tested and approved, except as provided in Section 105.3.4 and to the extent permitted by Section A-701.5 of the Philadelphia Administrative Code.

* * *

SECTION F-1418
ASBESTOS ABATEMENT

F-1418.1 Asbestos Abatement. Asbestos abatement work in buildings shall be in accordance with the following fire safety requirements:

- 1. Materials used in the construction of temporary enclosures shall be noncombustible or flame resistant in accordance with NFPA 701.*
- 2. Means of egress shall not be blocked, unless an alternate exiting plan is approved by the fire code official. Exit doors shall not be held open.*
- 3. Sprinklers, standpipes and other fire suppression systems shall remain in service, unless otherwise approved by the fire code official.*
- 4. A sign shall be posted at the building's fire alarm annunciator panel indicating the areas undergoing asbestos abatement, as well as signs at each abatement area.*
- 5. Each abatement area shall have at least one portable fire extinguisher with a minimum rating of 2-A:10-B:C. All workers shall be instructed in the proper use of the fire extinguisher.*
- 6. In occupied buildings where automatic fire detection is taken out of service, a 24-hour fire watch, making hourly rounds and having a means to contact the Fire Department, shall be provided.*
- 7. In occupied buildings where negative pressure ventilation equipment does not exhaust to outdoor areas, a fire watch shall be provided, as indicated in item 6 above.*

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CHAPTER 22
MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

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SECTION 2203
LOCATION OF DISPENSING DEVICES

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F-2203.3 Vehicle impact protection. Vehicle impact protection shall be provided in accordance with Section 312.

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CHAPTER 23
HIGH-PILED COMBUSTIBLE STORAGE

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SECTION 2303
COMMODITY CLASSIFICATION

* * *

F-2303.7 Classification of plastics. Plastics shall be designated as Group A, B or C in accordance with Sections 2[9]303.7.1 through 2[7]303.7.4.

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CHAPTER 24 TENTS AND OTHER MEMBRANE STRUCTURES

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SECTION 2404 TEMPORARY AND PERMANENT TENTS AND MEMBRANE STRUCTURES

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F-2404.15 Heating, *air conditioning* and cooking equipment. Heating, *air conditioning* and cooking equipment shall be in accordance with Sections F-2404.15.1 through 2404.15.7.

F-2404.15.1 Installation. Heating, *air conditioning* or cooking equipment, tanks, piping, hoses, fittings, valves, tubing and other related components shall be installed as specified in the International Mechanical Code and the International Fuel Gas Code, and shall be approved by the fire code official.

* * *

F-2404.15.3 Location. Cooking and heating equipment shall not be located within 10 feet (3048 mm) of exits or combustible materials. Heating and air conditioning units and fuel and power sources (such as generators) for cooking, heating and air conditioning shall be located at least 10 feet (3048 mm) from the outside of tents and other membrane structures, except LP-gas containers shall be located in accordance with Section 2404.16. Barricades shall be provided around heating and air conditioning units, fuel supplies and ducts. Units shall not be in operation during refueling. While units are in operation, at least one trained person shall monitor their operation.

F-2404.15.4 Operations. Operations such as warming of foods, cooking demonstrations and similar operations that use solid flammables, butane or other similar devices which do not pose an ignition hazard [, shall be approved] *are permitted provided the fuel containers are spill-proof or placed in chafing dish holders.*

F-2404.15.5 Cooking tents. Tents [with sidewalks or drops] where cooking is performed *shall not be used for any other purpose and* shall be separated from other tents or membrane structures by a minimum of 20 feet (6096 mm).

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CHAPTER F-25 VEHICLE SALVAGE, TIRE REBUILDING AND TIRE STORAGE

SECTION 2501 GENERAL

F-2501.1 Scope. Tire rebuilding plants, tire storage and tire byproduct facilities shall comply with this chapter, other applicable requirements of this code and NFPA 13. *Vehicle salvage and wrecking facilities shall comply with Section F-2510 and other applicable requirements of this code.* Tire storage in buildings shall also comply with Chapter 23.

* * *

SECTION F-2510 VEHICLE SALVAGE AND WRECKING FACILITIES

F-2510.1 General. *Facilities conducting vehicle salvage or wrecking operations shall comply with Sections F-2510.2 through F-2510.8.*

F-2510.2 Control of combustibles to prevent fire. Combustible rubbish (trash, debris, etc.) on the exterior of a property performing vehicle salvage or wrecking operations shall be stored in containers with lids. Vegetation (bushes, shrubs, grass, weeds, etc.) shall be kept trimmed to prevent it from becoming a fire hazard. Dead and dying vegetation shall be removed.

F-2510.3 Cutting and welding. Cutting and welding operations shall be in accordance with Chapter 26.

F-2510.4 Portable fire extinguishers. Portable fire extinguishers shall be in accordance with Section F-906.

F-2510.5 Tire storage. Tire storage shall be neat and orderly. The exterior storage of tires shall be in accordance with Section 2505.

F-2510.6 Vehicle fluids. The storage, handling and use of flammable and combustible liquids shall be in accordance with Chapter 34. Fuel shall be removed from vehicle fuel tanks scheduled for salvage or wrecking within 48 hours of the arrival of a vehicle. Fuel tanks not removed from vehicles within 48 hours of arrival shall be filled with water until the tanks are removed. Other fluids shall be removed if leaking, but not later than the start of further salvage or wrecking operations.

F-2510.7 Lead-acid batteries. Lead-acid batteries shall be removed from vehicles if leaking, but not later than the start of further salvage or wrecking operations.

F-2510.8 Burning of vehicle parts. The burning of vehicle parts is prohibited.

CHAPTER 26
WELDING AND OTHER HOTWORK

SECTION 2601
GENERAL

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F-2601.2 Permits. Permits shall be required as set forth in Section 105.6. A hot work program as listed in Section F-105.6.5 shall be approved by the fire department.

F-2601.2.1 Bond required for hot work operations. Before a permit is issued to perform hot work operations, the applicant shall file a bond or proof of public liability and property damage insurance in such form, amount and coverage as determined by the Law Department to be adequate in each case to indemnify the City against any damages arising from the permitted work.

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CHAPTER 27
HAZARDOUS MATERIALS - GENERAL PROVISIONS

SECTION 2701
GENERAL

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F-2701.7 Hazardous material emergency planning and response. Pursuant to SARA Title III and the Pennsylvania Hazardous Material Emergency Planning and Response Act of 1990 (HazMat Act), the requirements of Sections F-2701.7.1 through F-2701.7.10 have been established to provide for hazardous material emergency planning and response:

F-2701.7.1 Philadelphia Local Emergency Planning Committee. The Philadelphia Local Emergency Planning Committee (PLEPC) has been established pursuant to subsection 203(a) of the HazMat Act and is composed as follows:

- 1. Mayor or designee*
- 2. Managing Director or designee*
- 3. Chairperson of the Public Safety Committee of City Council or designee*
- 4. Emergency Management Director of the City*

5. *At least one person from each of the following City departments, agencies or offices:*

- 5.1. *Fire Department*
- 5.2. *Police Department*
- 5.3. *Department of Public Health*
- 5.4. *Law Department*
- 5.5. *City Planning Commission*
- 5.6. *Department of Licenses and Inspections*
- 5.7. *Water Department*
- 5.8. *Streets Department*
- 5.9. *Managing Director's Office of Emergency Management*

6. *At least one person representing each of the following entities or groups:*

- 6.1. *United States Coast Guard Sector Delaware Bay*
- 6.2. *Southeastern Pennsylvania Transportation Authority*
- 6.3. *American Red Cross, Southeastern Pennsylvania Chapter*
- 6.4. *Hospitals and/or health care agencies*
- 6.5. *Environmental advocacy organizations*
- 6.6. *Owners and operators of regulated facilities*
- 6.7. *Community groups not affiliated with emergency service groups*
- 6.8. *Broadcast and print media*
- 6.9. *Railroads and or other transportation carriers*

F-2701.7.2 Appointment of members to PLEPC. Pursuant to the HazMat Act, the members of the PLEPC have been appointed by the Pennsylvania Emergency Management Agency. Should a vacancy occur in the PLEPC, the Emergency Management Services Director shall nominate to the Pennsylvania Emergency Management Agency a successor member who has been nominated by the represented organization or industry in which the vacancy occurs, if applicable. If the vacancy occurs within a represented category (listed in item 6 of Section F-2701.7.1), then the Emergency Management Director shall cause a nominating committee to be formed consisting of PLEPC members to recommend a replacement member, who shall in turn be nominated to the Pennsylvania Emergency Management Agency.

F-2701.7.3 Emergency Management Director. Pursuant to the HazMat Act, the City's Emergency Management Director, who is the person designated by the Mayor to perform emergency management functions, shall have the lead responsibility for ensuring that the plans and activities of PLEPC comply with SARA Title III, the HazMat Act and other applicable statutes, laws and ordinances.

F-2701.7.4 Emergency response plan. The Comprehensive Local Emergency Response Plan (Emergency Response Plan) required by Section 303 of SARA Title III and Section 203(k) of the HazMat Act shall include, but not be limited to, each of the following:

1. *Identification of each Regulated Facility within the City, identification of routes likely to be used for the transportation of substances on the list of Extremely Hazardous Substances and identification of additional facilities contributing or subject to additional risk due to their proximity to the Regulated Facility subject to the requirement of this section, such as hospitals or natural gas facilities.*
2. *Methods and procedures to be followed by Regulated Facility owners and operators and local emergency and medical personnel to respond to any Release of such substances.*
3. *Designation of a community emergency coordinator and Regulated Facility emergency coordinators who shall make determinations necessary to implement the Emergency Response Plan.*
4. *Procedures providing reliable, effective and timely notification by the Regulated Facility emergency coordinators and the City Emergency Management Director to persons designated in the Emergency Response Plan and to the public, that a Release has occurred, consistent with the notification requirements of Section 304 of SARA Title III.*
5. *Methods for determining the occurrence of a Release, and the area of population likely to be affected by such Release.*
6. *A description of emergency equipment and facilities in the City and at each Regulated Facility and an identification of persons responsible for such equipment and facilities.*
7. *Evacuation plans, including provisions for a precautionary evacuation and alternative traffic routes.*
8. *Training programs, including schedules for training of local emergency response and medical personnel. Training shall meet the minimum standards outlined in 29 Code of Federal Regulations 1910.1200, Hazardous Waste Operations and Emergency Response.*
9. *Methods and schedules for exercising the Emergency Response Plan.*

F-2701.7.5 Hazardous Material Emergency Response Preparedness Assessment. The City Emergency Management Director shall develop and submit to the Pennsylvania Emergency Management Agency a Hazardous Material Emergency Response Preparedness Assessment (the Assessment) in accordance with Section 204(a)(3) of the HazMat Act. The Assessment shall be updated annually. The City shall assess the potential dangers and risks that hazardous material Releases from Regulated Facilities and transportation

accidents pose to public health and the environment, identify the City's needs and resources for hazardous material response teams to deal with those dangers and risks and outline its plan for implementing City emergency planning functions under the HazMat Act. The Assessment shall include the following:

1. Potential threats posed by Regulated Facilities required to be included in the City's Emergency Response Plan under Section 303 of SARA Title III, and other concentrations of hazardous material in the City or in areas immediately adjacent to the City that may pose a threat.
2. Potential threats posed by hazardous material transported by highway and railroad in the City.
3. Identification of existing capabilities to respond to hazardous material Releases, including personnel, equipment, training, planning and identification of existing hazardous material response zones.
4. Organization and operation of a certified hazardous material response team under Section 209(e) of the HazMat Act and identification of the need for personnel, equipment, training and planning needed to respond to potential threats, including the designation of proposed levels of preparedness for the City's hazardous material response team.
5. Identification of other resources needed to implement the provisions of the HazMat Act and to support the PLEPC.
6. An audit of the Hazardous Material Emergency Response Account.

F-2701.7.6 Hazardous Material Emergency Response Account. A non-lapsing restricted account, known as the Hazardous Material Emergency Response Account (HazMat Account) and established within the Grants Revenue Fund by the City Finance Department shall consist of all fees authorized by this subsection, City, federal, or state funds, grants, loans or penalties and any private donations provided to finance the hazardous material safety program established pursuant to the HazMat Act. Expenditures from the HazMat Account shall be made pursuant to appropriations from the HazMat Account of the Grants Revenue Fund and consistent with the needs identified in the City's Assessment. The PLEPC shall be consulted with respect to the consistency of proposed expenditures with the needs identified in the assessment.

F-2701.7.7 Hazardous Chemical Fee. By March 1 of every year, each owner or operator of a Regulated Facility shall pay to the City Revenue Department (via the PLEPC Tier II Coordinator), to be deposited in the HazMat Account, a Hazardous Chemical Fee for each hazardous chemical which is required by Section 312 of SARA Title III to be listed on the hazardous chemical inventory form (Tier II) which the owner or operator of a Regulated Facility submits to the PLEPC, provided that no fee may be applied to additional facilities or hazardous materials because of changes made by the United States Environmental Protection Agency in lists of hazardous materials, threshold planning quantities or other requirements under SARA Title III, unless there has been compliance with the provisions of Section 213 of the HazMat Act. A credit in an amount up to 100 percent of the Hazardous Chemical Fee obligation shall be given to Regulated Facility owners or operators for training, equipment or other in-kind services donated to the City to support the hazardous material safety program, if such training, equipment or in-kind services are accepted by the City upon approval of the Emergency Management Director following a review by the PLEPC of a written proposal of donation. The PLEPC shall recommend to the City's Emergency Management Director whether or in what amount a credit for such training, equipment or in-kind services shall be extended to a Regulated Facility owner or operator. Each agreement by the City to accept such a donation in exchange for a credit toward the Hazardous Chemical Fee obligation shall be written, and shall specify the amount of credit to be awarded, based on the fair market value of equipment donated and the agreed-upon value of training or in-kind services donated. The owners or operators of family farm enterprises, service stations (as such terms are defined in the HazMat Act) and Regulated Facilities owned by state and local governments shall be exempt from payment of the fees required in this section.

F-2701.7.8 Emergency Planning Fee. By March 1 of every year, each owner or operator of a Regulated Facility that manufactures, produces, uses, stores, supplies or distributes any Extremely Hazardous Substance in quantities larger than the threshold planning quantities shall pay to the City Revenue Department for each Regulated Facility an Emergency Planning Fee. A credit in the amount of 100 percent of this Emergency Planning Fee shall be available to Regulated Facility owners or operators for training, equipment or other in-kind services donated to the City to support the hazardous material safety program if such training, equipment or in-kind services are accepted by the City in the same manner provided for acceptance of donations credited to the Hazardous Chemical Fee in F-2701.7.7 and are in addition to those for which credit is claimed under F-2701.7.7. The owners or operators of family farm enterprises, service stations (as such terms are defined in the HazMat Act) and Regulated Facilities owned by state and local governments shall be exempt from payment of the fees required by this section.

F-2701.7.9 Limited liability of members of the PLEPC. Pursuant to the HazMat Act, no member of the PLEPC shall be liable for the death of, or any injury to persons or loss or damage to property or the environment or any civil damages resulting from any act or omission arising out of the performance of the functions, duties and responsibilities of the PLEPC, except for acts or omissions which constitute willful misconduct.

F-2701.7.10 Relationship to federal and state laws. The requirements of F-2701.7 shall be read in conjunction with federal and state acts, laws or regulations providing for the identification, labeling or reporting of information concerning hazardous material Releases, and any other health and safety matters related to hazardous materials, and is intended to supplement federal and state

acts, laws and regulations in the interest of protecting the health and safety of the citizens of this City. In those instances where the provisions of F-2701.7 are more comprehensive or stringent than the provisions of an applicable federal or state act, law or regulation, the provisions of Section F-2701.7 shall be controlling.

F-2701.8 Emergency information required on site. Material Safety Data Sheets, for quantities of hazardous materials requiring a permit in accordance with Section F-105.6 or a Tier II Chemical Inventory Form required by Subtitle B, Sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III), shall be stored on the exterior of a facility (building wall, fence, post mounted, etc.) in an Emergency Information Container at a location readily available to emergency responders on a 24-hour basis. The container shall be weather-resistant and locked by a padlock. The location of the container shall be subject to approval by the fire department.

Exceptions:

- 1. Facilities with an emergency control center staffed 24-hours per day are permitted to provide the required information by an alternative means approved by the fire department.*
- 2. Facilities utilizing an off-site electronic records storage company to maintain their MSDS records provided the arrangement is approved by the fire department.*
- 3. Where the number of MSDS is too large to store in the Emergency Information Container, information in the container shall indicate the location of the on-site MSDS, provided they are readily available for utilization by emergency response personnel and the location is approved by the fire department.*

F-2701.8.1. Contents of Emergency Information Container. Where required by Section F-2701.8 to provide emergency Information available on a 24-hour basis, the Emergency Information Container shall contain the following information for a facility. The information shall be updated whenever a change occurs.

- 1. Material Safety Data Sheets (MSDS) stored in a binder and filed in alphabetical order by chemical name.*
- 2. Hazardous Materials Management Plan (see Section 2701.5.1)*
- 3. Hazardous Materials Inventory Statement (see Section 2701.5.2)*
- 4. Name and telephone number of facility personnel knowledgeable in facility operations and emergency procedures to call in the event of an emergency.*

F-2701.8.2 Security of Emergency Information Containers. Where an Emergency Information Container is required and there is a concern that it is subject to being vandalized, installation of the container is permitted to a maximum height of 10 feet (3048 mm).

F-2701.9 Equipment containing polychlorinated biphenyls. Facilities shall be in compliance with the proper marking, use, storage, disposal and record keeping requirements for polychlorinated biphenyls (PCBs) in the United States Environmental Protection Agency, 40 Code of Federal Regulations (CFR), Part 761. In general, the CFR requires equipment containing PCBs exceeding 500 parts per million (ppm) to be marked: CAUTION - CONTAINS PCBs. Marking of equipment containing between 50 and 500 ppm PCBs is optional, but if marked shall read: PCB CONTAMINATED. The location of equipment marked pursuant to federal regulation shall be reported to the Fire Department.

F-2701.9.1 Inspection of PCB equipment. The fire department is authorized to conduct inspections of equipment containing PCBs for compliance with federal and other safety regulations.

F-2701.10. Chemical plant/refinery emergency coordination. Chemical plants and refineries shall plan, train and exercise with the Fire Department, the Managing Director's Office of Emergency Management and other City agencies to establish and maintain operating procedures and equipment to be used during fires or other emergencies at a facility.

F-2701.10.1 Emergency procedures. Facilities that have hazardous materials in quantities exceeding 10,000 pounds (4540 kg) or who have extremely hazardous substances as regulated by the Environmental Protection Agency (EPA) and Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and appearing on the EPA's Community Right to Know Chemical List shall prepare procedures to be followed during an emergency at their facility, including the immediate notification of the Fire Department. A copy of the procedures shall be sent to the fire department and the Philadelphia Local Emergency Planning Committee. Managers shall ensure that employees are knowledgeable of their responsibilities during emergencies. Emergency procedures shall be posted in prominent locations throughout a facility.

F-2701.10.2 Facilities with in-plant fire brigades. Petroleum refineries and chemical plants with in-plant fire brigades shall assign knowledgeable personnel to all operating shifts to act as plant emergency coordinators who shall be responsible for coordinating with fire department and other emergency officials during fires or other emergencies.

F-2701.10.2.1 Review of emergency procedures. Annually, the designated coordinator of a facility with an in-plant fire brigade shall meet with the Deputy Commissioner of Operations of the fire department and the Emergency Management Director, or

their designees, to review and coordinate plant fire fighting and emergency procedures to ensure that their procedures are compatible with fire department operations and the City's emergency management plan. Emergency procedures and training should be consistent with NFPA 30.

F-2701.10.2.2 Communications during an emergency. Facilities with in-plant fire brigades shall have two portable radios capable of receiving and transmitting on the fire department's fireground radio frequencies. The radios shall be for use by plant emergency coordinators to maintain communications with fire department personnel during emergencies.

SECTION 2702 DEFINITIONS

F-2702.1 Definitions. The following words and terms shall, for the purposes of this chapter, Chapters 28 through 44, and as used elsewhere in this code, have the meanings shown herein.

* * *

HAZARDOUS MATERIALS. Those chemicals or substances which are physical hazards or health hazards as defined and classified in this chapter, whether the materials are in usable or waste condition. *Hazardous materials shall also include any of the following as defined in the Pennsylvania HazMat Act or regulations promulgated thereto:*

1. *A hazardous substance.*
2. *An extremely hazardous substance.*
3. *A hazardous chemical.*
- 1) 4. *wrapdefaultA toxic chemical.*

* * *

REGULATED FACILITY. *All buildings, structures and other stationary items which are located on a single site or on a contiguous or adjacent site and which are owned or operated by the same person and which actually manufacture, produce, use, transfer, store, supply or distribute any hazardous material and which are subject to the requirements of Section 303 of SARA Title III. The term includes railroad yards and truck terminals, but does not include individual trucks, rolling stock, water vessels, airplanes or other transportation vehicles.*

RELEASE. *Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment of a hazardous material, including, but not limited to, the abandonment or discarding of barrels, containers and other receptacles containing a hazardous material.*

REPORTABLE QUANTITY. *The quantity of a hazardous material stated on the various lists of hazardous substances and extremely hazardous substances as defined in this section, the release of which has been deemed to constitute a substantial danger to the public health or welfare or environment and is therefore designated as the threshold quantity necessitating reports of releases pursuant to Section 102 of CERCLA and the HazMat Act.*

* * *

SECTION 2703 GENERAL REQUIREMENTS

* * *

F-2703.3.1.2 Mitigation of hazard [Preparation]. Provisions shall be made for controlling and mitigating unauthorized discharges. Where a discharge cannot be cleaned up by on-site personnel with materials on hand, this shall constitute a hazardous condition and shall be immediately reported to the fire department.

* * *

F-2703.4 Material Safety Data Sheets. Material Safety Data Sheets (MSDS) shall be readily available on the premises for hazardous materials regulated by this chapter and maintained in accordance with Section F-2701.8. When a hazardous substance is developed in a laboratory, available information shall be documented.

* * *

CHAPTER 33
EXPLOSIVES AND FIREWORKS

SECTION 3301
GENERAL

* * *

F-3301.1.3 Fireworks and illegal explosives. The possession, manufacture, storage, sale, handling and use of fireworks *and illegal or forbidden explosives (sometimes referred to as fireworks)* are prohibited. *(See Section F-3302.1 for the definition of illegal or forbidden explosives.)*

Exceptions:

1. Storage and handling of fireworks as allowed in Section 3304 *when approved by the fire department.*
- [2. Manufacture, assembly and testing of fireworks as allowed in Section 3305.
- 3] 2. The use of fireworks for fireworks displays as allowed in Section 3308 *when approved by the fire department.*
- [4] 3. The possession, storage, sale, handling and use of [specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided such fireworks comply with CPSC 16 CFR, Parts 1500 and 1507, and DOTn 49 CFR, Parts 100-185, for consumer fireworks] *items designed to produce an audible or visual effect as follows.*
 - 3.1. *Starter pistols for sporting or theatrical events, or toy caps and similar non-projectile items containing not more than 16.2 milligrams (0.25 grains) of pyrotechnic composition per cap or item.*
 - 3.2. *Snappers containing not more than 1 milligram (0.02 grains) of pyrotechnic composition.*
 - 3.3. *Sparklers containing not more than 100 grams (3.5 ounces) of pyrotechnic composition per sparkler.*
 - 3.4. *Other novelty effects containing not more than 50 milligrams (0.8 grains) of pyrotechnic composition per effect, and that have no projectile components.*

* * *

F-3301.2 Permit required. Permits shall be required as set forth in Section F-105.6, *F-105.8* and regulated in accordance with this section. *Applications for the use of explosives for building demolitions shall be submitted at least 90 days in advance of the proposed date and for all other uses at least 21 days in advance. Applicants shall also follow the specific requirements of the various city departments charged with ensuring the safe demolition of buildings by explosives.*

* * *

F-3301.2.3.1 Limitation on demolition. *Demolition of buildings or structures by explosives is prohibited during the time period from December 16 to March 1, unless permission is granted by the Managing Director's Office.*

* * *

F-3301.2.4 Financial responsibility. Before a permit is issued, as required by Section *F-3301.2*, the applicant shall file with the [jurisdiction] *City* a corporate surety bond [in the principal sum of \$100,000] or a *certificate of public liability and property damage insurance [policy for the same amount] from an insurance company authorized to write such insurance in the Commonwealth of Pennsylvania, in an amount determined by the City,* for the purpose of the payment of all damages to persons or property which arise from, or are caused by, the conduct of any act authorized by the permit upon which any judicial judgment results. The fire code official is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this bond requirement.

All costs associated with the clean-up of dust and debris from demolition by explosives shall be borne by the contractor. All costs for cold weather provisions for demolition by explosives, including water additives, shall be borne by the contractor.

* * *

F-3301.2.5 Use of explosives for other than building demolition. *Persons desiring to use explosives for purposes other than the demolition of a building are required to do the following, in addition to the other requirements of this chapter:*

1. *An application for an "Operational Permit - Use of Explosives" shall be submitted to the Managing Director's Office, fire department and Department of Licenses and Inspections at least 21 days in advance of the requested blasting date.*

2. *The City Councilmember elected from the district in which the explosives are to be used shall be notified at least 21 days in advance of the requested blasting date and prior to any community announcements or notifications.*
3. *A community meeting shall be held to inform neighborhood residents of the proposed blasting date and the precautions that will be undertaken to assure the safety of residents and their property. The meeting notice must appear in one newspaper of citywide distribution and one community-based newspaper. The date, time and location of the community meeting shall be determined by the Managing Director's Office after consultation with the district Councilmember.*
4. *A printed announcement indicating the blasting date, safety precautions and telephone numbers of officials from the blasting company shall be individually distributed to each property owner in the affected surrounding area. The Managing Director's Office shall determine the affected surrounding area after consultation with the district Councilmember.*

F-3301.3 Prohibited explosives. Permits shall not be issued or renewed for possession, manufacture, storage, handling, sale or use of the following materials and such materials currently in storage or use shall be disposed of in an approved manner.

1. Liquid nitroglycerin.
2. Dynamite containing more than 60-percent liquid explosive ingredient.
3. Dynamite having an unsatisfactory absorbent or one that permits leakage of a liquid explosive ingredient under any conditions liable to exist during storage.
4. Nitrocellulose in a dry and uncompressed condition in a quantity greater than 10 pounds (4.54 kg) of net weight in one package.
5. Fulminate of mercury in a dry condition and fulminate of all other metals in any condition except as a component of manufactured articles not hereinafter forbidden.
6. Explosive compositions that ignite spontaneously or undergo marked decomposition, rendering the products of their use more hazardous, when subjected for 48 consecutive hours or less to a temperature of 167°F(75°C).
7. New explosive materials until approved by DOTn, except that permits are allowed to be issued to educational, governmental or industrial laboratories for instructional or research purposes.
8. Explosive materials condemned by DOTn.
9. Explosive materials containing an ammonium salt and a chlorate.
10. Explosives not packed or marked as required by DOTn 49 CFR, Parts 100-185.
11. *Illegal or forbidden explosives as described in Sections F-3301.1.3 and F-3302.1.*

Exception: Gelatin dynamite.

F-3301.4 Qualifications. Persons in charge of magazines, blasting, fireworks display or pyrotechnic special effect operations shall not be under the influence of alcohol or drugs which impair sensory or motor skills, shall be at least 21 years of age and shall demonstrate knowledge of all safety precautions related to the storage, handling or use of explosives, explosive materials or fireworks. *Prior to the issuance of a permit to use the above materials, the fire department shall determine whether the user has the necessary qualifications to protect against health and safety hazards.*

* * *

SECTION 3302 DEFINITIONS

F-3302.1 Definitions. The following words and terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings shown herein.

* * *

ILLEGAL OR FORBIDDEN EXPLOSIVES. *Illegal or forbidden explosives are explosive devices as described in the Code of Federal Regulations (CFR), Title 16, Section 1500.17(3) and those items or materials that have not been tested and approved by the Federal Department of Transportation as indicated in the CFR, Title 49, Section 173.54. Illegal or forbidden explosives, as indicated in the CFR, include devices commonly referred to as M-80, M-100, M-250, M-1000, quarter or half stick, blockbuster or cherry bomb.*

* * *

SECTION 3305 MANUFACTURE, ASSEMBLY AND TESTING OF EXPLOSIVES, EXPLOSIVE MATERIALS AND FIREWORKS

F-3305.1 General. The manufacture, assembly and testing of explosives, ammunition, blasting agents and fireworks shall comply with the requirements of this section and NFPA 495 or NFPA 1124. *Prior to issuance of a permit, approval shall be obtained from the police department for the use of explosives and blasting agents and from the fire department for the use of fireworks.*

Exceptions:

1. The hand loading of small arms ammunition prepared for personal use and not offered for resale.
2. The mixing and loading of blasting agents at blasting sites in accordance with NFPA 495.
3. The use of binary explosives or phosphoric materials in blasting or pyrotechnic special effects applications in accordance with NFPA 495 or NFPA 1126.

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SECTION 3308 FIREWORKS DISPLAY

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F-3308.2 Permit application. Prior to issuing permits for a fireworks display, plans for the fireworks display, inspections of the display site and demonstrations of the display operations shall be approved. A plan establishing procedures to follow and action to be taken in the event that a shell fails to ignite in, or discharge from, a mortar or fails to function over the fallout area or other malfunctions shall be provided to the fire [code official] department.

Applications for Assisted Operation Permits for fireworks and pyrotechnic displays shall be submitted at least 15 days in advance of the event. Prior to the issuance of a permit for fireworks displays, the applicant shall submit a diagram of the site, type and number of fireworks and/or pyrotechnic effects, qualifications of the operator and proof of insurance. Approval by the fire department is required for all fireworks and pyrotechnic displays. Launching racks shall be in accordance with requirements of the fire department.

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CHAPTER 34 FLAMMABLE AND COMBUSTIBLE LIQUIDS

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SECTION 3404 STORAGE

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F-3404.2.9.6.1 Locations where above-ground tanks are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited [within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Ordinance for Adoption of the *International Fire Code* on page v)] *on premises accessible by the public.*

* * *

F-3404.2.11 Underground tanks. Underground storage of flammable and combustible liquids in tanks shall comply with Section 3404.2 and Sections 3404.2.11.1 through 3404.2.11.5.2. *Underground storage tanks newly installed or repaired shall be inspected by the Department of Licenses and Inspections prior to the tank being covered. An inspection shall be made within 48 hours, exclusive of weekends and holidays, of the receipt of a written request for inspection.*

* * *

F-3404.2.11.2 Location. Flammable and combustible liquid storage tanks located underground, either outside or under buildings, shall be in accordance with all of the following:

1. Tanks shall be located with respect to existing foundations and supports such that the loads carried by the latter cannot be transmitted to the tank.

2. The distance from any part of a tank storing liquids to the nearest wall of a basement, pit, cellar or lot line shall not be less than 3 feet (914 mm).
3. A minimum distance of 1 foot (305 mm), shell to shell, shall be maintained between underground tanks.
4. *Underground storage tanks and piping newly installed within 100 feet (30,480 mm) of a subway or below-grade concourse shall be double wall with interstitial space monitoring to detect leaks.*

* * *

F-3404.2.12.2.1 Periodic testing of underground tanks. Every 5 years, or more frequently where required by the manufacturer's instructions, underground tanks shall be tested for tightness in accordance with NFPA 329, Section 21.5.2. A leak shall exist if the net change exceeds 0.1 gallons (0.4 l) per hour.

Exception: Underground tank systems that have automatic tank gauging, inventory reconciliation analysis or secondary containment with interstitial monitoring.

* * *

F-3404.2.13.1.4 Tanks abandoned in place. Tanks abandoned in place shall be as follows:

1. Flammable and combustible liquids shall be removed from the tank and connected piping.
2. The suction, inlet, gauge, vapor return and vapor lines shall be disconnected.
3. The tank shall be filled completely with an approved inert solid material.
4. Remaining underground piping shall be capped or plugged.
5. A record of tank size, location and date of abandonment shall be retained.
6. All exterior above-grade fill piping shall be permanently removed when tanks are abandoned or removed.
7. *A site assessment, to determine if there is any soil or ground water contamination, shall be conducted in accordance with requirements of the Pennsylvania Department of Environmental Protection (PADEP). The site assessment report shall be performed for all abandoned tanks, including those not regulated by PADEP. A copy of the site assessment, documentation of any required site remediation and a closure report shall be maintained by the property owner.*

* * *

SECTION 3406 SPECIAL OPERATIONS

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F-3406.2.4.4 Locations where above-ground tanks are prohibited. The storage of Class I and II liquids in above-ground tanks is prohibited [within the limits established by law as the limits of districts in which such storage is prohibited (see Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page v)] on premises accessible by the public. The storage of Class I, II and IIIA liquids in above-ground tanks on farms and at construction sites shall be approved by the fire department if, after a review of the fire hazards at the location and the capacity of the tank, the fire department determines that it is safe to install an above-ground tank. Tanks approved for use at construction sites shall be double-wall tanks.

* * *

F3406.2.5.2 Tanks for gravity discharge. Tanks with a connection in the bottom or the end for gravity-dispensing liquids shall be mounted and equipped as follows:

1. Supports and harnesses to elevate the tank for gravity discharge shall be designed to carry all required loads and provide stability. *Documentation from the tank manufacturer, an authorized representative of the tank manufacturer or a professional engineer shall be provided to verify compliance with this requirement.*
2. Bottom or end openings for gravity discharge shall be equipped with a valve located adjacent to the tank shell which will close automatically in the event of fire through the operation of an effective heat-activated releasing device. Where this valve cannot be operated manually, it shall be supplemented by a second, manually operated valve.

The gravity discharge outlet shall be provided with an approved hose equipped with a self-closing valve at the discharge end of a type that can be padlocked to its hanger.

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CHAPTER 38
LIQUEFIED PETROLEUM GASES

SECTION 3801
GENERAL

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[3801.2 Permits. Permits shall be required as set forth in Sections 105.6 and 105.7.

Distributors shall not fill an LP-gas container for which a permit is required unless a permit for installation has been issued for that location by the fire code official.]

F-3801.[3]2 Construction documents. [Where a single LP-gas container is more than 2,000 gallons (7570 L) in water capacity or the aggregate water capacity of LP-gas containers is more than 4,000 gallons (15 140 L), the installer shall submit construction documents for such installation.] Construction documents and a site plan shall be submitted to the fire department for all temporary or permanent installations of LP-gas in accordance with F-3804.2.

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SECTION 3803
INSTALLATION OF EQUIPMENT

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F-3803.2.1.5 Demonstration and entertainment uses. Portable LP-gas containers are allowed to be used temporarily for demonstrations, [and] public exhibitions and entertainment performances. Such containers shall not exceed a water capacity of 12 pounds (5 kg) (5 pounds gas capacity). Where more than one such container is present in the same room, each container shall be separated from other containers by a distance of not less than 20 feet (6096 mm).

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SECTION 3804
LOCATION OF LP-GAS CONTAINERS

* * *

F-3804.2 [Maximum capacity within established limits] Fire safety in heavily populated or congested areas. [Within the limits established by law restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L) (see Section 3 of the Sample Ordinance for Adoption of the International Fire Code on page xiii)] Due to most areas of the City of Philadelphia being heavily populated or congested, the fire department shall review all applications and installations for LP-gas to ensure they are in compliance with the requirements of the Pennsylvania Propane and Liquefied Petroleum Gas Act of 2002 and NFPA 54 and 58.

[Exception: In particular installations, this capacity limit shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-gas containers, degree of fire protection to be provided and capabilities of the local fire department.]

* * *

CHAPTER 46
CONSTRUCTION REQUIREMENTS FOR EXISTING BUILDINGS

SECTION 4601
GENERAL

* * *

F-4601.5 Installation, inspection, testing and maintenance of fire protection systems. The installation, inspection, testing and

maintenance of fire protection systems in existing buildings shall be in accordance with Sections 901 and 907.9.5 and conducted by a contractor licensed by the Department of Licenses and Inspections (L&I). Annually certification of testing shall be provided to L&I on approved forms.

Exception: Building owners are permitted to perform inspection, testing and maintenance of smoke alarms and inspection and maintenance of NFPA 13D and limited area sprinkler systems in accordance with the manufacturer's instructions.

* * *

SECTION 4603 FIRE SAFETY REQUIREMENTS FOR EXISTING BUILDINGS

F-4603.1 Required construction. Existing buildings shall comply with not less than the minimum provisions specified in Table 4603.1 and as further enumerated in Sections 4603.2 through F-460[3.7.3]4.26 and other chapters where application to existing buildings is indicated.

The provisions of this chapter shall not be construed to allow the elimination of fire protection systems or a reduction in the level of fire safety provided in buildings constructed in accordance with previously adopted codes.

Exception: Group U occupancies.

* * *

F-4603.3.2 Three [to five] stories. In other than Group I occupancies, interior vertical openings connecting [three to five] 3 stories shall be protected by either 1-hour fire-resistance-rated construction or an automatic sprinkler system shall be installed throughout the building in accordance with Section 903.3.1.1 or 903.3.1.2.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.
3. Vertical opening protection is not required for escalators.

F-4603.3.3 More than [five] three stories. In other than Group I occupancies, interior vertical openings connecting more than [five] 3 stories shall be protected by 1-hour fire-resistance-rated construction.

Exceptions:

1. Vertical opening protection is not required for Group R-3 occupancies.
2. Vertical opening protection is not required for open parking garages and ramps.
3. Vertical opening protection is not required for escalators.

* * *

F-4603.4 Sprinkler systems. An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 4603.4.1 [and] through F-4603.4.[2]8. New installations shall be in accordance with Section 903.3.

* * *

F-4603.4.2 Basements without openings. Basements in existing buildings exceeding 2500 square feet (232 m²) without openings that conform to the provisions of Section 903.2.11.1 and its subsections shall be equipped with an approved automatic fire sprinkler system.

Exceptions:

1. Basements containing no occupancy or storage, excluding permanently installed building service equipment, but not excluding oil cooled electrical equipment.
2. Group R-3 and Group U occupancies.

F-4603.4.3 High-hazard occupancies. An automatic fire extinguishing system shall be installed throughout existing high-hazard occupancies.

F-4603.4.4 High-rise buildings. An automatic fire extinguishing system shall be installed throughout existing high-rise buildings.

Exception: Portions of high-rise buildings currently occupied by Group R-2 occupancies without change in use since December 18, 1991.

F-4603.4.4.1 High-rise Group R-2 occupancies. An automatic fire extinguishing system shall be installed in the

following areas of existing Group R-2 occupancies in the portions of high-rise buildings to which the requirements of Section F-4603.4.4 do not apply:

- 1. Basements in accordance with Section F-4603.4.2.*
- 2. Rooms used for the storage of combustibles where the floor area exceeds 120 square feet (11 m²).*
- 3. Trash and incinerator chutes and rooms.*

Exception to #3: In buildings where an automatic fire extinguishing system is not required throughout the building and where the trash chute access room or compartment is completely enclosed by fire barriers having a fire resistance rating of not less than one hour and is not used for the temporary or permanent storage of combustible materials, the automatic fire extinguishing system is not required in the access room or compartment.

F-4603.4.[2]5 Group I-2. An automatic sprinkler system shall be provided throughout existing Group I-2 fire areas. The sprinkler system shall be provided throughout the floor where the Group I-2 occupancy is located, and in all floors between the Group I-2 occupancy and the level of exit discharge.

F-4603.4.6 Group I-4 child care facilities. An automatic fire-extinguishing system shall be installed throughout existing Group I-4 child care facilities.

Exception: Group I-4 child care facilities legally in existence prior to January 1, 1984, where all children less than 2 ½ years of age are kept on the level of exit discharge.

F-4603.4.7 Monitoring of existing fire extinguishing systems. Automatic fire extinguishing systems installed on or after March 1, 1991, and automatic fire extinguishing systems installed in Group H and I occupancies and high-rise buildings prior to March 1, 1991, shall be monitored in accordance with Sections 903.4.1, excluding exception #2, and 904.3.5, as applicable.

F-4603.4.8 Fire department connections for sprinkler systems. Fire department connections for sprinkler systems shall be in accordance with Section 912.

F-4603.5 Standpipes. Existing structures with occupied floors located more than 50 feet (15 240 mm) above or below the lowest level of fire department vehicle access shall be equipped with standpipes installed in accordance with Section 905. The standpipes shall have an approved fire department connection with hose connections at each intermediate floor level above or below the lowest level of fire department access. [The fire code official is authorized to approve the installation of manual standpipes systems to achieve compliance with this section where the responding fire department is capable of providing the required hose flow at the highest standpipe outlet.] These requirements shall also apply to buildings that were granted variances prior to January 1, 2004, to omit standpipes from the required exit stairways.

Exceptions:

- 1. In existing buildings having the highest occupied floors located not more than 75 feet above the lowest level of fire department vehicle access, Class I standpipe systems are permitted to be manual wet systems.*
- 2. Standpipe systems installed prior to January 1, 1995 that provide a residual pressure of 65 psi (448 kPa) or greater at the highest hose connection are exempt from the requirement to provide a residual pressure of 100 psi (690 kPa) at the highest hose connection.*
- 3. Standpipe systems with a residual pressure of less than 100 psi (690 kPa) at the topmost hose connection are permitted when in accordance with 3.1 through 3.3.*
 - 3.1. The building existed prior to January 1, 2004.*
 - 3.2. The building is equipped throughout with an automatic sprinkler system.*
 - 3.3. The highest floor level is not more than 150 feet (45,720 mm) above the lowest level of fire department vehicle access.*
- 4. Existing standpipes with hose connections at floor landings.*

F-4603.5.1 Removal of occupant use hoseline or Class II standpipe systems. Removal of the hoseline attached to a Class II or Class III standpipe system, or removal of an entire Class II standpipe system is permitted when in accordance with Section F-4603.5.1.1 and F-4603.5.1.2.

F-4603.5.1.1. Removal of hoseline from a Class II or Class III standpipe system. Where a building is equipped with a Class I standpipe system or the building is not required to have a Class I system, the hoseline is permitted to be removed from the standpipe.

F-4603.5.1.2. Removal of a Class II standpipe system. Removal of a Class II standpipe system is permitted in buildings equipped with a wet Class I standpipe system or the building is not required to have a Class I or Class II standpipe system based on the Building Code.

F-4603.5.2 Fire department connections for standpipe systems. Fire department connections for existing standpipe systems shall be in accordance with Section F-912.

F-4603.6 Fire alarm systems. An approved fire alarm system shall be installed in existing buildings and structures in accordance with Sections *F-4603.6.1* through *F-4603.6.13* and provide occupant notification [in accordance with Section 907.6] unless other requirements are provided by other sections of this code.

Exceptions:

1. Occupancies with an existing, previously approved fire alarm system installed prior to March 1, 1991, are permitted to have notification appliances that produce a sound pressure level above the normal ambient sound level of at least 15 decibels (dBA) throughout the building.
2. Fire alarm systems installed between March 1, 1991, and December 31, 2009, shall have notification appliances that produce a sound pressure level of at least 15 dBA above the normal ambient sound level, but not less than 60 dBA throughout the building, and not less than 70 dBA throughout Group I-1 and R occupancies.

F-4603.6.1 Group A occupancies. A manual fire alarm system shall be installed in existing Group A-1, A-2 and A-3 occupancies with an occupant load of 300 or more and in all Special Assembly Occupancies in accordance with 907.2.1, excluding 907.2.1.1. In Special Assembly Occupancies a shut-off (shunt trip) device shall be provided to automatically shut off electricity to circuits controlling audio equipment in the facility upon activation of the fire alarm system or automatic sprinkler system.

F-4603.6.[1]2 Group E. A manual fire alarm system shall be installed in existing Group E occupancies in accordance with Section 907.2.3.

Exceptions:

1. A manual fire alarm system is not required in a building with a maximum area of 1,000 square feet (93 m²) that contains a single classroom and is located no closer than 50 feet (15 240 mm) from another building.
2. A manual fire alarm system is not required in Group E occupancies with an occupant load less than 50, provided that one interconnected smoke alarm is installed in each classroom or child care area.
3. Group E occupancies operated in Group R-3 occupancies are not required to have a manual fire alarm system provided that the building has the fire protection equipment required by Section F-410.

F-4603.6.3 Group H. A manual fire alarm system shall be installed in existing Group H occupancies.

F-4603.6.[2]4 Group I-1. An automatic fire alarm system shall be installed in existing Group I-1 residential care/assisted living facilities in accordance with Section 907.2.6.1.

Exceptions:

1. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and [that] the travel distance[s] required in Section 907.5.2 (200 feet) [are] is not exceeded.
2. Where each sleeping room has a means of egress door opening directly to an exterior egress balcony that leads directly to the exits in accordance with Section 1019, and the building is not more than three stories in height.
3. In Group I-1 occupancies protected throughout with an automatic sprinkler system automatic fire detection is not required.

F-4603.6.[3]5 Group I-2. An automatic fire alarm system shall be installed in existing Group I-2 occupancies in accordance with Section 907.2.6.2.

Exceptions:

1. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits if located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and [that] the travel distance[s] required in Section 907.5.2 (200 feet) [are] is not exceeded.
2. Automatic fire detection is not required in existing Group I-2 occupancies protected throughout by an automatic sprinkler system.

F-4603.6.[4]6 Group I-3. An automatic and manual fire alarm system shall be installed in existing Group I-3 occupancies in accordance with Section 907.2.6.3.

F-4603.6.7 Group I-4. An automatic and manual fire alarm system shall be installed in existing Group I-4 occupancies.

F-4603.6.[5]8 Group R-1. A fire alarm system and smoke alarms shall be installed in existing Group R-1 occupancies in accordance with Sections *F-4603.6.[5]8.1* through *F-4603.6.[5]8.2.1*.

F-4603.6.[5]8.1 Group R-1 hotel and motel [manual] fire alarm system. *An automatic and manual fire alarm system that activates the occupant notification system [in accordance with Section 907.6] shall be installed in existing Group R-1 hotels and motels [more than three stories or with more than 20 sleeping units].*

Exceptions:

1. Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, exit court or yard.
2. Manual fire alarm boxes are not required throughout the building when [the following conditions are met:] *in accordance with 2.1 through 2.3.*
 - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.[:]
 - 2.2. The notification appliances will activate upon sprinkler water flow.[: and.]
 - 2.3. At least one manual fire alarm box is installed at an approved location.

F-4603.6.[5]8.1.1 Group R-1 hotel and motel automatic smoke detection system. *An automatic smoke detection system that activates the occupant notification system [in accordance with Section 907.6] shall be installed in existing Group R-1 hotels and motels throughout all interior corridors serving sleeping rooms not equipped with an approved, supervised sprinkler system installed in accordance with Section 903.*

Exception: An automatic smoke detection system is not required in buildings that do not have interior corridors serving sleeping units and where each sleeping unit has a means of egress door opening directly to an exit or to an exterior exit access that leads directly to an exit.

F-4603.6.[5]8.2 Group R-1 boarding and rooming houses manual fire alarm system. *A manual fire alarm system that activates the occupant notification system [in accordance with Section 907.6] shall be installed in existing Group R-1 boarding and rooming houses.*

Exception: Buildings less than two stories in height where all sleeping units, attics and crawl spaces are separated by 1-hour fire-resistance-rated construction and each sleeping unit has direct access to a public way, exit court or yard.

F-4603.6.[5]8.2.1 Group R-1 boarding and rooming houses automatic smoke detection system. *An automatic smoke detection system that activates the occupant notification system [in accordance with Section 907.6] shall be installed in existing Group R-1 boarding and rooming houses throughout all interior corridors serving sleeping units not equipped with an approved, supervised sprinkler system installed in accordance with Section 903.*

Exception: Buildings equipped with single-station smoke alarms meeting or exceeding the requirements of Section 907.2.1 [0]1.1 and where the fire alarm system includes at least one manual fire alarm box per floor arranged to initiate the alarm.

F-4603.6.[6]9 Group R-2. *An automatic [or] and manual fire alarm system that activates the occupant notification system [in accordance with Section 907.6] shall be installed in existing Group R-2 occupancies [more than three stories in height or with more than 16 dwelling or sleeping units].*

Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than 0.75 hour, and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and having a local alarm to notify all occupants.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to the exits or are served by open-ended corridors designed in accordance with Section 10236.6, Exception 4.

F-4603.6.10 Group R-1 and R-2 congregate living facilities. *Existing Group R-1 and R-2 congregate living facilities shall have hard-wired, interconnected smoke alarms installed in accordance with NFPA 72 and Section 907.2.11.1 or 907.2.11.2 as applicable. (Group R-1 congregate living is up to 10 and Group R-2 congregate living is up to 16 occupants. See Chapter 2 under Occupancy Classification for the complete definition of Group R-1 and R-2 congregate living facilities.)*

F-4603.6.[7]11 Group R-4. *An automatic [or] and manual fire alarm system that activates the occupant notification system [in accordance with Section 907.6] shall be installed in existing Group R-4 residential care/assisted living facilities in accordance with Section 907.2.10.*

Exceptions:

1. Where there are interconnected smoke alarms meeting the requirements of Section 907.2.11 and there is at least one manual fire alarm box per floor arranged to continuously sound the smoke alarms.

2. [Other manually activated, continuously sounding alarms approved by the fire code official.] *Hard-wired, interconnected smoke alarms installed in accordance with Section 907.2.11 prior to January 1, 2010.*

F-4603.6.12 Mixed residential and nonresidential use. Where a nonresidential occupancy is located below a residential occupancy, an automatic smoke detection system shall be installed throughout the nonresidential occupancy and alarm notification appliances shall be installed throughout the building.

Exception: An automatic sprinkler system is installed throughout the non-residential portion of the building.

F-4603.6.13 Sign at manual fire alarm boxes. At each manual fire alarm box a sign shall be mounted near the box that states: IN CASE OF FIRE - SOUND ALARM AND CALL FIRE DEPARTMENT (OR 911).

* * *

F-4603.7.1 Where required. Existing Group R occupancies and dwellings [not classified as group R occupancies not already provided with single-station smoke alarms] shall be provided with single-station smoke alarms. Installation shall be in accordance with Section 907.2.1[0]1, except as provided in this section and in Sections F-4603.7.2 and F-4603.7.3.

Exceptions:

- 1. Smoke alarms are not required in sleeping rooms in existing Group R-2 occupancies in high-rise buildings equipped throughout with an automatic fire extinguishing system.*
- 2. Smoke alarms are not required in sleeping rooms in Group R-2 or R-3 occupancies in buildings built prior to January 1, 1988, and not classified as high-rise.*
- 3. Where a smoke alarm installed in the immediate vicinity of bedrooms would result in its installation within 3 feet (914 mm) of a door to a bathroom or kitchen, installation beyond the immediate vicinity is permitted, provided that it does not exceed 15 feet (4572 mm) from all bedroom doors.*

F-4603.7.2 Interconnection. Where more than one smoke alarm is required to be installed within an individual dwelling or sleeping unit, the smoke alarms shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all bedrooms over background noise levels with all intervening doors closed.

Exceptions:

- 1. Interconnection is not required in buildings built prior to January 1, 1988, that are not undergoing alterations, repairs or construction of any kind.*
- 2. Smoke alarms in existing areas of buildings built prior to January 1, 1988, are not required to be interconnected where alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for interconnection without the removal of interior finishes.*

F-4603.7.3 Power source. Single-station smoke alarms shall receive their primary power from the building wiring provided that such wiring is served from a commercial source and shall be equipped with a battery backup. Smoke alarms with integral strobes that are not equipped with battery backup shall be connected to an emergency electrical system. Smoke alarms shall emit a signal when the batteries are low. Wiring shall be permanent and without a disconnecting switch other than as required for overcurrent protection.

Exceptions:

- 1. Smoke alarms are permitted to be solely battery operated in existing buildings built prior to January 1, 1988, where no construction is taking place.*
- 2. Smoke alarms are permitted to be solely battery operated in buildings that are not served from a commercial power source.*
- 3. Smoke alarms are permitted to be solely battery operated in existing areas of buildings built prior to January 1, 1988, undergoing alterations or repairs that do not result in the removal of interior walls or ceiling finishes exposing the structure, unless there is an attic, crawl space or basement available which could provide access for building wiring without the removal of interior finishes.*

F-4603.7.4 Verification of smoke alarms upon sale of building. Upon the sale of a building containing a Group R-3 occupancy, the seller shall certify in writing to the buyer that smoke alarms required by Section 4603.7 are installed and in proper operating condition.

F-4603.7.5 Testing and maintenance of smoke alarms. Smoke alarms, both battery powered and hard wired shall be tested, inspected and maintained in accordance with manufacturer's instructions. They shall be tested weekly.

F-4603.7.5.1 Responsibility. Occupants shall be responsible for the testing and battery replacement of battery-powered smoke alarms within their dwelling units. Owners shall be responsible for the repair or replacement of non-operating smoke alarms

within three days of written notice.

F-4603.8 Manual fire alarm boxes. Manual fire alarm boxes in existing buildings shall be in accordance with Sections 907.5.2 through 907.5.2.5.

Exceptions:

- 1. Manual fire alarm boxes are not required where an automatic sprinkler system is installed throughout the building, provided that in Group I-1 and I-2 occupancies they are installed at all nurses' control stations or other constantly attended staff locations.*
- 2. In Group R-2 occupancies with one exit and not exceeding three stories in height, one manual fire alarm box is permitted provided that it is installed in the exit stairway at the exit discharge.*

F-4603.9 Monitoring of fire alarm systems in existing buildings. Fire alarm systems in existing buildings shall be monitored in accordance with Section 907.7.5.

Exception: In buildings existing prior to January 1, 2004, fire alarm systems are required to be monitored in only Group I and H occupancies and high-rise buildings.

SECTION 4604 MEANS OF EGRESS FOR EXISTING BUILDINGS

F-4604.1 General. Means of Egress in existing buildings shall comply with the minimum egress requirements when specified in Table F-4603.1 as further enumerated in Sections 4604.2 through 4604.2[1]2 and Section 1030, and the building code that applied at the time of construction. Where the provisions conflict, the most restrictive provision shall apply. Existing buildings that were not required to comply with a building code at the time of construction shall comply with the minimum egress requirements when specified in Table F-4603.1 as further enumerated in Sections 4604.2 through F-4604.2[1]2 and, in addition, shall have a life safety evaluation prepared, consistent with the requirements of Section 104.7.2. The life safety evaluation shall identify any changes to the means of egress that are necessary to provide safe egress to occupants and shall be subject to review and approval by the fire code official. The building shall be modified to comply with the recommendations set forth in the approved evaluation.

* * *

F-4604.3 Exit signs [illumination]. Exit signs shall comply with Section 1030. Exit signs shall be internally or externally illuminated. The face of an exit sign illuminated from an external source shall have an intensity of not less than 5 foot-candles (54 lux). Internally illuminated signs shall provide equivalent luminance and be listed for the purpose.

Exception: Approved self-luminous signs that provide evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts (0.21 cd/m²).

* * *

F-4604.8 [Size of d]Doors. The minimum width of each door opening shall be sufficient for the occupant load thereof and shall provide a clear width of not less than 28 inches (711 mm). Where this section requires a minimum clear width of 28 inches (711 mm) and a door opening includes two door leaves without a mullion, one leaf shall provide a clear opening width of 28 inches (711 mm). The maximum width of a swinging door leaf shall be 48 inches (1219 mm) nominal. Means of egress doors in an occupancy in Group I-2 used for the movement of beds shall provide a clear width not less than 41.5 inches (1054 mm). The height of doors shall not be less than 80 inches (2032 mm).

Exceptions:

- 1. The minimum and maximum width shall not apply to door openings that are not part of the required means of egress in occupancies in Groups R-2 and R-3.*
- 2. Door openings to storage closets less than 10 square feet (0.93 m²) in area shall not be limited by the minimum width.*
- 3. Width of door leafs in revolving doors that comply with Section 1008.1.4.1 shall not be limited.*
- 4. Door openings within a dwelling unit shall not be less than 78 inches (1981 mm) in height.*
- 5. Exterior door openings in dwelling units, other than the required exit door, shall not be less than 76 inches (1930 mm) in height.*
- 6. Exit access doors serving a room not larger than 70 square feet (6.5 m²) shall be not less than 24 inches (610 mm) in door width.*

* * *

F-4604.8.1 Door swing. Doors in the means of egress shall swing in the direction of egress travel where serving an occupant load of 50 or more or a Group H occupancy.

F-4604.8.2 Panic and fire exit hardware. Doors serving rooms or spaces with an occupant load of 50 or more in a Group A or E occupancy shall have panic hardware on the egress side of the door.

Exception: A main exit of a Group A occupancy in compliance with Section F-1008.1.9.3, Item 2.

* * *

F-4604.18 Corridors. Corridors serving an occupant load greater than 30 and any occupant load in high-rise buildings of Group R-2 occupancy and openings therein shall provide an effective barrier to resist the movement of smoke. Transoms, louvers, doors and other openings shall be kept permanently closed or self-closing.

Exceptions:

- 1. Corridors in occupancies other than in Group H, which are equipped throughout with an approved automatic sprinkler system.*
- 2. Patient room doors in corridors in occupancies in Group I-2 where smoke barriers are provided in accordance with the Building Code.*
- 3. Corridors in occupancies in Group E where each room utilized for instruction or assembly has at least one-half of the required means of egress doors opening directly to the exterior of the building at ground level.*
- 4. Corridors that are in accordance with the Building Code.*

* * *

F-4604.22 Stairway floor number signs. Existing stairs shall be marked in accordance with Section [1022.8] F-4604.24.4.

* * *

F-4604.24 Exits. Exits in existing buildings shall be in accordance with Sections F-4604.24.1 through F-4604.24.4.

F-4604.24.1 Existing buildings with one exit. Where a building with one exit was constructed in conformance with the building code in effect at the time the building was constructed, the single exit is acceptable provided it is in accordance with one of the following conditions:

- 1. A nonresidential building not exceeding 6 stories above grade.*
- 2. A residential building, other than Group R-3, not exceeding 3 stories above grade.*
- 3. A Group R-3 building of any height.*
- 4. A building equipped with a fire suppression system and fire alarm system throughout the building with smoke detectors in all corridors, lobbies and other common areas.*
- 5. A building equipped with a fire alarm system with smoke detectors installed throughout the building and the single exit is a smokeproof enclosure or pressurized stairway installed in accordance with the Building Code.*
- 6. Buildings in compliance with the Building Code.*

F-4604.24.2 Existing exit doors. Exit doors in existing buildings shall be self-closing and latching and maintain the fire resistance rating required by the building code at the time of construction, but at a minimum shall have a fire resistance rating of one hour. Where a door is replaced in an existing exit enclosure, the replacement door shall be a labeled fire door with the appropriate fire-resistance rating. Existing door frames shall be permitted provided they are in good repair.

Exceptions:

- 1. Where an existing exit enclosure is required to have a maximum one-hour fire resistance rating, existing self-closing and latching doors shall be accepted provided they are solid core wood with a minimum thickness of 1 ¾ inches (44 mm). Existing door frames shall be permitted provided they are in good repair.*
- 2. Where an existing exit enclosure is required to have a maximum one-hour fire resistance rating, existing self-closing and latching panel doors shall be accepted provide the panels on one side are filled with a non-combustible material and the entire surface of the door on that side is covered with a sheathing to provide a minimum door thickness of 1 ¾ inches measured at the stile. Existing door frames shall be permitted provided they are in good repair.*

F-4604.24.3 Existing exit stairway doors. Interior stairway exit doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

- 1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.*

F-4604.24.4.1 Signage requirements. Stairway identification signs shall comply with all of the following requirements:

- Exceptions:*

- Exception: The nave or worship area of a place of worship with fixed seating.*

SECTION	USE	OCCUPANCY C
	HALLWAY risco group	S
4603.2	R - R	R
4603.3.1	R - R	
4603.3.2	R - R	
4603.3.3	R - R	
4603.3.4	- R -	
4603.3.5	- - -	

4603.3.6	-	-	-	
4603.3.7	-	-	-	
4603.4 ⁺	R	-	-	
4603.5	R	-	R	
4603.6*	-	-	-	
4603.7	-	-	-	
4604.4	R	R	R	

R = The building is required to comply.

+ Also see Section F-4603.4.2

* Also see Section F-4603.6.12

APPENDIX K

ELEVATOR CALL STATION PICTOGRAPH

HIGH-RISE BUILDING ELEVATOR CALL STATION FLOOR DIAGRAM