

CHAPTER 3 GENERAL PRECAUTIONS AGAINST FIRE

SECTION FC 301 GENERAL

301.1 Scope. This chapter shall govern the operation and maintenance of buildings, structures and premises with respect to precautions to prevent fire and the spread of fire. This chapter shall additionally govern the design, installation, operation and maintenance of the operations, facilities and premises set forth herein.

301.2 Permits. Permits shall be required as set forth in FC 105.6.

SECTION FC 302 DEFINITIONS

302.1 Definitions. The following terms shall, for the purposes of this chapter and as used elsewhere in this code, have the meanings set forth in FC 202.

ASPHALT MELTER.

AUTOMOTIVE SALVAGE AND WRECKING FACILITY.

COKE.

COKE-FUELED SALAMANDER.

COMPUTATIONAL FLUID DYNAMICS ANALYSIS.

ELECTRIC BARBECUE.

HI-BOY.

HIGH-VOLTAGE TRANSMISSION LINE.

OPEN FIRES.

OPEN FLAME.

OPEN-FLAME DEVICE.

PORTABLE FUELED EQUIPMENT.

PORTABLE SPACE HEATER.

POWERED INDUSTRIAL EQUIPMENT.

POWERED INDUSTRIAL TRUCK.

POWERED MOBILITY DEVICES.

PRODUCTION LOCATION.

RESIDENTIAL FIRE PIT.

TAR KETTLE.

SECTION FC 303 TAR KETTLES AND ASPHALT MELTERS

303.1 Transporting. Tar kettles and asphalt melters shall not be transported or otherwise moved when the heat source for the kettle or melter is operating.

Exception: Tar kettles and asphalt melters in the process of patching road surfaces.

303.2 Location. Tar kettles and asphalt melters shall not be located within 20 feet (6096 mm) of any combustible material, combustible building surface or any building opening and within a controlled area identified by the use of traffic cones, barriers or other approved means. Tar kettles, asphalt melters and pots shall not be utilized indoors or on the roof of a building or structure, except that LPG-fueled asphalt melters may be utilized on the roof of a building or structure in accordance with the rules. Roofing kettles, and operating tar kettles and asphalt melters shall not block means of egress, gates, roadways or entrances.

303.3 Location of fuel containers. Fuel containers shall be located at least 10 feet (3048 mm) from the burner.

Exception: Containers properly insulated from heat or flame are allowed to be within 2 feet (610 mm) of the burner.

303.4 Supervision. An operating tar kettle or asphalt melter requiring a permit shall be under the personal supervision of a person holding a certificate of fitness. The certificate of fitness holder shall be within 100 feet (30 480 mm) of the kettle or melter, have the kettle or melter within sight and have unobstructed access to the kettle or melter. Ladders and other obstacles shall not form a part of the route between the certificate of fitness holder and the kettle or melter. The certificate of fitness holder shall not have to climb or descend a ladder or circumvent any obstacle to gain access to the kettle or melter.

303.5 Portable fire extinguishers. There shall be at least one portable fire extinguisher complying with the requirements of FC 906 and with a minimum 3-A:40-B:C rating within 25 feet (7620 mm) of each tar kettle and asphalt melter during the period such kettle or melter is being utilized, and one additional portable fire extinguisher with a minimum 3-A:40-B:C rating on the roof being covered.

303.6 Lids. Tar kettles and asphalt melters shall be equipped with tight-fitting lids.

303.7 Hi-boys. Hi-boys shall be constructed of noncombustible materials. Hi-boys shall be limited to a capacity of 55 gallons (208 L). Fuel sources or heating elements shall not be allowed as part of a hi-boy.

303.8 Kettle and asphalt melter construction. Any kettle used as a tar kettle and any melter used as an asphalt melter shall be constructed of noncombustible materials.

303.9 Fuel containers under air pressure. It shall be unlawful to store, handle or use fuel containers that operate under air pressure.

303.10 Flammable liquid fuel. It shall be unlawful to store, handle or use tar kettles or asphalt melters that utilize flammable liquid as a fuel.

303.11 Roofing operations. Roofing operations, including repairs, using open-flame devices shall comply with the requirements of FC 3317 and FC Chapters 35 and 58.

SECTION FC 304 STORAGE AND ACCUMULATION OF RUBBISH AND OTHER COMBUSTIBLE WASTE

304.1 Accumulation of combustible waste. It shall be unlawful to cause or allow rubbish and other combustible waste to accumulate in a building or structure or upon a premises.

304.1.1 Maintenance. Roofs, courts, yards, vacant lots, alleys, parking lots, open spaces, and the space beneath a grandstand, bleacher, pier, wharf, or other similar structure, shall be regularly cleaned so as to prevent the accumulation of any rubbish, vegetation or other combustible waste.

304.1.2 Vegetation. Weeds, grass, vines, brush or other vegetation that is capable of being ignited shall be regularly pruned, or cleared and removed for a distance of 10 feet (3048 mm) from any building or structure.

304.2 Unsafe storage of combustible waste prohibited. It shall be unlawful to store rubbish or other combustible waste in a manner that creates a fire hazard or public nuisance.

304.3 Containers. Rubbish and other combustible waste stored pending removal in a building or structure or upon a premises shall be stored in accordance with this section, and any other applicable law, rule or regulation.

304.3.1 Spontaneous ignition. Rubbish and other combustible waste susceptible to spontaneous ignition, such as oily rags, shall be stored in a listed disposal container. Contents of such containers shall be removed and disposed of daily.

304.3.2 Capacity exceeding 40 gallons. Dumpsters and other containers with a capacity exceeding 40 gallons (0.15 m³) shall be provided with lids. Such containers and their lids shall be constructed of noncombustible materials or of materials having a peak rate of heat release

not exceeding 300 kW/m² when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m² in the horizontal orientation, and listed and labeled as such.

304.3.3 Capacity exceeding 200 gallons. Dumpsters and other containers with an individual capacity exceeding 200 gallons (0.76 m³) shall not be stored indoors, and shall not be stored outdoors within 5 feet (1524 mm) of combustible walls, openings or combustible roof eave lines.

Exceptions:

1. Dumpsters or containers in areas protected throughout by a sprinkler system.
2. Storage in a building or structure of Type I or Type IIA construction or other construction with an equivalent fire rating, where such building or structure is located not less than 10 feet (3048 mm) from other buildings or structures and used exclusively for container or dumpster storage.

304.3.4 Wastebaskets in Group I-2 and I-3 occupancies. Wastebaskets and other waste containers, including their lids, used in Group I-2 and I-3 occupancies shall be constructed of noncombustible materials or of materials having a peak rate of heat release not exceeding 300 kW/m² when tested in accordance with ASTM E 1354 at an incident heat flux of 50 kW/m² in the horizontal orientation. Metal wastebaskets and other metal waste containers with a capacity of 20 gallons (76 L) or more shall be listed in accordance with UL 1315 and shall be provided with a noncombustible lid.

304.4 Outdoor storage. Outdoor storage of combustible waste at a transfer station, recycling facility, or other lawful outdoor combustible waste storage facility, shall comply with the requirements of FC 315.

SECTION FC 305 IGNITION SOURCES

305.1 Clearance from ignition sources. Clearance between ignition sources, such as luminaires, heaters and open-flame devices, and combustible materials shall be maintained in an approved manner.

305.2 Hot ashes and spontaneous ignition sources. Hot ashes, cinders, smoldering coals or greasy or oily materials subject to spontaneous ignition shall not be deposited in a combustible container, or within 10 feet (3048 mm) of other combustible material, including combustible walls and partitions and combustible waste, or within 2 feet (610 mm) of openings to buildings or structures.

Exception: The minimum required separation distance to other combustible materials shall be 2 feet (610 mm) where the material is deposited in a covered, noncombustible container placed on a noncombustible floor, ground surface or stand.

305.3 Open-flame warning devices. It shall be unlawful to use an open-flame device on roadways as a warning signal or for any other purposes.

Exception: The use of fusees at the scene of an emergency or as required by standard railroad operating procedures.

305.4 Deliberate or negligent burning. It shall be unlawful to deliberately or through negligence set fire to or cause the burning of combustible material or combustible waste in such a manner as to endanger the safety of persons or property.

SECTION FC 306 MOTION PICTURE FILM AND SCREENS

306.1 Motion picture projection rooms. Electric arc, xenon or other light source projection equipment which develops hazardous gases, dust or radiation and the projection of ribbon-type cellulose nitrate film, regardless of the light source used in projection, shall be operated within a motion picture projection room complying with the requirements of Chapter 4 of the Building Code.

306.2 Cellulose nitrate film storage, handling and use. Cellulose nitrate film shall be stored, handled and used in accordance with NFPA 40 and subject to the approval of the commissioner.

306.2.1 Supervision. The handling and use of cellulose nitrate film, including motion picture projection, shall be under the personal supervision of a person holding a certificate of fitness. The storage of cellulose nitrate film shall be under the general supervision of a person holding a certificate of fitness.

306.3 Motion picture screens. The screens upon which motion pictures are projected shall be of noncombustible construction as set forth in Chapter 6 of the Building Code, or shall meet the flame propagation performance criteria of NFPA 701, or shall comply with the requirements for a Class A interior finish in accordance with Chapter 8 of the Building Code. Screens installed prior to the effective date of this code shall comply with the applicable Building Code requirements. The construction supporting such motion picture screens shall be of noncombustible construction as set forth in Chapter 6 of the Building Code, and shall comply with the load bearing requirements of the Building Code.

SECTION FC 307 OPEN FIRES

307.1 General. Kindling, building, maintaining or using an open fire is prohibited.

Exceptions:

1. Portable outdoor barbecues as authorized by FC 307.5.
2. Outdoor noncommercial barbecue fires in equipment provided by and located in city parks where such open fires are allowed by the Department of Parks and Recreation.

3. In connection with training of fire brigades or similar purposes by persons or entities where such training is required by law, rule or regulation.
4. Approved open fires used for special effects in connection with television, motion picture, theatrical and other entertainment productions.
5. Coke-fueled salamanders at a construction site in accordance with FC 307.6 and the rules.
6. Lighting of charcoal for hookah use on the premises of non-tobacco hookah establishments in accordance with FC 310 and the rules.
7. Residential fire pits as authorized by FC 307.7.

307.2 Authorization. Open fires allowed pursuant to FC 307.1 may only be kindled, built, maintained or used with the prior written authorization of the agencies with regulatory jurisdiction, property owner and other required approvals, and only when such open fires are maintained in compliance with all conditions of such authorization or approval. The commissioner may prohibit the kindling, building, maintaining or use of open fire or order the extinguishment of any open fire allowed by this section, upon a determination that such open fire will create an undue hazard because of conditions in the surrounding environment.

307.3 Reserved.

307.4 Attendance. Open fires shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with the requirements of FC 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as a garden hose connected to an approved water supply, shall be available for immediate use.

307.5 Portable outdoor barbecues. Charcoal, electric, and LPG and piped natural gas-fueled portable outdoor barbecues may be operated and maintained in compliance with the requirements of this section.

307.5.1 General. Portable outdoor barbecues burning charcoal, powered by electricity, or fueled by LPG containers or piped natural gas may be stored and used on any residential premises in compliance with the requirements of this section and the rules. Portable outdoor barbecues burning charcoal, powered by electricity, or fueled by piped natural gas may be stored and used on any other premises in compliance with the requirements of this section and the rules, except as may be restricted by the Zoning Resolution or the Department by rule or order. Stationary outdoor grills and other outdoor cooking equipment shall be installed in accordance with the Building and Mechanical Codes, and operated and maintained in accordance with this section.

307.5.2 Grate area. The total grate area of a portable outdoor barbecue shall not exceed 10 square feet (0.929 m²).

307.5.3 Clearance distances. Portable outdoor barbecues shall not be stored or used within 10 feet (3048 mm) of any combustible waste, combustible material, or any combustible building surface, including combustible roofs and decks. To the maximum extent feasible, windows, doors and other building openings within 10 feet (3048 mm) of a barbecue in use shall be kept closed. An entrance door shall be closed immediately after entering or exiting the building while the barbecue is in use.

307.5.4 Fire extinguishing equipment. A garden-type hose attached to a water supply, or a minimum of one portable fire extinguisher complying with the requirements of FC 906 with a minimum 4-A rating, shall be provided for any portable outdoor barbecue, and shall be readily accessible whenever the portable outdoor barbecue is in use. A portable fire extinguisher complying with the requirements of FC 906 and with a Class K rating shall be provided for any portable outdoor barbecue used for commercial cooking purposes, and shall be readily accessible whenever such barbecue is in use.

307.5.5 Natural gas piping. The natural gas piping supplying portable outdoor barbecues designed to use piped natural gas shall be designed and installed in accordance with the Fuel Gas Code.

307.5.6 LPG containers. Portable outdoor barbecues fueled by LPG containers shall additionally comply with the requirements of FC 307.5.6.1 and 307.5.6.2.

307.5.6.1 Group R-2 occupancies. Only portable outdoor barbecues designed for use with LPG containers with a capacity of 16.4 ounces (0.465 kg) may be stored or used on the premises of a Group R-2 occupancy. Indoor storage of 16.4-ounce (0.465 kg) LPG containers for this or any other purpose is limited to a maximum of four such containers per dwelling unit.

307.5.6.2 Group R-3 occupancies. Portable outdoor barbecues designed for use with LPG containers with a capacity of 20 pounds (9.08 kg) or LPG containers with a capacity of 16.4 ounces (0.465 kg) may be stored or used on the premises of a Group R-3 occupancy. Twenty-pound LPG containers shall not be stored or used indoors, or on any rooftop or balcony. A maximum of two 20-pound LPG containers may be used to fuel a portable outdoor barbecue. Indoor storage of 16.4-ounce (0.465 kg) LPG containers for this or any other purpose is limited to a maximum of four such containers per dwelling unit.

307.5.7 Cleaning. Portable outdoor barbecues shall be periodically cleaned by removing grease or fat accumulations from grills and in trays below the grill.

307.6 Coke-fueled salamanders. Coke and coke-fueled salamanders may be stored, handled and used for construction-related curing and drying at construction sites in accordance with this section and the rules.

307.6.1 Supervision. The handling and use of coke and coke-fueled salamanders at construction sites, including the extinguishment of the coke, shall be under the personal supervision of a certificate of fitness holder. A certificate of fitness holder may not supervise the handling or use of more than fifty coke-fueled salamanders, or the handling or use of coke

or coke-fueled salamanders that are located on more than one floor. The storage of coke and coke-fueled salamanders at construction sites shall be under the general supervision of a certificate of fitness holder.

307.7 Residential fire pits. Residential fire pits may be stored and used to maintain an open fire in compliance with the requirements of this section and the rules on the premises of a detached Group R-3 occupancy in any R1, R2, or R3 residential zoning district.

307.7.1 Safe operations. Residential fire pits must be operated in accordance with manufacturer instructions for such residential fire pit, and shall be constantly attended while a fire is lit.

307.7.2 Clearance distances. Residential fire pits shall not be stored or used within 10 feet (3048 mm) of any combustible waste, combustible material, or any combustible building surface. To the extent feasible, windows, doors and other building openings within 25 feet (7620 mm) of a residential fire pit in use shall be kept closed. An entrance door shall be closed immediately after entering or exiting the building while a residential fire pit is in use.

307.7.3 Design and operation. The department may establish by rule standards for the design, installation, operation and maintenance for residential fire pits, provided that such rules are consistent with provisions established by this section.

307.7.4 Hazardous environmental conditions. The department may prohibit use of residential fire pits in any location upon determination that such activity creates an undue fire hazard because of conditions in the surrounding environment, including during wind conditions or red flag weather.

SECTION FC 308 OPEN FLAMES

308.1 General. This section governs the use of open flames in all buildings, structures and premises.

308.2 Use of open flames. Open flames may be lighted, maintained and used only as allowed in this section. Stationary appliances, including cooking, space heating and water heating appliances, are not open-flame devices subject to this section and shall be designed and installed in accordance with the construction codes. Portable fueled devices, equipment and systems, including LPG-fueled cookstoves and torches, shall be operated in accordance with FC 313.

308.3 Prohibitions. It shall be unlawful to:

1. cause or allow an open flame to be lit or maintained in any room or other area of a building, structure, premises, marine vessel, watercraft or other place in which a hazardous material is stored, handled or used, or where conditions exist that could cause ignition of flammable vapors or combustible material.

2. use or maintain in any area in which smoking is prohibited, as set forth in FC 310 or elsewhere in this code, a lighted match or other flame which has not been approved for use by the department in such areas.
3. place or discard, or cause to be placed or discarded, an open flame, lighted match or other flaming substance or object on any surface or article where it can cause the ignition of combustible material or combustible waste, or otherwise cause an unwanted fire.
4. store or use candles, incense or similar open-flame producing items in Group R-1 college and university dormitories.
5. use or maintain an open flame or open-flame device in or on a building, structure or premises as a signal or marker, except that fusees may be used on roadways to alert motorists to stopped vehicles or other emergency condition.
6. light and release or allow to become airborne any lantern, balloon, or other item or craft containing or fueled by a flame or other heat-producing material, except for balloon operations authorized by FC Chapter 20 and other operations authorized by the department.

308.4 General safety precautions. Open flames and open-flame devices are ignition sources that can readily ignite combustible materials. When their use is allowed by this section, all safety precautions appropriate to the circumstances shall be observed, including the following requirements:

1. Candles and other unenclosed open flames shall be constantly attended while lit.
2. Open flames and open-flame devices, including lighted candles, shall be protected from accidental contact by appropriate placement, and secured from tipping or other movement by a suitable candleholder or other device.
3. Open flames and open-flame devices, including lighted candles, except open-flame devices designed to be surface mounted, shall be placed on a noncombustible surface.
4. Open flames and open-flame devices, including lighted candles, shall be kept at least 3 feet (914 mm) from any combustible material or combustible waste.
5. Open flames and open-flame devices, including lighted candles, shall not be placed or kept in any corridor, stairwell or exit.
6. Open flame food warming devices shall be placed on non-combustible surfaces and constantly attended while lit. LPG-fueled open flame food warming devices shall not be used for food warming except where authorized by the department by issuance of an open flame permit.

308.5 Use of open flames in assembly occupancies and places of public gathering. Open flames may be lighted, maintained and used in Group A occupancies and public gathering places only as allowed in FC 308.5.1 through 308.5.4 and the rules.

308.5.1 Prohibitions. It shall be unlawful to light, maintain or use an open flame in a Group A occupancy or other building or structure used for a public gathering.

Exceptions:

1. Open flames are allowed in the following locations when used for the following purposes, provided that safety precautions are taken to prevent ignition of combustible material and otherwise ensure the safety of occupants in accordance with FC 308.4, other applicable provisions of this code and the rules, and the terms and conditions of the permit or other approval:
 - 1.1. Use of candles and open-flame devices in accordance with FC 308.5.2.
 - 1.2. The preparation of flaming foods or beverages in accordance with FC 308.5.3.
 - 1.3. Special effects in connection with a theatrical performance or other event for which a special effect permit has been granted in accordance with FC 308.5.4.
 - 1.4. Open-flame devices for food warming in accordance with the rules.
 - 1.5. Open-flame devices for demonstrations in exhibitions or trade shows in accordance with the rules.
 - 1.6 Where necessary for ceremonial or religious purposes.
2. Natural gas light fixtures installed in compliance with the requirements of the Building Code and the Plumbing Code, and approved precautions are taken to prevent ignition of combustible materials.

308.5.2 Open-flame decorative devices. Open-flame decorative devices, including wall-mounted candles, torch sconces, insect-repellant candles in glass jars or metal cans, tabletop candles and oil lamps, free standing torch holders and candelabras, shall comply with the following requirements:

1. Use of Class I and Class II liquids, including alcohol, and LPG in open flame decorative devices, is prohibited.
2. Liquid- or solid-fueled lighting devices containing more than 8 ounces (237 ml) of fuel must self-extinguish and not leak fuel at a rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.
3. The device or holder shall be constructed to prevent the spillage of liquid fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) when the device or holder is not in an upright position.

4. The device or holder shall be designed so that it will return to the upright position after being tilted to an angle of 45 degrees from vertical.

Exception: Devices that self-extinguish if tipped over and do not spill fuel or wax at the rate of more than 0.25 teaspoon per minute (1.26 ml per minute) if tipped over.

5. The flame shall be enclosed except where openings on the side are not more than 0.375 inch (9.5 mm) diameter or where openings are on the top and the distance to the top is such that a piece of tissue paper placed on the top will not ignite in 10 seconds.
6. Enclosures shall be made of noncombustible materials and securely attached to the open-flame device.

Exception: An enclosure is not required to be attached to any open-flame decorative device that will self-extinguish if the device is tipped over.

7. Fuel canisters shall be safely sealed for storage.
8. Storage and handling of combustible liquids shall be in accordance with FC Chapter 57.
9. Shades, where used, shall be made of noncombustible materials and securely attached to the open-flame device holder or enclosure.
10. Candelabras with flame-lighted candles shall be securely fastened in place to prevent overturning, and shall be located away from occupants using the area and away from possible contact with drapes, curtains or other combustibles.
11. Open-flame devices shall not be placed in any aisle, standing area, corridor or component of the means of egress.

308.5.3 Flaming food and beverage preparation. The preparation and serving of flaming foods and beverages in Group A occupancies and public gathering places shall be in accordance with FC 308.5.3.1 through 308.5.3.4.

308.5.3.1 Dispensing of liquid. Alcohol or other flammable or combustible liquid used in the preparation of flaming food and beverages shall be stored in a container with a capacity not exceeding 1 quart (946.5 ml) and dispensed from such container using a controlled-pouring device limiting the flow to a 1-ounce (29.6 ml) serving. The container shall have a secure cap or lid or one designed to prevent spillage when not in use.

308.5.3.2 Ignition and serving of flaming food. Flaming food shall be ignited and served as follows:

1. Flaming food shall be ignited on a noncombustible surface or, if the surface is combustible, it shall be protected by a noncombustible mat that covers the entire top surface of the table.

2. The flames generated for flaming food shall not exceed 6 inches (152.4 mm) above the serving dish. Any pouring, ladling or spooning of liquids is restricted to a maximum height of 8 inches (203 mm) above the receiving receptacle.
3. Flaming food shall not be ignited on or above the table at which the patrons to whom the food is to be served are seated. Flaming food shall be ignited on a nearby serving table or cart at least 3 feet (914 mm) from patrons, or lighted in the kitchen and transported to the table on a serving cart.
4. The flames generated by flaming food shall be extinguished before the food is placed on the table before the patron.
5. The person preparing the flaming foods shall have a wet cloth towel immediately available for use in smothering the flames in the event of an emergency. In addition to portable fire extinguishers required by FC 906, a portable fire extinguisher with a minimum 2-A:10B rating shall be kept at or near the location where flaming food or beverage is ignited.

308.5.3.3 Ignition and serving of flaming beverages. Ignition and serving of flaming beverages at patron tables shall be conducted in the same manner as flaming food, as set forth in FC 308.5.3.2. Flaming beverages shall not be ignited and served on bars and counters at which the public is seated unless a safe perimeter of at least 3 feet (914 mm) from any patrons can be established and maintained while the beverage is lighted and flaming.

308.5.3.4 Staff training. Any staff serving flaming food or beverages shall be trained and knowledgeable in the safe ignition and handling of such food or beverages.

308.5.4 Special effects. Use of open flames as a special effect is allowed in conjunction with theatrical performances and in other places of assembly or public gathering only when authorized by the department. When approved, open flames shall be used in accordance with FC Chapter 56 and NFPA 160.

308.6 Alcohol-fueled decorative open-flame devices. Alcohol-fueled decorative open-flame devices shall be designed, installed, operated and maintained in accordance with FC 308.6.1 through 308.6.5.

308.6.1. Prohibitions. It shall be unlawful to install or use a stationary or portable alcohol-fueled open-flame device in Group A, E and I occupancies, and public gathering spaces. It shall be unlawful to use portable alcohol-fueled open-flame devices in Group R occupancies.

308.6.2 Design. Stationary and portable alcohol-fueled open-flame devices installed or used in New York City shall be designed in accordance with the following requirements:

1. The device shall be constructed of metal, fire-resistant glass and/or other noncombustible material of sufficient thickness as to be capable of withstanding the heat generated by the open flames.

2. The device shall be constructed to provide protection from the flames at the maximum flame height the device is capable of generating.
3. The open flame shall be generated in a controlled manner through the use of a wick, valve or other approved method. A device that generates a flame in an uncontrolled manner is an open fire prohibited by FC 307.1.
4. The device shall have a means of manually extinguishing the flame, either by a shutoff valve, a means of manually closing the device that cuts off the supply of oxygen to the flame thereby extinguishing the flame, or other approved method. The method by which the flame is extinguished shall not require use of a battery-powered device.
5. The device shall use solid fuel or be fueled through a pump or other means of liquid fuel transfer from a container to the device without spillage. Only the type of fuel specified for the device shall be used.
6. The fuel capacity of the device shall not exceed 64 fluid ounces (1888 ml) or the equivalent in solid fuel, except as authorized by the department.
7. The device shall be listed by a nationally recognized testing laboratory.

308.6.3 Installation. All stationary and portable alcohol-fueled open-flame devices shall be installed or placed in accordance with listing requirements, manufacturer's instructions and the following fire safety requirements:

1. The device shall be installed or placed at a location protected from movement and air drafts, and at least 3 feet (914 mm) from combustible surfaces and materials, including upholstered furniture, draperies, and wood surfaces.
2. The device shall be installed or placed in a room of sufficient size and ventilation to avoid dangerous accumulations of carbon monoxide or carbon dioxide, taking into consideration the capacity of the device's alcohol reservoir and rate of burning. In no event shall a device be installed or used in a room smaller than that recommended by the manufacturer's instructions.
3. Devices designed for stationary installation shall be securely affixed to the floor, wall or ceiling or in furniture to prevent movement. No devices shall be installed in or on a wall or ceiling, or in a wooden cabinet or other furniture of combustible construction, unless it is of a type for which a certificate of approval has been issued by the department.

308.6.4 Safety precautions. Alcohol-fueled decorative devices shall be used in accordance with manufacturer's instructions and the following safety precautions:

1. A lighted device shall not be left unattended. Flames shall be extinguished when the person responsible for attending to the operation of the device leaves the room or goes to

sleep. The shutoff switch or device closure shall be used to ensure that the alcohol flames, which are not always readily visible, are extinguished.

2. A device shall not be fueled or moved when it is lighted or when it is not lighted but still hot.
3. A smoke alarm and a carbon monoxide alarm, or detectors, shall be installed in any room in which an alcohol-fueled decorative device is installed or used.
4. A portable fire extinguisher for household use shall be kept readily available in any room in which an alcohol-fueled decorative open-flame device is installed or used.

308.6.5 Storage of fuel. Alcohol stored for use in alcohol-fueled decorative open-flame devices shall be stored in a tightly sealed container in a cool location, away from heat and ignition sources. Such fuel storage is limited to 1 gallon (3.8 L).

SECTION FC 309 POWERED INDUSTRIAL TRUCKS, EQUIPMENT AND MOBILITY DEVICES

309.1 General. Powered industrial trucks, powered industrial equipment and powered mobility devices shall be designed, operated and maintained in accordance with this section.

309.2 Powered industrial trucks. Powered industrial trucks fueled by flammable or combustible liquids or flammable gases shall be designed and operated in accordance with FC 309.2.1 through 309.2.5.

309.2.1 Hazardous locations. Powered industrial trucks that are operated in areas designated as hazardous (classified) locations in accordance with the Electrical Code shall be listed and labeled for use in such environments in accordance with NFPA 505. Entry by equipment that is not listed or approved as suitable for the specific classified location may be allowed for the purpose of maintenance or other necessary business operation where the owner has established an entry authorization procedure and has verified that the entry area is clear of hazardous environment and will remain so for the duration of the entry.

309.2.2 Powered industrial trucks using flammable gas fuel. Powered industrial trucks that use LPG or other flammable gas as fuel shall be limited to one fuel container with a capacity not greater than 40 pounds (18.16 kg) or 340 SCF (9.63 m³) of flammable gas, whichever is less, except that powered industrial trucks used to resurface ice that are designed to operate with more than one such container shall be limited to operating with two such containers. Liquefied gas containers installed in a horizontal position shall be of such a design that the pressure relief valve will discharge vapor properly. Powered industrial trucks that use LPG or other flammable gas as fuel shall not be parked near open flames or other heat or ignition sources, or near open pits, underground entrances, elevator shafts, or similar areas. Such powered industrial trucks shall be stored and used in locations with adequate ventilation. It shall be unlawful to store or use such powered industrial trucks in a basement, cellar or other areas below grade.

309.2.3 Fueling. Powered industrial trucks using a flammable or combustible liquid or flammable gas fuel shall be fueled in compliance with the requirements of FC 309.2.3.1 through 309.2.3.4.

309.2.3.1 Location. All fueling, including container replacement, shall be conducted outdoors or in areas specifically approved for that purpose, and in accordance with this code and the rules.

309.2.3.2 Liquid fuels. Fixed liquid fuel-dispensing equipment for powered industrial trucks shall be designed, installed, operated and maintained in accordance with FC Chapter 23. Emergency refueling of powered industrial trucks using portable containers shall be in accordance with FC Chapters 23 and 57. The engine of a powered industrial truck shall be shut off and the operator shall not be on or inside the truck during refueling.

309.2.3.3 Container replacement. Outdoor connecting and disconnecting of fuel gas containers shall be conducted away from open pits, underground entrances, or other areas below grade, and away from all open flames or other heat or ignition sources. Fueling of powered industrial trucks shall be in accordance with FC Chapter 61, if LPG-powered, and FC Chapters 23 and 58, if CNG-powered, and the rules

309.2.3.4 Hydrogen fueling. Filling of containers for powered industrial trucks with hydrogen, including metal hydride hydrogen storage system containers, shall be conducted in accordance with FC 2309.

309.2.4 Repairs. Repairs to fuel systems or electrical systems, and repairs utilizing open flame or welding, shall be done in an indoor or outdoor location approved for that purpose.

309.2.5 Storage. When not in use, powered industrial trucks shall be stored in approved designated storage areas. Each storage area shall be provided with a portable fire extinguisher complying with the requirements of FC 906 having a minimum 4-A:20-B:C rating.

309.3 Battery-powered industrial trucks, industrial equipment and mobility devices. Powered industrial trucks, powered industrial equipment and powered mobility devices using a storage battery shall be designed in accordance with FC 309.3.1, and shall be charged and stored in a storage, charging and/or repair facility, including any storage or charging area in Group B, R-2 or M occupancy, that is designed, installed, operated and maintained in accordance with the construction codes, Electrical Code and FC 309.3.2 through 309.3.4.

Exceptions:

1. Storage and charging in a Group R-3 occupancy or in a dwelling unit in a Group R-2 occupancy of not more than 5 powered mobility devices using a storage battery, provided that such devices are for personal use.
2. Charging of a single powered mobility device by and in the presence of its owner or user.

309.3.1 Battery chargers. Powered industrial trucks, powered industrial equipment and powered mobility devices using a storage battery shall be charged in accordance with the manufacturer's instructions and the applicable listing standard using the original equipment manufacturer-supplied charging equipment, or other charging equipment suitable for the purpose, that is designed in accordance with applicable federal, New York State and/or New York City laws, rules or regulations, and listed:

1. pursuant to UL Standard 1564 or other approved listing of an approved testing laboratory; or
2. for use with the truck, item of equipment or device in accordance with UL Standard 2272, UL Standard 2849 or other approved listing of an approved testing laboratory.

309.3.2 Battery inspection. A storage battery shall be inspected for cracks, punctures, leaking contents or other damage prior to charging or re-charging if the battery was dropped, involved in a collision or otherwise subjected to a potential mechanism of damage. Damaged batteries shall not be re-used. Damaged batteries and batteries at the end of their useable life shall be promptly removed from the premises and lawfully disposed of.

309.3.3 Battery charging areas. Powered industrial trucks, powered industrial equipment and powered mobility devices using a storage battery shall be charged in a suitable indoor room or area or outdoor location that:

1. has sufficient natural or mechanical ventilation in accordance with the Mechanical Code to prevent the accumulation of any flammable or other gases that may be discharged during normal charging operations;
2. has an adequate electrical supply and a sufficient number of electrical receptacles to allow the charging equipment for each truck, item of equipment or device to be directly connected to a receptacle. Extension cords and power strips shall not be used. A minimum of 3 feet (914 mm) shall be maintained between each truck, item of equipment or device during charging operations;
3. has an adequate electrical supply and a sufficient number of electrical receptacles to allow the charging equipment for battery packs and other removable storage batteries to be directly connected to a receptacle. Extension cords and power strips shall not be used. Battery packs and other removable storage batteries shall not be stacked or charged in an enclosed cabinet (unless the cabinet is specially designed and approved by the department for such purpose). Except as otherwise approved by the department, a minimum distance of 2 feet (610 mm) shall be maintained between each battery pack or other removable storage battery during charging operations, provided that the aggregate energy capacity of battery packs or other removable storage batteries that can be charged in a single fire area does not exceed 20 kWh. A minimum distance of 3 feet (914 mm) shall be maintained if the aggregate energy capacity exceeds 20 kWh. The aggregate energy capacity of battery packs or other removable batteries that can be charged in a single fire area shall not exceed 50 kWh;

4. is not used for the storage of combustible materials, combustible waste or hazardous materials;
5. is separated by a fire barrier with a minimum one-hour fire-resistance rating from areas in which repairs or other servicing is conducted on the storage battery or other electrical components of the truck, item of equipment or mobility device;
6. where six or more trucks, items of industrial equipment or devices using a storage battery are being charged at a single indoor location, is dedicated for battery charging and secured from unauthorized entry; separated by a fire barrier which encloses the entire space with a minimum one-hour fire-resistance rating; and protected by a fire sprinkler system and one or more smoke detectors or smoke alarms. If the building or occupancy is equipped with a fire alarm system, the smoke detector shall be connected to such system. If the ambient temperature of the room during battery charging operations exceeds the limitations set forth in the manufacturer's instructions or the equipment listing, the room or area shall be temperature controlled to prevent overheating or other unsafe battery condition; and
7. is provided with a portable fire extinguisher complying with the requirements of FC 906 having a minimum 4-A:20-B:C rating.

309.3.4 Storage areas. Indoor storage rooms or areas or outdoor enclosures used for the storage, but not charging or repair, of powered industrial trucks, powered industrial equipment and powered mobility devices using a storage battery shall comply with the requirements of FC 309.3.3(4), (5) and (7).

***309.3.5 Second-use batteries.** It shall be unlawful to:

1. assemble or recondition a lithium-ion battery using cells removed from used storage batteries; or
2. sell or offer for sale a lithium-ion battery that uses cells removed from used storage batteries.

**Section 309.3.5 was added by [Local Law 42 of 2023](#). This law has an effective date of March 20, 2023.*

***309.4 Enforcement of certification requirements.** The department is hereby authorized to enforce the provisions of section 20-610 of the administrative code, which, in part, prohibits the distribution, sale, lease, or rental of powered bicycles and powered mobility devices, as defined in that section, unless the storage batteries and electrical systems of such devices have been certified by an accredited testing laboratory, as defined in the rules of the Department of Consumer and Worker Protection.

**Section 309.4 was added by [Local Law 50 of 2024](#). This law has an effective date of September 25, 2024.*

SECTION FC 310 SMOKING

310.1 General. Smoking, including the carrying of a lighted pipe, cigar, cigarette or any other type of smoking paraphernalia or material, shall be conducted in accordance with this section.

310.2 Prohibitions. It shall be unlawful to:

1. smoke in any area in which smoking is prohibited, as set forth in this section or elsewhere in this code.
2. place or discard, or cause to be placed or discarded, any lighted pipe, cigar, cigarette or other type of smoking paraphernalia or material where it can cause the ignition of combustible material or combustible waste, or otherwise cause an unwanted fire.
3. smoke in any building, structure, premises or part thereof where flammable or combustible materials or explosives are manufactured, stored, handled, used or transported.
4. smoke in the following occupancies and spaces:
 - 4.1. Cellars and basements, except in R-3 occupancies.
 - 4.2. Group A occupancies and public gathering places, except for smoking non-tobacco smoking products in a non-tobacco hookah establishment in accordance with FC 310.7.
 - 4.3. Group M occupancies, except for smoking non-tobacco smoking products in a non-tobacco hookah establishment in accordance with FC 310.7.
 - 4.4. Hospitals, nursing homes, rehabilitation facilities and similar medical facilities housing the ill, aged and infirm.
 - 4.5. On any bulkhead, dock, drydock, shipyard, pier, wharf, warehouse or shed on the waterfront.
 - 4.6. On board any ship, barge, ferry, lighter, carfloat, scow, and all other similar floating watercraft or equipment whether berthed or moored at a dock, wharf, pier, or to a marine vessel made fast thereto or in a shipyard.
 - 4.7. Factories as set forth in Section 283 of the New York State Labor Law.
 - 4.8. Lumber yard or woodworking facility as set forth in FC 2803.5.3.
 - 4.9. As otherwise prohibited by this code or the rules.

310.3 “No Smoking” signs. When smoking is prohibited by this code or the rules, durable “No Smoking” signs shall be conspicuously posted at approved locations throughout the facility or other location in accordance with FC 310, or as otherwise specifically provided in this code. The

content, lettering, size and color of required “No Smoking” signs shall be in accordance with the rules, or as otherwise approved by the commissioner.

310.3.1 Location. “No Smoking” signs shall be conspicuously posted at all entrances to facilities in which smoking has been entirely prohibited and any area therein where hazardous materials are stored, handled or used. Facilities or areas within such facilities in which smoking is allowed in designated areas shall have signs indicating that smoking is allowed in designated areas only.

310.4 Removal of signs prohibited. A posted “No Smoking” sign shall not be removed, obscured or rendered illegible.

310.5 Compliance with “No Smoking” signs. It shall be unlawful to smoke, or discard or deposit any burning substance, in any building, structure or premises or part thereof, in which “No Smoking” signs are posted pursuant to this code or the rules or otherwise for fire safety purposes.

310.6 Ash trays. Where smoking is allowed, suitable noncombustible ash trays or receptacles shall be provided at appropriate locations.

310.7 Non-tobacco hookah establishments. Smoking of non-tobacco smoking products is allowed in non-tobacco hookah establishments lawfully operating pursuant to Chapter 5 of Title 17 of the Administrative Code (as those terms are defined therein), provided that such establishments are designed, installed, operated and maintained in accordance with the following requirements:

310.7.1. Permits. Permits shall be required as set forth in FC 105.6.

310.7.2 Supervision. The storage of coal and other solid or liquid flammable and combustible materials in non-tobacco hookah establishments shall be under the general supervision of a person holding a certificate of fitness. The handling and use of charcoal and other solid or liquid flammable and combustible materials in non-tobacco hookah establishments shall be under the personal supervision of a person holding a certificate of fitness.

310.7.3 Use of charcoal or other material for smoking paraphernalia. Where smoking paraphernalia requires the use of lighted charcoal or any other solid or liquid flammable or combustible material, such material shall be stored, handled and used in accordance with this section and the rules.

310.7.3.1 Smoking paraphernalia. Smoking paraphernalia shall comply with such safety measures as may be prescribed in the rules to minimize the risk of fire associated with the use of such paraphernalia.

310.7.3.2 Storage of charcoal. Charcoal shall be stored in accordance with FC 315.7. Other flammable or combustible materials shall be stored in compliance with the requirements of this code and the rules.

310.7.3.3 Preparation, handling and disposal of charcoal and other materials. Charcoal shall be prepared for use in an approved indoor or outdoor area, on a

noncombustible surface, using an approved device heated by an electric element or other approved device or method, stored in an oven or other approved noncombustible vessel, and vented by means of a hood, or in a room with an approved ventilation system, or other approved method, as set forth in the rules. Lighted charcoal and ashes, cinders and other fire debris, and other combustible waste shall be handled and disposed of in such manner as may be prescribed in the rules to minimize the risk of fire.

310.7.3.4 Portable fire extinguishers. In addition to complying with the requirements of FC 906, a portable fire extinguisher with at least a 2-A:10-B:C rating shall be provided and maintained in a non-tobacco hookah establishment in the charcoal preparation area and in each area in which non-tobacco smoking products are smoked.

310.7.3.5 Decorations. Decorations in non-tobacco hookah establishments shall be flame-resistant in accordance with FC 805 and the rules.

310.8 Hazardous environmental conditions. The commissioner may prohibit lighted matches, cigarettes, cigars or other burning substances in any location upon a determination that such activity creates an undue fire hazard because of conditions in the surrounding environment.

SECTION FC 311 VACANT AND TEMPORARILY UNOCCUPIED PREMISES

311.1 Vacant buildings. Any vacant building, structure or premises, or part thereof, shall be deemed to constitute a temporarily unoccupied building and shall be safeguarded and maintained in compliance with the requirements of this section, unless such building, structure or premises has been deemed unsafe pursuant to Article 216 of Title 28 of the Administrative Code, in which case it shall be safeguarded and maintained in compliance with the requirements of the Department of Buildings and/or the Department of Housing, Preservation and Development, as applicable.

311.2 Temporarily unoccupied buildings. Temporarily unoccupied buildings, structures, premises or parts thereof, including tenant spaces, shall be secured and protected in accordance with this section.

311.2.1 Security. Exterior openings and interior openings accessible to unauthorized persons, including tenants, shall be locked or otherwise protected to prevent entry by unauthorized persons.

311.2.2 Fire protection. Fire alarm, sprinkler and standpipe systems shall be maintained in an operable condition at all times, except as authorized by the commissioner.

311.2.3 Fire separation. Fire-resistance-rated partitions, fire barriers, and fire walls, including those separating temporarily unoccupied tenant spaces from the remainder of the building shall be maintained. Openings, joints, and penetrations in fire-resistance-rated assemblies shall be protected in accordance with Chapter 7 of the Building Code.

311.3 Removal of combustible waste. The owner of any building, structure or premises, or part thereof, that is deemed unsafe, and any temporarily unoccupied building, structure or premises, or

part thereof, shall remove therefrom and prevent accumulations of rubbish and other combustible waste by regular cleaning of the premises.

Exception: Temporarily unoccupied buildings, structures, premises or parts thereof undergoing construction or repair in accordance with the Building Code, where rubbish and other combustible waste is controlled and removed in accordance with FC 304.

311.4 Removal of hazardous materials. The owner of any vacant building, structure or premises, or part thereof, that contains hazardous materials and that is deemed unsafe pursuant to Article 216 of Title 28 of the Administrative Code shall comply forthwith with the facility closure requirements of FC 5001.6. The owner of a temporarily unoccupied building, structure or premises, or part thereof, that contains hazardous materials regulated by FC Chapter 50 shall comply with the facility closure requirements of FC 5001.6. Vacant and temporarily unoccupied buildings, structures or premises, and all parts thereof, shall thereafter be maintained free of hazardous materials, including hazardous waste material, except as approved by the commissioner.

311.5 Covered malls. Unoccupied tenant spaces in covered malls shall be:

1. kept free from the storage of any combustible materials.
2. kept separate from other tenant spaces and areas of the mall by maintaining any fire separation requirement of the Building Code during the period of time that the space remains unoccupied or under reconstruction.
3. periodically inspected on at least a weekly basis to ensure that the space is being maintained in accordance with this section. Doors to spaces shall be secured from entry by keeping all doors locked at all times when the space is unoccupied.
4. kept free from rubbish and other combustible waste.

SECTION FC 312 VEHICLE IMPACT PROTECTION

312.1 General. Vehicle impact protection required by this code shall be provided by posts that comply with the requirements of FC 312.2 or FC 312.3, and FC 312.4.

312.2 Posts. Posts used to provide vehicle impact protection shall comply with the following requirements:

1. Constructed of steel not less than 4 inches (102 mm) in diameter and concrete filled.
2. Spaced not more than 4 feet (1219 mm) between posts on center.
3. Set not less than 3 feet (914 mm) deep in a concrete footing of not less than a 15-inch (381-mm) diameter.
4. Set with the top of the posts not less than 3 feet (914 mm) above grade.

5. Located not less than 3 feet (914 mm) from the protected object.

312.3 Other barriers. Barriers meant to resist, deflect or visually deter vehicular impact, other than posts in accordance with FC 312.2, shall be designed and installed in an approved manner commensurate with anticipated impact scenarios.

312.4 Fire apparatus access. Posts and other barriers that may obstruct or impede fire apparatus access shall be removable by the department in an approved manner.

SECTION FC 313 PORTABLE FUELED EQUIPMENT

313.1 Scope. The storage, handling and use of portable fueled equipment shall be governed by this section and the rules.

313.2 General. Portable fueled equipment shall be stored, handled and used in accordance with this section.

313.3 Prohibitions. It shall be unlawful to:

1. Store, handle or use indoors portable fueled equipment, including lawn-care equipment, snow blowers, portable generators, kerosene and other portable space heaters, and any portable fueled device, equipment or system that generates a flame, other than one installed in accordance with the construction codes. The owner of a building, structure or premises shall not provide, or cause to be provided, any such equipment, including equipment designed for space heating.

Exceptions:

1. Indoor storage of lawn-care equipment, power washers, snow blowers, portable generators and other portable fueled equipment designed for outdoor use in a garage or garage space separated from dwelling spaces or other occupancies in accordance with the Building Code, or in a building classified as a Group U occupancy; or in another approved storage area in a building. This exception shall not apply to portable space heaters.
2. The indoor storage, handling and use of portable fueled equipment where authorized by this code, including portable fueled equipment allowed by this section, open-flame devices allowed by FC 308, displays allowed by FC 314, and construction equipment allowed by FC Chapter 33, and portable fueled equipment allowed for demonstrations at exhibitions and trade shows by the rules.
3. The storage of portable fueled equipment for sale or distribution in a mercantile or storage occupancy.

4. The storage, handling and use of portable fueled equipment in a business, factory or mercantile occupancy engaged in the business of manufacturing or repairing of such equipment, provided that portable space heaters are operated solely in connection with such manufacturing or repair, and are not used for space heating purposes.
2. Store, handle or use for space heating, other than storage for sale, any portable fueled equipment that utilizes a flammable liquid as a fuel, or, except as authorized by FC 313.5, that utilizes a combustible liquid as a fuel. Any such portable fueled equipment that shows evidence of having been used shall be deemed to be or have been in use.
3. Use any portable fueled equipment that utilizes waste oil as a fuel. Any such portable fueled equipment that shows evidence of having been used shall be deemed to be or have been in use.
4. Remove paint in or on buildings, structures or premises with a torch or any other flame-generating device. Paint removal may be conducted using heat-producing devices other than portable fueled equipment. The person using such heat-producing device to remove the paint shall remain at the location where the heating operation was conducted to maintain a fire watch for not less than 1 hour after using such device.

313.4 Confiscation and removal. The commissioner may confiscate or order the removal of portable fueled equipment from indoor or outdoor locations where the storage, handling or use of such equipment is determined by the commissioner to be hazardous.

313.5 Portable space heaters. Portable fueled equipment used for space heating shall additionally be stored, handled and used in accordance with FC 313.5.1 and 313.5.2.

313.5.1 Listing and labeling of space heaters. Portable space heaters and other portable fueled equipment used for space heating shall be listed and labeled.

313.5.2 Authorized uses. Portable space heaters may be used for space heating as set forth in FC 313.5.2.1 through 313.5.2.6.

313.5.2.1 Portable natural gas heaters. Portable space heaters fueled by piped natural gas may be stored, handled and used for outdoor use when designed, installed, operated and maintained in accordance with this code, including FC 313.6, the rules and the construction codes, including the Building Code.

313.5.2.2 Construction sites. Portable space heaters may be stored, handled and used at construction sites in accordance with FC Chapter 33 and the rules.

313.5.2.3 Reserved.

313.5.2.4 Local emergency. In the event of failure during severe cold weather of a central heating unit in any building or structure other than a private dwelling, multiple dwelling or Group A occupancy, portable space heaters approved for such indoor use may be used for a period not to exceed 2 weeks when such use has been approved.

313.5.2.5 Public emergencies. In the event of a public emergency which disrupts, interferes with or impairs the operation or use of equipment, supplies or utilities normally utilized for heating, use of portable space heaters for indoor or outdoor use may be authorized by the commissioner upon a declaration of emergency by the mayor.

313.5.2.6 Supervision. The handling and use of portable space heaters shall be under the personal supervision of a certificate of fitness holder or a plumber. The storage of portable space heaters, and the fuel therefor, shall be under the general supervision of a certificate of fitness holder or a plumber.

Exception: Group R-3 occupancies.

313.6 Portable natural gas heaters. Portable space heaters fueled by piped natural gas shall be designed, operated and maintained in accordance with FC 313.6.1 through 313.6.5.

313.6.1 Clearance to buildings. Heaters shall be located outdoors and at least 5 feet (1524 mm) from any building or structure.

313.6.2 Clearance to combustible materials. Heaters shall not be located beneath, or closer than 5 feet (1524 mm) to combustible decorations and combustible overhangs, awnings, sun control devices or similar combustible attachments to buildings or structures.

313.6.3 Proximity to exits. Heaters shall not be located within 5 feet (1524 mm) of exits or exit discharges.

313.6.4 Tip-over switch. Heaters shall be equipped with a tilt or tip-over switch that automatically shuts off the flow of gas if the appliance is tilted more than 15 degrees (0.26 rad) from the vertical.

313.6.5 Guard against contact. The heating element or combustion chamber of heaters shall be permanently protected so as to prevent accidental contact by persons or material.

313.7 Torches. Where allowed, indoor use of torches shall be in accordance with FC Chapters 35, 58 and 61 and the rules. Indoor use of LPG-fueled torches in residential occupancies for soldering, food browning and other household uses, shall be limited to torches with an LPG container capacity of 16.4 ounces in accordance with FC Chapter 61 and the rules.

SECTION FC 314 INDOOR DISPLAYS

314.1 General. Indoor displays in any occupancy shall be designed and installed in accordance with FC 314.2 through 314.4.

314.2 Fixtures and displays. Fixtures and displays of goods for sale to the public shall be arranged so as to maintain free, immediate and unobstructed access to exits as required by FC Chapter 10 and the construction codes, including the Building Code.

314.3 Highly combustible goods. It shall be unlawful to display highly combustible goods, including flammable or combustible liquids, liquefied flammable gases, oxidizing materials, pyroxylin plastics and agricultural goods, in main exit access aisles, corridors, common areas of covered malls, or within 5 feet (1524 mm) of entrances to exits and exterior exit doors.

314.4 Vehicles and watercraft. Fueled and electric vehicles (including motor vehicles, motorcycles and mopeds) and watercraft that are displayed indoors shall comply with the following requirements:

1. Vehicle and watercraft engines shall not be operated at any time when the display is open to the public. Liquid-fueled vehicle and watercraft engine batteries shall be disconnected or the engine otherwise disabled from starting by installation of an ignition lock, “kill switch” (relay) or other approved means. Battery or other electrical connections that are disconnected shall be adequately taped to prevent arcing. For electric and gaseous-fueled vehicles:
 - 1.1. Battery power necessary to preserve vehicle safety features shall be maintained.
 - 1.2. Appropriate safety measures shall be implemented to prevent the engine from being started and/or the vehicle from moving or other approved means, including securing the engine start key or fob and preventing remote engine start.
2. Fuel in fuel tanks shall not exceed one-eighth tank or 2.5 gallons (9.5 L) (whichever is less). Gaseous-fueled vehicles or watercraft shall contain no more fuel than the energy equivalent of 2.5 gallons (9.5 L) of gasoline.
3. Fuel tanks and fill openings shall be closed and secured with a locking gas cap.
4. Fueling or defueling shall not be conducted indoors.
5. No repairs or other work shall be conducted on a motor vehicle or watercraft in the display area.
6. Where indoor display of motor vehicles and watercraft is in Group A occupancies and other public gathering places, aisles with an unobstructed minimum width of 3 feet (914 mm) shall be maintained.
7. Such other requirements as the department may promulgate by rule.

314.5 Required clearance from fire safety systems. Sprinklers and fire alarm systems shall not be obstructed by indoor displays.

314.5.1 Sprinkler systems. A sprinkler system shall be installed in or under covered kiosks, displays, booths, or concession stands that exceed 4 feet (1219 mm) in width. The clearance between any sprinkler head deflector installed above the top of the kiosks, displays, booths, or concession stands shall not be less than 18 inches (457 mm).

Exception: Open-grid and drop-out ceilings complying with the requirements of NFPA 13, as modified by FC Appendix B, may be installed beneath sprinklers.

314.5.2 Fire alarm systems. Sufficient clearance shall be provided between kiosks, displays, booths, or concession stands and fire alarm and carbon monoxide systems equipment and devices including detectors and strobes, so as not to interfere with their operation.

SECTION FC 315 COMBUSTIBLE MATERIALS STORAGE AND OTHER STORAGE HAZARDS

315.1 General. Storage of materials shall be in accordance with this section.

Exception: Storage of materials during construction and demolition operations shall comply with the requirements of FC Chapter 33.

315.2 Storage in buildings. Storage of materials in buildings shall be orderly and stacked materials shall be stable. Storage of combustible materials shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur.

315.2.1 Ceiling clearance. Storage shall be maintained 2 feet (610 mm) or more below the ceiling in areas of buildings not protected by a sprinkler system, or a minimum of 18 inches (457 mm) below sprinkler head deflectors in areas protected by a sprinkler system, provided, however, that storage of noncombustible materials to the ceiling may be authorized by the department when such storage is within 30 inches (762 mm) of a fire partition.

315.2.2 Means of egress. Materials shall not be stored in a manner that obstructs egress from any building, structure or premises.

315.2.3 Equipment rooms. Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms.

315.2.4 Attic, under-floor and concealed spaces. 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 protected by assemblies that are self-closing and are of noncombustible construction or solid wood core not less than 1.75 inches (44.5 mm) in thickness. Storage shall not be placed on exposed joists.

Exceptions:

1. Areas protected throughout by sprinkler systems.
2. Group R-3 and Group U occupancies.
3. Groups S-1 and S-2 occupancies.

315.3 Outdoor storage. Outdoor storage of combustible materials in quantities in excess of 32 cubic feet (0.91 m³) shall comply with FC 315.3.1 through 315.3.6.

315.3.1 Property line. Except as otherwise provided in FC 315.3.5, outdoor storage of combustible materials shall not be located within 10 feet (3048 mm) of a property line.

315.3.2 Adjoining properties. Except as otherwise provided in FC 315.3.5, outdoor storage of combustible materials shall not be located within 50 feet (15 240 mm) of the nearest wall of a building occupied as a Group A occupancy, Group E educational occupancy, Group I-2 occupancy, or any building, structure or premises used for a public gathering.

315.3.3 Building walls, openings and overhead projections. Except as otherwise provided in FC 315.3.5, outdoor storage of combustible materials shall not be located:

1. Within 10 feet (3048 mm) of any building wall that is constructed of a combustible material;
2. Within 10 feet (3048 mm) of any building opening, regardless of the wall construction; and
3. Under building eaves, canopies, awnings and other overhangs.

315.3.4 Height. Outdoor storage shall not exceed 20 feet (6096 mm) in height or such lower maximum height allowed by the Building Code or Zoning Resolution.

315.3.5 Reduced separation distance. The separation distances set forth in FC 315 may be reduced when the combustible materials are:

1. Stored in approved cabinets or containers as set forth in FC 315.7.2.2, or other approved cabinet or container suitable for the type or quantity of stored combustible material;
2. Where appropriate to the type of stored combustible material, enclosed by a solid fence of an approved noncombustible material and an approved height. The combustible materials shall not be piled higher than 2 feet (610 mm) below the top of the fence; and/or
3. One or more other approved fire protection measures are provided.

315.3.6 Portable fire extinguishers. At least one portable fire extinguisher with a rating of at least 4-A shall be provided for every 2,500 square feet (232.3 m²) of storage area, or portion thereof, or in lieu thereof, a hose of at least 1 inch (25 mm) in diameter, equipped with a nozzle of at least ½ inch (12.7 mm) in diameter, sufficient in length to reach all parts of the enclosure, and connected to an adequate water supply may be provided.

315.4 Space underneath grandstands and bleachers. Except where enclosed in not less than 1-hour fire-resistance-rated construction in accordance with the Building Code, spaces underneath grandstand and bleacher seating shall not be occupied or utilized for purposes other than means of egress.

315.5 Storage underneath high-voltage transmission lines. It shall be unlawful to store hazardous materials or combustible materials outdoors within the utility easement underneath high-voltage transmission lines.

315.6 Storage in plenums. It shall be unlawful to use plenums for storage of combustible or other material, including equipment and cabling that has been taken out of service and abandoned, unless such equipment and cables have been tagged for future use in accordance with Electrical Code. The accessible portion of such abandoned equipment and cables shall be removed.

315.7 Storage of solid fuel. Storage of wood, charcoal or other combustible material for use as solid fuel, including for use in commercial cooking appliances, fireplaces or solid fuel-burning equipment approved by the Department of Buildings, and in non-tobacco hookah establishments, shall be in accordance with FC 315.7.1 through 315.7.3, except that storage of solid fuel in Group R-2 occupancies shall be in accordance with FC 315.7.4.

Exceptions:

1. Storage for sale of solid fuel in a mercantile establishment.
2. Group R-3 occupancies.

315.7.1 Supply for immediate use. Not more than a one-day supply of solid fuel may be kept in the same room as the solid fuel-burning equipment or in the room with the fuel loading or clean-out doors or other opening. Unless the solid fuel-burning equipment is designed for internal storage of solid fuel, the solid fuel stored in such room shall not be located:

1. Within 3 feet (914 mm) of the solid-fuel burning equipment or any other heating or cooking appliance;
2. Within 6 feet (1829 mm) of any solid fuel loading opening or door of the solid fuel-burning equipment; or
3. Above any cooking or heating equipment, flue or vent.

315.7.2 Additional solid fuel storage. Solid fuel in excess of a one-day supply shall be stored indoors and/or outdoors in accordance with FC 315.7.2.1 through 315.7.2.2.

315.7.2.1 Indoor. Solid fuel may be stored indoors in:

1. A room dedicated to the storage of not more than 150 cubic feet (4.3 m³) of solid fuel, provided that such storage room is protected by a sprinkler system and enclosed by a minimum of 1-hour fire barriers and horizontal assemblies (walls, floor and ceiling) constructed in accordance with the Building Code; or
2. A building or occupancy protected throughout by a sprinkler system, in metal cabinets dedicated to the storage of solid fuel that:

- 2.1. Are designed and constructed in accordance with FC 5003.8.7 (for hazardous materials storage);
 - 2.2. Are placed on a stable, noncombustible surface; and
 - 2.3. Have a maximum aggregate capacity of 75 cubic feet (2.1 m³); or
3. Metal cabinets designed and installed in accordance with FC 315.7.2.1(2) that are located in a room that is protected by a sprinkler system and enclosed by a minimum of 1-hour fire barriers and horizontal assemblies (walls, floor, and ceiling) constructed in accordance with the Building Code, but such room is not required to be dedicated solely to the storage of solid fuel.

315.7.2.2 Outdoor. Solid fuel shall be stored in well-constructed metal cabinets or containers (with welded seams) dedicated to the storage of solid fuel that:

1. Have securely-closing, close-fitting metal door or lids;
2. Are placed on a concrete or other stable, noncombustible surface;
3. Have a maximum aggregate capacity of 75 cubic feet (2.1 m³); and
4. Are designed and constructed in accordance with FC 5003.8.7 (for hazardous materials storage) or, if not located within 6 feet (1829 mm) of a combustibile surface, are designed and well-constructed of steel having a thickness of not less than 0.0478 inch (1.2 mm) (18 gauge).

315.7.3. Protection of solid fuel. Solid fuel shall be protected by:

1. Keeping the doors or lids to a solid fuel storage room, cabinet or container closed;
2. Posting a durable sign or marking that reads “SOLID FUEL – KEEP FIRE AWAY” at the entrance to a solid fuel storage room or storage cabinet or container; and
3. Storing charcoal and similar combustibile materials in their original packaging, or in noncombustibile containers with securely-closing lids and an internal vertical dimension of not more than 48 inches (1219 mm).

315.7.4 Storage of solid fuel in Group R-2 occupancies. Storage of solid fuel in Group R-2 occupancies, including storage for use in fireplaces and solid fuel-burning equipment approved by the Department of Buildings, shall be in accordance with FC 315.7.4.1 and 315.7.4.2.

315.7.4.1 Indoor storage. Indoor storage of solid fuel shall not exceed 4 cubic feet (0.11 m³) of solid fuel in each dwelling unit, which shall be stored in a safe manner away from sources of ignition.

315.7.4.2 Outdoor storage. Outdoor storage of solid fuel shall be in accordance with FC 315.7.2.2.

SECTION FC 316 HAZARDS TO EMERGENCY RESPONDERS

316.1 Hoistway and shaftway protection. The doors and/or gates to hoistways, freight elevator shafts, trap doors and other means used to provide access to vertical openings, shall be kept closed and secured, or otherwise protected, except when being used to provide access, and shall be closed, secured or otherwise protected, as applicable, at the end of each work day.

316.2 Shaftway markings. Vertical shafts shall be identified as required by this section.

316.2.1 Exterior access to shaftways. Outside openings accessible to the department and which open directly on a hoistway or shaftway communicating between two or more floors in a building shall be plainly marked with the word SHAFTWAY in red letters at least 6 inches (152 mm) high on a white background. Such warning signs shall be placed so as to be readily discernible from the outside of the building.

316.2.2 Interior access to shaftways. Door or window openings to a hoistway or shaftway from the interior of the building shall be plainly marked with the word SHAFTWAY in red letters at least 6 inches (152 mm) high on a white background. Such warning signs shall be placed so as to be readily discernible.

Exception: Marking shall not be required on shaftway openings which are readily discernible as openings onto a shaftway by the construction or arrangement.

316.3 Pitfalls. Installations designed to disable, injure, maim or kill intruders are prohibited. No person shall install or use firearms, sharp or pointed objects, razor wire, explosives, flammable or combustible liquid containers, or dispensers containing highly toxic, toxic, irritant, piercing sounds or other hazardous materials in a manner which may passively or actively disable, injure, maim or kill a firefighter or other emergency responder who enters a building or premises, forcibly or otherwise, for the purpose of controlling or extinguishing a fire, rescuing trapped occupants or rendering other emergency assistance.

316.4 Security device. It shall be unlawful to install, operate or maintain a security device that emits any substance that could obscure a means of egress in any building, structure or premises.

SECTION FC 317 AUTOMOTIVE SALVAGE AND WRECKING FACILITIES

317.1 General. Automotive salvage and wrecking facilities shall be designed, installed, operated and maintained in accordance with this section. The design and installation provisions of this section shall apply to both new and existing facilities.

317.2 Prohibitions. It shall be unlawful to:

1. Dispose of any fuel or flammable or combustible liquid waste by discharging or otherwise disposing of such fuel or liquid waste in any drain or sewer, upon any premises, or in any river, stream or other body of water.
2. Light or maintain an open fire for the burning, dismantling, salvaging, scrapping wrecking of motor vehicles or parts thereof.

317.3 Supervision. Automotive salvage and wrecking facilities shall be supervised as follows:

1. The facility shall be under the personal supervision of a person holding a certificate of fitness for automotive salvage and wrecking facilities, who shall ensure that the facility is designed, installed, operated and maintained in accordance with this code and other applicable laws, rules, and regulations.
2. The defueling of motor vehicle fuel tanks and the transfer of fuel from the defueling equipment shall be conducted by or under the personal supervision of a certificate of fitness holder.
3. Hot work shall be personally conducted by a person holding a certificate of fitness for such work in accordance with FC Chapter 35.

317.4 Facility requirements. Automotive salvage and wrecking facilities shall be in accordance with FC 317.4.1 through 317.4.3.

317.4.1 Licensing. Department permits and other approvals shall be issued to an automotive salvage and wrecking facility only if such facility is licensed and maintained in accordance with requirements of the New York State Department of Motor Vehicles and the New York City Department of Consumer and Worker Protection.

317.4.2 Lawful occupancy. Department permits and other approvals shall be issued to automotive salvage and wrecking facilities only if use of the premises for such facility is authorized by the certificate of occupancy or otherwise constitutes a lawful use of the premises.

317.4.3 Design requirements. Automotive salvage and wrecking facilities shall be designed in accordance with FC 317.4.3.1 through 317.4.3.3.

317.4.3.1 Facility enclosure. The facility shall be enclosed on all sides by a solid, opaque fence or wall at least 8 feet (2438 mm) in height in accordance with the Building Code and the Zoning Resolution.

317.4.3.2 Fire apparatus roads. The facility shall be accessible from fire apparatus roads with a minimum unobstructed width of 20 feet (6096 mm). An outdoor area of the facility shall be accessible by fire apparatus roads on all four sides with a distance between such roads of not greater than 50 feet (15 240 mm) by 100 feet (30 480 mm).

317.4.3.3 Defueling area. The defueling of motor vehicle fuel tanks shall be conducted at an approved location that is protected throughout by a fire extinguishing system.

317.5 Operation and maintenance. Automotive salvage and wrecking facilities shall be operated and maintained in accordance with FC 317.5.1 through 317.5.4.

317.5.1 Fire apparatus access roads. Fire apparatus access roads shall be maintained unobstructed to provide access for department apparatus.

317.5.2 Torch operations. Torch operations shall be conducted in accordance with FC Chapter 35 and in compliance with the following requirements:

1. Torch operations shall be conducted at least 35 feet (10 668 mm) from combustible waste, other motor vehicles, stacks of motor vehicles or other combustible material, unless protection in the form of noncombustible shields or covers are provided to restrict the scattering of sparks and molten metal.
2. Torch operations shall not be conducted in any location where hazardous gases or vapors may be present. Fuel tanks of motor vehicles shall be emptied of fuel and purged of all flammable vapors before any torch operations are commenced.
3. Compressed gas containers, when in use, shall be properly supported and placed a safe distance from torch operations.
4. Compressed gas containers, when not in use, and reserve containers, shall be properly supported and stored in a location remote from torch operations. The valves of such containers shall be closed and protected from mechanical damage by the placement of protective caps. Empty containers shall be treated as full.
5. Torch operation areas shall be protected by a charged hose line, at least 1 inch (25 mm) in diameter, connected to an approved source of water. In lieu of such hose line, at least four portable fire extinguishers with a minimum 2-A rating each may be provided.
6. The torch operator or a person designated as a fire watch shall search the torch operation area immediately after operations to determine that no sparks or molten metal remain in the area. Additionally, a second such search shall be conducted ½ hour thereafter. A record of such searches shall be maintained in a log book at the premises and made available for inspection by any representative of the department.

317.5.3 Draining of motor vehicle fluids. The draining of fluids from motor vehicles shall be in accordance with FC 317.5.3.1 and 317.5.3.2.

317.5.3.1 Draining of motor vehicle fuel tanks. As soon as practicable after arrival, the fuel tank of motor vehicles received at salvage and wrecking facilities shall be defueled through the vehicle's fuel connection, or other approved procedure. Defueling equipment shall be listed for such purpose as a complete assembly and shall have a container capacity not exceeding 65 gallons (246 L). The fuel recovered by the defueler shall be transferred to a storage tank complying with the requirements of FC Chapter 23 or 57, as applicable. Defueling equipment shall not be used to fuel motor vehicles.

317.5.3.2 Draining of other motor vehicle fluids. Crankcase oil and other flammable or combustible liquid waste shall be removed from motor vehicles and stored outdoors, in tanks complying with the requirements of FC Chapter 57, or, when approved, portable containers.

317.5.4 Emergency operations. In automotive salvage and wrecking facilities provided with cranes for the purpose of moving or stacking motor vehicles, procedures shall be developed by the owner such that a crane operator would be made available in a reasonable period of time in the event that crane operation is required during a fire or other emergency.

317.6 Excessive fires. The occurrence of more than two fires in an automotive salvage and wrecking facility during any 12-month period shall give rise to a rebuttable presumption that the owner has failed to properly maintain the facility in compliance with the requirements of this section, and shall be grounds for revocation of department permits and other approvals, or other appropriate enforcement action.

317.7 Air bags. Undeployed waste air bags shall be stored and handled at automotive salvage and wrecking facilities in accordance with the FC 317.7.1 through 317.7.3.

317.7.1 Limitation on storage. Not more than 250 undeployed waste air bags shall be stored at an automotive salvage and wrecking facility unless the facility is an approved air bag waste collection facility in accordance with EPA regulations and registered with the New York State Department of Environmental Conservation.

317.7.2 Storage of undeployed waste air bags. No later than the end of each workday, undeployed waste air bags shall be packaged for shipment and disposal in compliance with DOTn regulations and stored in a cool, dry and secure area, free of oil, grease, detergent, or water, at least 50 feet from any hot work area or other source of ignition. The air bag leads shall be protected from stray current by shunting them and wrapping them in electrical tape or by other approved method. Storage of more than 250 undeployed waste air bags shall require that the automotive salvage and wrecking facility be an approved air bag waste collection facility.

317.7.3 Removal of undeployed waste air bags. Undeployed waste air bags shall be disposed of by a lawful waste hauler in accordance with EPA, DOTn and New York State Department of Environmental Conservation regulations.

SECTION FC 318 ROOFTOP GARDENS AND LANDSCAPING

318.1 General. Rooftop gardens and landscaping, including living walls, shall be designed, installed, operated and maintained in accordance with the construction codes, including the Building Code and this section.

318.2 Rooftop access and obstructions. Rooftop gardens and landscaping subject to the rooftop access and obstruction provisions of FC 504.4 shall be designed and installed in compliance with the requirements of that section.

318.3 Maintenance of vegetation. Rooftop gardens and landscaping shall be maintained in a healthy condition and shall not be allowed to encroach upon areas required to be kept clear. Vegetation shall be regularly pruned for these purposes and vegetation capable of being ignited shall be regularly cleared and removed from the rooftop and the building.

318.4 Maintenance equipment. Portable fueled equipment, including flammable and combustible liquid fuels, used for the maintenance of rooftop garden and landscaping vegetation shall be stored in accordance with FC 313 and 5704.3.4.4.

318.5 Water supply. Rooftop gardens or landscaping exceeding 250 square feet (23 m²) shall be provided with a rooftop garden hose connected to an approved water supply. Where the size of the rooftop garden, extent of landscaping, type of vegetation, and/or premises maintenance history warrant, the department may require installation of an irrigation system or other approved method of hydration to ensure proper maintenance of the vegetation.

SECTION FC 319 RESERVED

SECTION FC 320 LAUNDRY CARTS

320.1 Laundry carts with a capacity of 1 cubic yard or more. Laundry carts with an individual capacity of 200 gallons (1 cubic yard or 0.76 m³) or more used for laundry purposes shall be constructed of noncombustible materials or of materials having a peak rate of heat release not exceeding 300 kW/m² at an incident heat flux of 50 kW/m² when tested in a horizontal orientation in accordance with ASTM E 1354, and shall be listed and labeled as such.

SECTION FC 321 FIXED GUIDEWAY TRANSIT AND PASSENGER RAIL SYSTEMS

321.1 Scope. This section shall govern the design, installation, operation and maintenance of underground, open cut, surface and elevated fixed guideway transit and passenger rail systems.

321.2 Design and installation. The design and installation of fire safety and life safety systems for fixed guideway transit and passenger rail systems, including emergency ventilation systems, emergency voice communication systems, fire protection systems and means of egress, shall be in accordance with NFPA 130 and all Annexes thereto, as modified by FC Appendix B; the Electrical Code; the provisions of the construction codes applicable to fire safety and life safety systems; and this section.

321.2.1 Fire scenario design parameters. Approved fire scenarios used for designing fixed guideway transit and passenger rail systems shall be in accordance with Sections 4.4 and A 4.4.2 of NFPA 130, as modified by FC Appendix B, and the following:

1. The worst case scenario, as set forth in NFPA 130, as modified by FC Appendix B, shall be used for both the station and trainway designs.
2. Computational fluid dynamics analysis for the fire simulation shall be performed for an approved period of time, both with and without mitigating systems, including but not limited to ventilation and sprinkler protection.
3. The tenable condition parameters reported in the computational fluid dynamics analysis, including but not limited to heat, visibility and carbon monoxide, shall be precisely reported in the analysis.

321.3 Operation and maintenance. The operation and maintenance of fixed guideway transit and passenger rail systems shall be in accordance with NFPA 130 and all Annexes thereto, as modified by FC Appendix B.

321.4 Construction site fire safety. Construction operations of fixed guideway transit and passenger rail systems, including stations and tunnels, shall be conducted in accordance with Chapter 33 of the Building Code; this code, including FC Chapter 33; and NFPA 130, as modified by FC Appendix B. Approved fire extinguishing systems shall be provided for construction shanties and construction storage facilities and areas.

SECTION FC 322 ROAD TUNNELS, BRIDGES AND OTHER LIMITED ACCESS HIGHWAYS

322.1 Scope. This section shall govern the design, installation, operation and maintenance of road tunnels, bridges and other limited access highways used or designed to be used by motor vehicles.

322.2 Design and installation. The design and installation of fire safety and life safety systems for road tunnels, bridges and other limited access highways, including emergency ventilation systems, emergency voice communication systems, fire protection systems and means of egress, shall be in accordance with NFPA 502, as modified by FC Appendix B; the Electrical Code; the provisions of the construction codes applicable to fire safety and life safety systems; and this section.

322.2.1 Fire scenario design parameters. Approved fire scenarios used for designing road tunnels shall be in accordance with NFPA 502, as modified by FC Appendix B, and the following:

1. The worst case scenario, as set forth in NFPA 502, as modified by FC Appendix B, shall be used for designs.

2. Computational fluid dynamics analysis for the fire simulation shall be performed for an approved period of time, both with and without mitigating systems, including but not limited to ventilation and sprinkler protection.
3. The tenable condition parameters reported in the computational fluid dynamics analysis, including but not limited to heat, visibility and carbon monoxide, shall be precisely reported in the analysis.

322.3 Operation and maintenance. The operation and maintenance of road tunnels, bridges and other limited access highways used or designed to be used by motor vehicles shall be in accordance with NFPA 502, as modified by FC Appendix B.

322.4 Construction site fire safety. Construction operations of road tunnels, bridges and other limited access highways shall be conducted in accordance with Chapter 33 of the Building Code; this code, including FC Chapter 33; and NFPA 502, as modified by FC Appendix B. Approved fire extinguishing systems shall be provided for construction shanties and construction storage facilities and areas.

SECTION FC 323 WASTEWATER TREATMENT AND COLLECTION FACILITIES

323.1 Scope. This section shall govern the design, installation, operation and maintenance of fire protection systems and other fire safety measures at wastewater treatment and collection facilities.

323.2 General. Fire protection systems and other fire safety measures at wastewater treatment facilities shall be designed, installed, operated and maintained in accordance with NFPA 820.

SECTION FC 324 ELECTRIC GENERATING PLANTS

324.1 Scope. This section shall govern the design, installation, operation and maintenance of fire protection systems and other fire safety measures at electric generating plants.

324.2 General. Fire protection systems and other fire safety measures at electric generating plants shall be designed, installed, operated and maintained in accordance with NFPA 850, except for microturbine installations, which shall be designed, installed, operated and maintained in accordance with FC 5810.

SECTION FC 325 PRODUCTION LOCATIONS

325.1 Scope. This section shall govern the protection of fire safety at production locations used for filming and rigging, except for soundstages, production studios and approved production facilities, as those terms are defined in NFPA 140.

325.2 General. Production locations shall comply with the fire safety measures required by this section and by NFPA 140, as applicable.

325.3 Permits. Permits shall be required as set forth in FC 105.6.

325.4 Interagency coordination. The department shall develop and establish, in consultation with the Mayor's Office of Film, Theatre and Broadcasting, or an officer, employee or unit of the Department of Small Business Services as may be authorized to issue permits in accordance with paragraph r of subdivision 1 of section 1301 of the charter or pursuant to its rules, and such other agencies as the department determines to be necessary and appropriate, a protocol and other processes to:

1. Provide to the department real-time access to information submitted to the Mayor's Office of Film, Theatre and Broadcasting, or an officer, employee or unit of the Department of Small Business Services as may be authorized to issue permits in accordance with paragraph r of subdivision 1 of section 1301 of the charter or pursuant to its rules, in connection with permit applications;
2. Provide notification to the local firehouse each time a permit for filming or rigging is issued for activities that occur at a production location within the area of response for such firehouse.
3. Enable the department to evaluate relevant fire safety considerations at production locations, familiarize local firehouses or other members of the department with field conditions, including alterations being performed at such locations, in advance of and during the course of rigging and filming, and provide additional production location information in a timely manner to firefighters and other emergency response personnel during fire and non-fire emergencies; and
4. Coordinate approval of permit applications to allow the department to determine whether any premises associated with the proposed production location is subject to any outstanding department or Department of Buildings violation that the department determines constitutes a life safety hazard sufficient to warrant denial of the application. The Mayor's Office of Film, Theatre and Broadcasting, or an officer, employee or unit of the Department of Small Business Services as may be authorized to issue permits in accordance with paragraph r of subdivision 1 of section 1301 of the charter or pursuant to its rule, shall deny such permit application when the department makes such a determination.

325.5 Fire safety at production locations. The department shall promulgate rules addressing fire safety at production locations. Such rules shall establish fire safety standards, procedures and requirements in consideration of such location's occupancy, construction and condition, including factors such as whether means of egress are impeded and a working sprinkler system exists, and the nature of the production activities to take place at such location, including set construction or other alterations, and whether pyrotechnic or other special effects will be conducted. Such rules may require the following fire safety measures:

1. The presence of one or more production location fire safety managers, to be designated by the permit holder, during production activities determined by the department to require such

supervision. Production location fire safety managers shall have such qualifications and duties as set forth in FC 325.6 and the rules.

2. The presence of department representatives or standby fire apparatus during production activities, as determined by the department.
3. Directing the cessation of filming activities when an unsafe condition arises that is detrimental to fire safety, until such time as such condition is corrected.
4. Such other fire safety measures as the department may require.

325.6 Production location fire safety manager. When required by the rules, production locations shall be under the personal supervision of one or more production location fire safety managers, each of whom shall hold the required certificate of fitness. The permit holder shall designate such production location fire safety managers before the commencement of the activity authorized by a permit for rigging and shooting pursuant to 43 RCNY § 9-01.

325.6.1 Fire safety manager duties. The production location fire safety manager shall have such duties and responsibilities as set forth in the rules, including but not limited to:

1. Ensuring compliance with the requirements of this code and other laws, rules and regulations enforced by the department.
2. Personally inspecting and monitoring the production location, confirming that permits or other required approvals have been obtained, and completing fire safety surveys or other recordkeeping.
3. Notifying the permit holder of any conditions detrimental to fire safety in accordance with the rules.

325.7 Means of egress. Means of egress shall be maintained free from obstruction at production locations. Prior approval of the Department of Buildings and/or the department shall be obtained in accordance with applicable laws, rules and regulations for any alteration or obstruction of the means of egress.

325.8 Housekeeping. All production locations shall be maintained free of accumulation of combustible waste in accordance with FC 304.

325.9 Portable fire extinguishers. The permit holder responsible for a production location shall provide one or more portable fire extinguishers when required by the rules.