RESOLUTION NO. 2005-050

A RESOLUTION OF THE GOVERNING BOARD FOR THE NORTHWEST FIRE DISTRICT APPROVING AND AUTHORIZING THE ADOPTION OF AMENDMENTS TO THE FIRE CODE.

WHEREAS, the Northwest Fire District previously held an election to adopt a fire code; and

WHEREAS, the qualified electors approved the adoption of the fire code; and

WHEREAS, the Northwest Fire District has, with the approval of the State Fire Marshal, amended the fire code from time to time; and

WHEREAS, three copies of the fire code are on file in the administrative offices of the Northwest Fire District and are available for public inspection; and

WHEREAS, pursuant to A.R.S. section 48-805 (B)(6), the Governing Board of the Northwest Fire District (the "Board") finds that it would be in the best interest of the residents of the District to amend the fire code; and

WHEREAS, attached hereto as Exhibit A and incorporated herein by this reference, are proposed amendments to the fire code; and

WHEREAS, pursuant to A.R.S. section 48-805 (B)(6), the Northwest Fire District has received approval from the State Fire Marshal to adopt the amendments; and

WHEREAS, after statutorily mandated posting and publication, pursuant to A.R.S. section 48-805 (A)(2), the Board held a public hearing to receive comments from the public and the District's staff concerning the amendments; and

WHEREAS, the Board has reviewed the amendments and finds that it is in the best interests of the District and its residents to amend the code by adopting them.

NOW, THEREFORE, BE IT RESOLVED by the Board that the fire code amendments, attached hereto as Exhibit A, are hereby adopted.

BE IT FURTHER RESOLVED that this Resolution shall have no effect nor application within the incorporated boundaries of the Town of Marana.

BE IT FURTHER RESOLVED that three copies of the amended fire code shall remain on file at the administrative offices of the Northwest Fire District and shall be available for public inspection.

BE IT FURTHER RESOLVED, that District Officers and staff are hereby authorized to take all steps necessary and proper to carry out the purposes of this Resolution.

PASSED AND ADOPTED by the Governing Board of the Northwest Fire District this 13th day of December, 2005.

_____
Linda A. Christopherson
Board Chair

_____
Lee C. Mellor
Clerk of the Board

APPROVED AS TO FORM:

_____
Thomas Benavidez
District Attorney

CHAPTER 1

ADMINISTRATION

SECTION 102 – APPLICABILITY

Section 102.3 Change of use or occupancy is **REVISED** to read:

> **102.3 Change of use or occupancy.** The provisions of the International Building Code shall apply to all buildings undergoing a change of occupancy.

Section 102.4 Application of building code is **REVISED** to read:

> **102.4 Application of building code.** The design and construction of new structures shall comply with the International Building Code. Repairs, alterations and additions to existing structures shall comply with the International Building Code.

Section 102.5 Historical buildings is **REVISED** to read:

> **102.5 Historical buildings.** The construction, alteration, repair, enlargement, restoration, relocation or movement of existing buildings or structures that are designated as historic buildings when such buildings or structures do not constitute a distinct hazard to life or property shall be in accordance with the provisions of the International Building Code.

102.9 Conflicting provisions. Amend to read as follows:

> **102.9 Conflicting provisions.** Where there is a conflict between a general requirement and a specific requirement, or between this code and any other code, ordinance or statute, the more restrictive shall apply.

SECTION 104 - GENERAL AUTHORITY AND RESPONSIBILITIES

Section 104.2 is REVISED by ADDING the following subsection:

> **Section 104.2.1 Permit Fees.** Permit fees shall be in accordance with the district's fee schedule as established by the northwest fire district board.

SECTION 105 – PERMITS

105.1.1 Permits required is **REVISED** as follows:

> **Permits required.** Permits required by this code shall be obtained from the fire code official. It shall be unlawful for any person, firm or corporation to use a building(s) or premises or engage in any activities for which the fire code official requires a permit without first having obtained such permit. Permit fees, if any, shall be paid prior to issuance of the permit. Issued permits shall be kept on the premises designated herein at all times and shall be readily accessible for inspection by the fire code official. For information on required permits, contact the northwest fire district, fire prevention section at (520) 887-1010.

Section 105.6 Required operational permits is **REVISED** as follows:

105.6 Required operational permits.

The fire code official is authorized to issue operational permits for the operations set forth in Sections 105.6.1 through 105.6.47.

105.6.1 Aerosol products. DELETED/RESERVED

105.6.2 Amusement buildings

An operational permit is required to operate a temporary special amusement building. Temporary special amusement buildings shall be operated for a period of time not to exceed 45 days. Plans for temporary special amusement buildings shall be submitted to the northwest fire district fire prevention section 30 days before the opening of the building or structure to the public.

105.6.3 Aviation facilities. DELETED/RESERVED

105.6.4 Carnivals and fairs.

An operational permit is required to conduct a carnival or fair.

105.6.5 Battery systems. DELETED/RESERVED

105.6.6 Cellulose nitrate film. DELETED/RESERVED

105.6.7 Combustible dust-producing operations. DELETED RESERVED

105.6.8 Combustible fibers. DELETED/RESERVED

105.6.9 Compressed gases. DELETED/RESERVED

105.6.10 Covered mall buildings. An operational permit is required for:

1. The placement of retail fixtures and displays, concession equipment, displays of highly combustible goods and similar items in the mall.
2. The display of liquid- or gas-fired equipment in the mall.
3. The use of open-flame or flame-producing equipment in the mall.

105.6.11 Cryogenic fluids. DELETED/RESERVED

105.6.12 Cutting and welding. DELETED/RESERVED

105.6.13 Dry cleaning plants. DELETED/RESERVED

105.6.14 Exhibits and trade shows.

An operational permit is required to operate exhibits and trade shows.

105.6.15 Explosives.

An operational permit is required for the manufacture, storage, handling, sale or use of any quantity of explosive, explosive material, fireworks, or pyrotechnic special effects within the scope of Chapter 33.

105.6.16 Fire hydrants and valves. DELETED/RESERVED

105.6.17 Flammable and combustible liquids. DELETED/RESERVED

105.6.18 Floor finishing. DELETED/RESERVED

105.6.19 Fruit and crop ripening. DELETED/RESERVED

105.6.20 Fumigation and thermal insecticidal fogging. DELETED/RESERVED

105.6.21 Hazardous materials. DELETED/RESERVED

105.6.22 HPM facilities. DELETED/RESERVED

105.6.23 High-piled storage. DELETED/RESERVED

105.6.24 Hot work operations. DELETED/RESERVED

105.6.25 Industrial ovens. DELETED/RESERVED

105.6.26 Lumber yards and woodworking plants. DELETED/RESERVED

105.6.27 Liquid- or gas-fueled vehicles or equipment in assembly buildings.

An operational permit is required to display, operate or demonstrate liquid- or gas-fueled vehicles or equipment in assembly buildings.

105.6.28 LP-gas. DELETED/RESERVED

105.6.29 Magnesium. DELETED/RESERVED

105.6.30 Miscellaneous combustible storage. DELETED/RESERVED

105.6.31 Open burning.

An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be adhered to.

Exception: Recreational fires.

105.6.32 Open flames and torches. DELETED/RESERVED

105.6.33 Open flames and candles.

105.6.34 Organic coatings. DELETED RESERVED

105.6.35 Places of assembly.

105.6.36 Private fire hydrants. DELETED/RESERVED

105.6.37 Pyrotechnic special effects material.

An operational permit is required for use and handling of pyrotechnic special effects material.

105.6.38 Pyroxylin plastics. DELETED/RESERVED

105.6.39 Refrigeration equipment. DELETED/RESERVED

105.6.40 Repair garages and motor fuel-dispensing facilities. DELETED/ RESERVED

105.6.41 Rooftop heliports. DELETED/RESERVED

105.6.42 Spraying or dipping. DELETED/RESERVED

105.6.43 Storage of scrap tires and tire byproducts. DELETED/RESERVED

105.6.44 Temporary membrane structures, tents and canopies. An operational permit is required to operate a temporary membrane structure or a tent having an area in excess of 400 square feet (37m^2), or a canopy in excess of 900 square feet (84m^2).

Exceptions:

1. Tents used exclusively for recreational camping purposes.

105.6.45 Tire-rebuilding plants. DELETED/RRESERVED

105.6.46 Waste handling. DELETED/RESERVED

105.6.47 Wood products. DELETED/RESERVED

Section 105.6 Required construction permits is **REVISED** as follows:

105.7 Required construction permits.

The fire code official is authorized to issue construction permits for work as set forth in Sections 105.7.1 through 105.7.12.

105.7.1 Automatic fire-extinguishing systems.

A construction permit is required for installation of or modification to an automatic fire-extinguishing system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.2 Compressed gases. DELETED/RESERVED

105.7.3 Fire alarm and detection systems and related equipment.

A construction permit is required for installation of or modification to fire alarm and detection systems and related equipment. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.4 Fire pumps and related equipment.

A construction permit is required for installation of or modification to fire pumps and related fuel tanks, jockey pumps, controllers, and generators. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.5 Flammable and combustible liquids. DELETED/RESERVED

105.7.6 Hazardous materials. DELETED/RESERVED

105.7.7 Industrial ovens. DELETED/RESERVED

105.7.8 LP-gas. DELETED/RESERVED

105.7.9 Private fire hydrants. DELETED/RESERVED

105.7.10 Spraying or dipping. DELETED/RESERVED

105.7.11 Standpipe systems.

A construction permit is required for the installation, modification, or removal from service of a standpipe system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

105.7.12 Temporary membrane structures, tents and canopies. A construction permit is required to erect a temporary membrane structure or a tent having an area in excess of 400 square feet (19m^2), or a canopy in excess of 900 square feet (37m^2).

Exceptions:

1. Tents used exclusively for recreational camping purposes.

SECTION 108 - BOARD OF APPEALS

Section 108.1 is **REVISED** as follows:

108.1 Board of appeals established. In order to hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code, the northwest fire district hereby establishes that the district's emergency services commission shall serve as the district's board of appeals. The fire code official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official. The Board shall have no authority to waive requirements of this code.

Section 108.1.1 Administrative Review is **ADDED** to read:

108.1.1 Administrative review. Whenever a violation of this code has been found and the property owner or representative wishes to challenge the application of this code by the inspection authority, an administrative review may be requested based on the claim that the intent of this code or the rules legally adopted

hereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equivalent method of protection or safety is proposed,

The request for an administrative review shall be filed with the fire code official as follows:

1. The applicant shall file a written request for administrative review on or before Friday of each week, not later than 4:30 p.m.
2. The fire code official will conduct the review within 10 working days of the receipt of the request.
3. The fire code official may use a hearing committee consisting of such staff as is deemed appropriate to provide additional insight regarding the request for review.
4. Adequate information shall be provided by the applicant on the request for review to fully describe the condition(s) in question.
5. The applicant may, but is not required to, meet with the fire code official to discuss the review.
6. If the administrative review results in upholding the actions of the inspection staff, the applicant shall comply with the requirement(s) of the fire code or file an appeal with the district's board of appeals.

Section 109.3 Violation penalties is **REVISED** to read:

Section 109.3 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or direction of the fire code official, or of a permit or certificate used under provisions of this code, shall be guilty of a civil infraction, and upon conviction thereof, punishable by a fine in accordance with the Town of Marana, Arizona or Pima County, Arizona fine schedule as applicable for such violation(s). Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Section 111.4 Failure to comply is **REVISED** to read:

111.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine in accordance with the Town Of Marana, Arizona Or Pima County, Arizona fine schedule as applicable for such violation.

CHAPTER 2

DEFINITIONS

SECTION 201 - GENERAL

Section 201.3 Terms defined in other codes is **REVISED** to read:

201.3 Terms defined in other codes. Whenever terms are not defined in this code and are defined by other applicable codes adopted by the jurisdiction, such terms shall have the meanings ascribed to them as in those codes.

SECTION 202 - GENERAL DEFINITIONS

The following definitions are **ADDED** as follows:

Barbecue pit. An enclosure in which approved fuels are burned to make a bed of hot coals over which food is prepared.

Driveway. A vehicular ingress and egress route that serves no more than two buildings or structures, not including accessory structures, or no more than five dwelling units.

The following **OCCUPANCY CLASSIFICATIONS** are **REVISED** as follows:

Institutional Group I.

[B] Institutional Group I. Institutional Group I occupancy includes, among others, the use of a building or structure, or a portion thereof, in which people, cared for or living in a supervised environment and having physical limitations because of health or age, are harbored for medical treatment or other care or treatment, or in which people are detained for penal or correctional purposes or in which the liberty of the occupants is restricted. Institutional occupancies shall be classified as Group I-1, I-2, I-3 or I-4.

Group I-1. This occupancy shall include buildings, structures or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities

Convalescent facilities
Group homes
Half-way houses
Residential board and care facilities
Social rehabilitation facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the International Residential Code. A facility such as above, housing at least six and not more than 10 persons, shall be classified as Group R-4.

Residential Group R.

Group R-4 is **REVISED** as follows:

R-4 Residential occupancies shall include buildings arranged for occupancy as Residential Care/Assisted Living homes including more than five but not more than 10 occupants, excluding staff~~.~~ , who because of age, mental or physical disability, or other reasons, live in a supervised residential environment which provides care licensed by the Arizona Department of Health Services.

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 except for the height and area limitations provided in Section 503 of the International Building Code or shall comply with the International Residential Code.

The following definitions are hereby **ADDED** to read as follows:

Person – is a natural person, heirs, executors, administrators or assigns, and also includes a firm, partnership or corporation, its or their successors or assigns, or the agent of any of the aforesaid.

Supervisory care service. General supervision, including daily awareness of resident functioning and continuing needs.

Unlawful, unless otherwise specifically provided, means civil infraction.

CHAPTER 3

GENERAL PRECAUTIONS AGAINST FIRE

SECTION 302 – DEFINITIONS

Section 302.1 Definitions. The definition of **BONFIRE** is hereby **DELETED** (in its entirety).

SECTION 307 OPEN BURNING AND RECREATIONAL FIRES

Section 307.2 Permit required is here by **REVISED** as follows:

> **307.2 Permit required.** A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silvicultural or range or wildlife management practices or prevention or control of disease or pests. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be installed.

Section 307.3.1 Bonfires is hereby **REPEALED** (in its entirety) and the Section is **RESERVED.**

Section 307.4 Attendance is hereby **REVISED** by **REPEALING** the word "**bonfires**".

> **307.4 Attendance.** Open burning or recreational fires shall be constantly attended until the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose or water truck, shall be available for immediate utilization.

SECTION 308 - OPEN BURNING

Section 308.3.1 is **REVISED** by **DELETING** Exception 2 as follows:

> **308.3.1 Open-flame cooking devices.** Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.
>
> **Exceptions:**
>
> 1. One- and two-family dwellings.

Section 308.3.6 Theatrical performers. Is hereby **REVISED** by **ADDING** the following subsections:

Section 308.3.6.1 Audience control. The audience shall be at least 30 feet (9144 mm) away from the closest projection of an open flame device. Audience control shall be established by use of a physical barrier which can be easily moved or removed in the event of an emergency and shall remain in place throughout the entire performance.

Section 308.3.6.2 Attendant. Performances shall be constantly attended by a person knowledgeable in the use of a fire extinguisher at the rate of at least 1 attendant for every 4 active performers. Attendants shall remain at the performance until the fire has been extinguished.

Section 308.3.6.3 Fire extinguishers. Adequate fire extinguishing equipment including but not limited to buckets of water, water soaked rags, water extinguishers, or charged hose lines, shall be readily available for use during the performance. Portable fire extinguishers shall be provided at a minimum of one 20bc extinguisher for every four simultaneous performers.

Section 308.3.6.4 Clearance from combustibles. A 25-foot (7620 mm) clearance from all combustibles shall be maintained in all directions.

SECTION 311 - VACANT PREMISES

Section 311.2 is hereby **AMENDED** as follows:

311.2 Safeguarding vacant premises. Temporarily unoccupied buildings, structures, premises or portions thereof shall be secured and protected in accordance with this section. Contact information shall be conspicuously posted, either on the building or as agreed to by the fire code official.

Section 311.2.2 Fire protection is hereby **AMENDED** by **DELETING** Exceptions 1 and 2 (in their entirety).

SECTION 313 – FUELED EQUIPMENT

Section 313.1 Fueled equipment is **REVISED** as follows:

313.1 Fueled equipment. Fueled equipment, including but not limited to motorcycles, mopeds, lawn-care equipment and portable cooking equipment, shall not be operated or repaired within a building, including living spaces of Group R occupancies.

Exceptions:

1. Buildings or rooms constructed for such use in accordance with the *International Building Code.*
2. When allowed by Section 314.
3. Use of LP-gas powered equipment in accordance with NFPA 58.

SECTION 316 – HEAT-PRODUCING APPLIANCES is hereby **ADDED** as follows:

SECTION 316 – HEAT PRODUCING APPLIANCES

Section 316.1 General. Heating appliances shall be installed and maintained in accordance with their listing and the jurisdiction's building, electrical, and mechanical codes. Clearances from combustible material shall be maintained as set for the in the building and mechanical codes and the product listing.

Section 316.2 Clothes dryers. Clothes dryers shall be frequently cleaned to maintain the lint trap, mechanical and heating components free from excessive accumulations of lint.

CHAPTER 4

EMERGENCY PLANNING AND PREPAREDNESS

Section 403.1 is **REVISED** by **ADDING** the following paragraphs:

When the fire code official has determined that a fire watch is needed, such personnel shall be qualified, off duty northwest fire district personnel. Fire watch personnel shall be subject to the fire code official's orders at all times, and shall not be permitted to perform any duties other than those prescribed by this section or by the fire code official.

Compensation of these personnel shall be in accordance with the district's schedule of charges for these services. The owner, agent or lessee of the premises for which fire watch services are provided shall, upon receipt of an invoice for these services, remit to the northwest fire district such amounts as are due and payable within 30 days of the date on the invoice.

Section 403.2 Special Amusement Buildings is **ADDED** as follows:

403.2 SPECIAL AMUSEMENT BUILDINGS

Section 403.2.1 Scope. Special amusement buildings used for a period of time not exceeding 45 days shall conform to the requirements in section 403.2 in addition to the provisions set forth in IFC Chapters 1, 2, 4, 9 and 10 and the International Building Code.

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

Section 403.2.2 Permit required. For permit requirements refer to section 105.6.2 of this code.

Section 403.2.3 General. Where mazes, mirrors or other effects are used to confound the egress path, exits and exit signs shall be approved by the building official and where practicable, shall comply with the requirements specified in Chapter 10 of this code.

Section 403.2.4 Travel distance. No portion of a maze may be further than 50 feet from an obvious, marked exit out of the maze.

Section 403.2.5 Hazards. Open flame and flammable and combustible liquids are prohibited within such occupancies.

Section 403.2.6 Operating at reduced lighting levels.

Section 403.2.6.1 General. When such facilities operate at reduced lighting levels they shall adhere to the following provisions:

1. Guide(s). Guides are required when haunted houses; fun houses and similar uses operate at reduced lighting levels. The guide(s) shall be responsible for complying with the following provisions:

A. When people enter such an occupancy, they shall be organized into a group not to exceed 20 persons (including the guides), and said group shall be accompanied by guides who shall be familiar with the facility.

B. The guides shall have an operable flashlight on their person at all times.

C. The guides shall have direct communication with an attendant located at the switch controlling the house lights.

2. Lighting attendant. There shall be an attendant who can immediately turn on the house lights in case of an emergency.

3. Change of elevations. Any change of elevation within a building or structure operating at reduced lighting level shall be provided with a minimum of one foot candle illumination at floor level.

Section 403.7 Fire protection. Fire protection for amusement buildings shall be in accordance with Section 903.2.10.4 of this code.

CHAPTER 5

FIRE SERVICE FEATURES

SECTION 503 - FIRE APPARATUS ACCESS ROADS

Section 503.1 Where required is **AMENDED** to read:

> **503.1 Where required.** Fire apparatus access roads shall be provided and maintained in accordance with Section 503.1.1 through 503.1.3, and Appendix D.

Section 503.2 Specifications is **AMENDED** to read:

> **503.2 Specifications.** Fire apparatus access roads shall be installed and arranged in accordance with Section 503.2.1 through 503.2.7, and Appendix D.

Section 503.2.7 Grade is **AMENDED** to read:

> **503.2.7 Grade.** The grade of the fire apparatus road shall comply with the provisions of Appendix D of this code.

Section 503.6 Security gates is **AMENDED** to read:

> **503.6 Security gates.** The installation of security gates across a fire apparatus access road shall be approved by the fire chief. Where security gates are installed, they shall have an approved means of emergency operation. The security gates and the emergency operation shall be maintained operational at all times. See Appendix D of this code for detailed requirements.

Section 503.7 Maintenance is **ADDED** to read:

> 503.7 Maintenance. The person(s) in possession of the premises on and into which a fire apparatus access roadway is required shall be solely responsible for the maintenance of such roadways and all required signs. No owner, manager or other person(s) in charge of premises served by a required fire apparatus access roadway shall abandon or close the fire apparatus access roadway or any part thereof without permission of the fire code official.
>
> The person(s) in possession of the premises shall be responsible in ensuring that fire apparatus access roadways are kept clear and unobstructed at all times.

SECTION 505 – PREMISES IDENTIFICATION

Section 505.1 Address numbers is hereby **AMENDED** to read:

505.1 Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. Address numbers shall be in accordance with Pima County or Town of Marana address display requirements.

SECTION 506 – KEY BOXES

Section 506.1 Where required is **AMENDED** to read:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life–saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official.

All commercial buildings equipped with an automatic fire sprinkler system or automatic fire alarm system shall have a key box installed in an approved location. Key boxes shall be of an approved type and be of a size suitable for the number of keys to be placed inside. If keys are for different locks, they shall be identified accordingly.

SECTION 508 – FIRE PROTECTION WATER SUPPLIES

Section 508.1 Required water supply is **AMENDED** to read:

508.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, building or portions of buildings are hereafter constructed or moved into or within the jurisdiction.

Where property is subdivided with or without the creation of public or private streets for the expressed purpose of providing said subdivided parcels for sale or otherwise permitting separate and/or individual development to occur, an approved water supply cable of providing the required fire flow for fire protection shall be provided and extended to serve directly any and all subdivided properties. The required fire flow shall be in accordance with Appendix B of this code.

Section 508.3 Fire flow is **REVISED** to read:

508.3 Fire flow. Fire flow requirements for buildings or portions of buildings and facilities shall be in accordance with Appendix B of this code.

Section 508.5.1 Where required is **REVISED** to read:

Section 508.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 300 feet (91.5 m) from a fire hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, additional fire hydrants and mains shall be provided where required by the fire code official.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance shall be 400 feet (122 m).

Where water mains are extended, replaced, or relocated, fire hydrants shall be installed in accordance with the distance requirements of this section. The code official may modify hydrant distance requirements when all structures are protected throughout with automatic fire sprinkler systems.

508.5.4 Obstructions is **REVISED** by **ADDING** a second paragraph to read:

Vehicles shall not be placed, parked, or kept within 15 feet of a fire hydrant.

Section 508.5.7 Reflective pavement markers is **ADDED** to read:

508.5.7 Reflective pavement markers. All fire hydrants shall be identified by the installation of approved blue reflective pavement markers placed in accordance with the requirements of the fire code official.

CHAPTER 8

INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS

SECTION 803 – FURNISHINGS

Section 803.3.1 Storage in corridors and lobbies is hereby **REVISED** to read:

803.3.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in corridors and lobbies.

Exceptions:

1. Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. Storage in metal lockers provided the minimum required egress width is maintained.

Section 803.4.1 Storage in corridors and lobbies is hereby **AMENDED** to read:

803.4.1 Storage in corridors and lobbies. Clothing and personal effects shall not be stored in corridors and lobbies.

Exceptions:

1. Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. Storage in metal lockers provided the minimum required egress width is maintained.

CHAPTER 9

FIRE PROTECTION SYSTEMS

SECTION 901 – GENERAL

Section 901.2.1 Statement of compliance. Is hereby **REPEALED** (in its entirety) and **REPLACED** with the following:

> **Section 901.2.1 Plans for fire sprinkler systems.** Complete plans and hydraulic calculations for fire sprinkler systems installations shall be submitted for review and approval prior to beginning installation, modification or alteration.
>
> Plans shall be drawn to an indicated scale, on sheets of uniform size and shall show, as a minimum the data required by NFPA 13-2002 Edition, Chapter 8. Water supply data for hydraulic calculations shall be based on 90 percent of the available water supply as determined by flow test information.

Section 901.4 Installation is hereby **AMENDED** by **REPEALING** the word **"Required"** in the second sentence:

> **Section 901.4 Installation.** Fire protection systems shall be maintained in accordance with the original installation standards for that system. Systems shall be extended, altered, or augmented as necessary to maintain and continue protection whenever the building is altered, remodeled or added to. Alterations to fire protection systems shall be done in accordance with applicable standards.

TABLE 901.6.1 FIRE PROTECTION SYSTEM MAINTENANCE STANDARDS is hereby **AMENDED** by **REPEALING** the words **"NFPA 25"** and **"NFPA 72"** from the Table and **REPLACING** both with **"APPENDIX H"**:

TABLE 901.6.1
FIRE PROTECTION SYSTEM MAINTENANCE STANDARDS

SYSTEM	STANDARD
Portable fire extinguishers	NFPA 10
Carbon dioxide fire-extinguishing system	NFPA 12
Halon 1301 fire-extinguishing systems	NFFP 12A
Dry-chemical extinguishing systems	NFPA 17
Wet-chemical extinguishing systems	NFPA 17A
Water-based fire protection systems	Appendix H
Fire alarm systems	Appendix H
Water-mist systems	NFPA 750
Clean-agent extinguishing systems	NFPA 2001

Section 901.7 Systems out of service is hereby **AMENDED** by **ADDING** a third paragraph to read as follows:

No required fire sprinkler system or fire alarm system shall be placed out of service for more than 8 hours in any 24 hour period without authorization by the fire code official.

This section is further **REVISED** by **REPEALING** (in their entirety) Sections 901.7.1 through 901.7.6 and **REPLACED** with the following:

901.7.1 Notification. The person placing the fire protection system (or portion thereof) out of service shall notify the fire code official of the time the system is placed out of service and an estimate of time the system (or portion thereof) will be out of service. Upon completion of the work on the system, the fire code official must be notified when the system (or portion thereof) is placed back in service.

SECTION 903 – AUTOMATIC FIRE SPRINKLER SYSTEMS

Section 903.2.1 Group A is **DELETED** (in its entirety) and **REPLACED** as follows:

903.2.1 Group A. An automatic sprinkler system shall be provided throughout buildings and portions thereof used as Group A occupancies.

For Group A-5 occupancies, the automatic sprinkler system shall be provided in concession stands, retail areas, press boxes, storage areas, and other accessory use areas.

Section 903.2.2 GROUP B is **ADDED** to **REPLACE** Group E. Group E is renumbered.

903.2.2 Group B. An automatic sprinkler system shall be provided throughout all Group B occupancies.

Section 903.2.2 Group E is **DELETED** (in its entirety), **RENUMBERED** and **REPLACED** as follows:

903.2.3 Group E. An automatic sprinkler system shall be provided throughout all Group E occupancies.

Section 903.2.3 Group F is **DELETED** (in its entirety), **RENUMBERED** and **REPLACED** as follows:

903.2.4 Group F. An automatic sprinkler system shall be provided throughout all Group F occupancies.

Section 903.2.4 Group H is RENUMBERED as follows:

903.2.5 Group H. Automatic sprinkler systems shall be provided in high-hazard occupancies as required in Sections 903.2.5.1 through 903.2.5.3.

903.2.5.1 General. An automatic sprinkler system shall be installed in Group H occupancies.

903.2.5.2 Group H-5 occupancies. An automatic sprinkler system shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall not be less than that required under the International Building Code for the occupancy hazard classifications in accordance with Table 903.2.5.2.

Where the design area of the sprinkler system consists of a corridor protected by one row of sprinklers, the maximum number of sprinklers required to be calculated is 13.

TABLE 903.2.4~~5~~.2
GROUP H-5 SPRINKLER DESIGN CRITERIA

LOCATION	OCCUPANCY HAZARD CLASSIFICATION
Fabrication areas	Ordinary Hazard Group 2
Service corridors	Ordinary Hazard Group 2
Storage Rooms without dispensing	Ordinary Hazard Group 2
Storage Rooms with dispensing	Extra Hazard Group 2
Corridors	Ordinary Hazard Group 2

903.2.4~~5~~.3 Pyroxylin plastics. An automatic sprinkler system shall be provided in buildings, or portions thereof, where cellulose nitrate film or pyroxylin plastics are manufactured, stored or handled in quantities exceeding 100 pounds (45 kg).

Section 903.2.5 Group I is **RENUMBERED** as follows:

903.2.6 Group I. An automatic sprinkler system shall be provided throughout buildings with a Group I fire area.

Exception: An automatic sprinkler system installed in accordance with Section 903.3.1.2 or 903.3.1.3 shall be allowed in Group I-1 facilities.

Section 903.2.6 Group M is **DELETED** (in its entirety), **RENUMBERED** and **REPLACED** as follows:

903.2.7 Group M. An automatic sprinkler system shall be provided throughout all Group M occupancies.

Section 903.2.7 Group R is **DELETED** (in its entirety), **RENUMBERED** and **REPLACED** as follows:

903.2.8 Group R. An automatic sprinkler system shall be provided throughout all Group R occupancies in accordance with this section.

903.2.8.1 Group R-1. An automatic sprinkler system shall be provided throughout all Group R-1 occupancies.

903.2.8.2 Group R-2. An automatic sprinkler system shall be provided throughout all Group R-2 occupancies.

903.2.8.3 Group R-3. An automatic sprinkler system shall be provided throughout all Group R-3 occupancies.

Exceptions:

1. Manufactured (mobile) and modular homes built on a permanent chassis designed and built as a dwelling unit and recreational vehicles that were not site built and are portable in nature.
2. An automatic sprinkler system installed in accordance with Section 903.3.1.2 or 903.3.1.3 shall be allowed in Group R-3 occupancies.
3. An automatic sprinkler system shall not be required where all the following conditions exists:

    A. Where the development of fire flow in accordance with Appendix Section B105.1 is available.
    B. Where fire apparatus access in accordance with appendix d is provided.

903.2.8.3.1 Model homes with sales offices or storage. An automatic sprinkler system shall be provided throughout all group r-3 occupancies used as model homes with sales offices or storage within the occupancy.

903.2.8.4 Group R-4. An automatic sprinkler system shall be provided throughout all Group R-4 occupancies.

Exception: An automatic sprinkler system installed in accordance with Section 903.3.1.2 or 903.3.1.3 shall be allowed in Group R-4 occupancies.

Section 903.2.8 Group S-1 is **DELETED** (in its entirety), **RENUMBERED** and **REPLACED** as follows:

903.2.9 Group S. An automatic sprinkler system shall be provided throughout all Group S occupancies.

Section 903.2.10 All occupancies except Groups R-3 and U is **DELETED** (in its entirety) and **REPLACED** as follows:

903.2.10 All occupancies except Groups R-3 and U. An automatic sprinkler system shall be installed in the locations set forth in Sections 903.2.10 and 903.2.10.2.

903.2.10.1 Rubbish and linen chutes. An automatic sprinkler system shall be installed at the top of rubbish and linen chutes and in their terminal rooms. Chutes extending through three or more floors shall have additional sprinkler heads installed within such chutes at alternate floors. Chutes sprinklers shall be accessible for servicing.

Section 903.2.10.2 Special amusement buildings Is **ADDED** to read:

Section 903.2.10.2 Special amusement buildings. Special amusement buildings shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. When the special amusement building is temporary, the sprinkler water supply shall be of an approved temporary means.

Section 903.3.1.1.1 Exempt locations is **REVISED** by **DELETING** Item 4:

903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from any room merely because it is damp, of fire-resistance rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the fire code official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.

Section 903.3.5 Water supplies is **REVISED** as follows:

903.3.5 Water supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. Automatic sprinkler system water supply data for hydraulic calculations shall be based on a curve that is 90 percent of the available water supply curve as determined by flow test information.

903.3.5.1 Domestic services. Where the domestic service provides the water supply for the automatic sprinkler system, the supply shall be in accordance with this section.

903.3.5.1.1 Limited area sprinkler systems. Limited area sprinkler systems serving fewer than 20 sprinklers on any single connection are permitted to be connected to the domestic service where a wet automatic standpipe is not available. Limited area sprinkler systems connected to domestic water supplies shall comply with each of the following requirements:

1. Valves shall not be installed between the domestic water riser control valve and the sprinklers.

Exception: An approved indicating control valve supervised in the open position in accordance with Section 903.4.

2. The domestic service shall be capable of supplying the simultaneous domestic demand and the sprinkler demand required to be hydraulically calculated by NFPA 13, NFPA 13R or NFPA 13D.

903.3.5.1.2 Residential combination services. A single combination water supply shall be permitted provided that the domestic demand is added to the sprinkler demand as required by NFPA 13R.

903.3.5.2 Secondary water supply. A secondary on-site water supply equal to the hydraulically calculated sprinkler demand, including the hose stream requirement, shall be provided for high-rise buildings in Seismic Design Category C, D, E or F as determined by the International Building Code. The secondary water supply shall have duration not less than 30 minutes as determined by the occupancy hazard classification in accordance with NFPA 13.

Exception: Existing buildings.

Section 903.3.8 Installation requirements is **ADDED** as follows**:**

903.3.8 Access to fire sprinkler riser room. Fire sprinkler risers and shut off controls shall be located in an enclosed riser room directly accessible from the outside of the building

Exception: when an approved alternate method of controlling the sprinkler water supply from the outside of the structure is provided and is accessible to the firefighters.

Section 903.4 Sprinkler system monitoring and alarms is **REVISED** as follows:

903.4 Sprinkler system monitoring and alarms. All valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical air pressures, and water-flow switches on all sprinkler systems shall be electrically supervised.

Exceptions:

1. Automatic sprinkler systems protecting one- and two-family dwellings installed in accordance with NFPA 13D.
2. Limited area systems serving fewer than 20 sprinklers.
3. Automatic sprinkler systems installed in accordance with NFPA13R where a common supply main is used to supply both domestic water

and the automatic sprinkler system, and a separate shutoff valve for the automatic sprinkler system is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, pre-action and deluge sprinkler systems that are sealed or locked in the open position.
8. Underground key or hub valves in roadway boxes provided for use by the municipality of public utility.

Section 903.4.1 Signals is **REVISED** as follows:

903.4.1 Signals. Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an approved central station, remote supervising station or proprietary supervising station as defined in NFPA 72 or, when approved by the fire code official, shall sound an audible signal at a constantly attended location.

Exceptions:

1. For automatic sprinkler systems protecting one- and two-family dwellings installed in accordance with NFPA13D, the water flow switch shall be permitted to sound a local alarm only.
2. Backflow prevention device shutoff valves shall be locked in the open position. The backflow prevention shutoff valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

Section 903.6 Existing Buildings is **REVISED** by **ADDING** the following subsection:

903.6.2 Fire area increase. Any addition to an existing structure, where the square footage of the new addition is greater than 25% of the total square footage of the existing structure and the required fire flow for the total fire area (new & existing) is not equal to the fire flow required by Appendix B of the fire code, shall require that the entire structure be equipped throughout with an approved automatic fire extinguishing system.

SECTION 904–ALTERNATE AUTOMATIC FIRE–EXTINGUISHING SYSTEMS

Section 904.11.2 System interconnection is **AMENDED** to read:

904.11.2 System interconnection. The actuation of the fire suppression system shall automatically shut down the fuel or electrical power supply to the cooking equipment and to all electrical receptacles located within the perimeter of the protected exhaust hood. The fuel and electrical supply reset shall be manual.

Section 906.2 General requirements is **AMENDED** by **DELETING** the exception (in its entirety) as follows:

Section 912.5 Blackflow protection is hereby **DELETED** (in its entirety).and **RESERVED**

Section 912.6 Inspection, testing and maintenance is **REVISED** as follows:

912.6 Inspection, testing and maintenance. All fire department connections shall be periodically inspected, tested and maintained in accordance with Appendix H.

SECTION 913 – FIRE PUMPS

Section 913.5 Testing and maintenance is **REVISED** as follows:

913.5 Testing and maintenance. Fire pumps shall be inspected, tested and maintained in accordance with the requirements of this section and Appendix H.

CHAPTER 10

MEANS OF EGRESS

SECTION 1008 – DOORS, GATES AND TURNSTILES

Section 1008.1.3.4. Access-controlled egress doors. Item 3 is **REVISED** as follows:

1008.1.3.4 Access-controlled egress doors. The entrance doors in a means of egress in buildings with an occupancy in Group A, B, E, M, R-1 or R-2 and entrance doors to tenant spaces in occupancies in Groups A, B, E, M, R-1 and R-2 are permitted to be equipped with an approved entrance and egress access control system which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads: PUSH TO EXIT. Lettering shall be at least 1 inch (25mm) in height and shall have a stroke of not less that 1/8 inch (3.2mm), on a contrasting background next to unlocking device. When operated, the manual unlocking device shall result in direct interruption of power to the lock, independent of the access control system electronics, and the doors shall remain unlocked for a minimum of 30 seconds.
4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.
5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.
6. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

Section 1008.1.8.6 Delayed egress locks. Item 5 is **REVISED** as follows:

1008.1.8.6 Delayed egress locks. Approved, listed, delayed egress locks shall be permitted to be installed on doors serving any occupancy except Group A, E

and H occupancies in buildings that are equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or an approved automatic smoke or heat detection system installed in accordance with Section 907, provided that the doors unlock in accordance with Items 1 through 6 below. A building occupant shall not be required to pass through more than one door equipped with a delayed egress lock before entering an exit.

1. The doors unlock upon actuation of the automatic sprinkler system or automatic fire detection system.
2. The doors unlock upon loss of power controlling the lock or lock mechanism.
3. The door locks shall have the capability of being unlocked by a signal from the fire command center.
4. The initiation of an irreversible process which will release the latch in not more than 15 seconds when a force of not more than 15 pounds (67 N) is applied for 1 second to the release device. Initiation of the irreversible process shall activate an audible signal in the vicinity of the door. Once the door lock has been released by the application of force to the releasing device, relocking shall be by manual means only.

   Exception: Where approved, a delay of not more than 30 seconds is permitted.

5. A sign shall be provided on the door located above and within 12 inches (305 mm) of the release device reading: PUSH UNTIL ALARM SOUNDS. DOOR CAN BE OPENED IN 15 [30] SECONDS. Lettering shall be at least 1 inch (25mm) in height and shall have a stroke of not less than 1/8 inch (3.2mm), on a contrasting background.
6. Emergency lighting shall be provided at the door.

SECTION 1027 - MAINTENANCE OF THE MEANS OF EGRESS

SECTION 1027 MAINTENANCE OF THE MEANS OF EGRESS is **REVISED** by **ADDING** the following subsection to read:

1027.6 Panic hardware. Where panic and fire exit hardware is installed, whether required or not, panic or fire exit hardware shall be the only locking device on the door except where otherwise permitted in this code.

CHAPTER 11

AVIATION FACILITIES

SECTION 1106 - AIRCRAFT FUELING

Section 1106.3 Construction of aircraft-fueling vehicles and accessories is **REVISED** by **ADDING** the words “and NFPA 385” to the end of the sentence as follows:

1106.3 Construction of aircraft-fueling vehicles and accessories.

Aircraft-fueling vehicles shall comply with this section and shall be designed and constructed in accordance with NFPA 407 and NFPA 385.

CHAPTER 13

COMBUSTIBLE DUST-PRODUCING OPERATIONS

Table 1304.1 is **REVISED** as follows:

Table 1304.1
EXPLOSION PROTECTION STANDARDS

STANDARD	SUBJECT
NFPA 61	Agricultural Food Products
NFPA 69	Explosion Prevention
NFPA 85	Boiler and Combustion Systems Hazards
NFPA 120	Coal Preparation Plants
NFPA 484	Combustible Metals, Metal Powders, And Metal Dusts
NFPA 484	Combustible Metals, Metal Powders, And Metal Dusts
NFPA 484	Combustible Metals, Metal Powders, And Metal Dusts
NFPA 650	Conveying Combustible Particulate Solids
NFPA 484	Combustible Metals, Metal Powders, And Metal Dusts
NFPA 654	Chemical, Dye, Pharmaceutical and Plastics
NFPA 655	Sulfur
NFPA 664	Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities
ICC Electric Code	Electrical Installations

CHAPTER 14

FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION

SECTION 1410 – ACCESSFOR FIRE FIGHTING

Section 1410.2 Key boxes is **REVISED** as follows:

> **1410.2 Key boxes or padlocks.** Key boxes or padlocks shall be provided as required by Chapter 5.

SECTION 1412 – WATER SUPPLY FOR FIRE PROTECTION

Section 1412.1 When required is **REVISED** as follows:

> **1412.1 When required.** Fire hydrants connected to an approved water supply for fire protection, shall be installed and in service prior to placing combustible material on site.

SECTION 1414 – AUTOMATIC SPRINKLER SYSTEMS

Section 1414.1 Completion before occupancy is **REVISED** as follows:

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

CHAPTER 22

SERVICE STATIONS AND REPAIR GARAGES

SECTION 2208 - COMPRESSED NATURAL GAS MOTOR FUEL-DISPENSING FACILITIES

Section 2208.3. Location of dispensing operation and equipment is **REVISED** by **ADDING** the subsection as follows:

2208.3 Location of dispensing operations and equipment. Compression, storage and dispensing equipment shall be located above ground, outside.

Exceptions:

1. Compression, storage or dispensing equipment shall be allowed in buildings of noncombustible construction, as set forth in the International Building Code, which are unenclosed for three quarters or more of the perimeter.
2. Compression, storage and dispensing equipment shall be allowed indoors in accordance with Chapter 30.

2208.3.1 Location on property. In addition to the requirements of Section 2203.1, compression, storage and dispensing equipment shall be installed as follows:

1. Not beneath power lines.
2. Ten feet (3048 mm) or more from the nearest building or lot line which could be built on, public street, sidewalk, or source of ignition.

   Exception: Dispensing equipment need not be separated from canopies that are constructed in accordance with the International Building Code and which provide weather protection for the dispensing equipment.

3. Twenty-five feet (7620 mm) or more from the nearest rail of any railroad track and 50 feet (15 240 mm) or more from the nearest rail of any railroad main track or any railroad or transit line where power for train propulsion is provided by an outside electrical source such as third rail or overhead catenary.
4. Fifty feet (15 240 mm) or more from the vertical plane below the nearest overhead wire of a trolley bus line.

2208.3.2 Vehicle impact protection. Vehicle impact protection for CNG gas storage containers, pumps and dispensers shall be provided in accordance with Section 312.

CHAPTER 24

TENTS, CANOPIES AND OTHER MEMBRANE STRUCTURES

SECTION 2403 – TEMPORARY, TENTS, CANOPIES AND MEMBRANE STRUCTURES

2403.2 Approval required. Tents and membrane structures having an area in excess of 400 square feet (37m^2) and canopies in excess of 900 square feet (84m^2) shall not be erected, operated or maintained for any purpose without first obtaining a permit and approval from the fire code official.

Exceptions:

1. Tents used exclusively for recreational camping purposes.

Section 2403.8.2 Location is **REVISED** as follows:

2403.8.2 Location. Tents, canopies or membrane structures shall not be located within 20 feet (6096 mm) of lot lines, buildings, other tents, canopies or membrane structures. For the purpose of determining required distances, support ropes and guy wires shall be considered as part of the temporary membrane structure, tent or canopy.

Exceptions:

1. Separation distance between membrane structures, tents and canopies not used for cooking, is not required when the aggregate floor area does not exceed 15,000 square feet (1394 m2).
2. Membrane structures, tents or canopies need not be separated from buildings when all of the following conditions are met:

    2.1. The aggregate floor area of the membrane structure, tent or canopy shall not exceed 10,000 square feet (929 m2).
    2.2. The aggregate floor area of the building and membrane structure, tent or canopy shall not exceed the allowable floor area including increases as indicated in the International Building Code.
    2.3. Required means of egress provisions are provided for both the building and the membrane structure, tent or canopy, including travel distances.
    2.4. Fire apparatus access roads are provided in accordance with Section 503.

Section 2403.12.3 Exit openings from tents. Item 2 is **REVISED** as follows:

2403.12.3 Exit openings from tents. Exit openings from tents shall remain open unless covered by a flame-resistant curtain. The curtain shall comply with the following requirements:

1. Curtains shall be free sliding on a metal support. The support shall be a minimum of 80 inches (2032 mm) above the floor level at the exit. The curtains shall be so arranged that, when open, no part of the curtain obstructs the exit.
2. Curtains shall be of a color, or colors, that contrasts with the color of the tent or is adequately marked otherwise indicating an exit opening.

Section 2403.12.4 Doors is hereby **REVISED** as follows:

2403.12.4 Doors. Exit doors shall swing in the direction of exit travel. To avoid hazardous air and pressure loss in air-supported membrane structures, such doors shall be automatic closing against operating pressures. Opening force at the door edge shall not exceed 15 pounds (7 kg). Doors that latch shall have panic hardware installed and operating at all times.

Section 2404.18.2.3 Closure is hereby **REVISED** by **REPEALING** the words "…locked and…" as follows:

2404.18.2.3 Closure. Fuel tank openings shall be sealed to prevent the escape of vapors.

CHAPTER 26

WELDING AND OTHER HOT WORK

SECTION 2604 - FIRE SAFETY REQUIREMENTS

Section 2604.2.6 Fire extinguisher is **REVISED** as follows:

2604.2.6 Fire extinguisher. A minimum of one portable fire extinguisher complying with Section 906 and with a minimum 2-A:20-B:C rating shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed. The fire extinguisher(s) shall be readily accessible without climbing stairs or ladders.

Section 2604.3.1 Pre-hot-work check is **REVISED** as follows:

2604.3.1 Pre-hot-work check. A pre-hot-work check shall be conducted prior to work to ensure that all equipment is safe and hazards are recognized and protected. A report of the check shall be kept at the work site during the work and available upon request. The pre-hot-work check shall determine all of the following:

1. Hot work equipment to be used shall be in satisfactory operating condition and in good repair. Damaged, leaking or worn hoses shall not be used.
2. Hot work site is clear of combustibles or combustibles are protected.
3. Exposed construction is of noncombustible materials or, if combustible, then protected.
4. Openings are protected.
5. Floors are kept clean.
6. No exposed combustibles are located on the opposite side of partitions, walls, ceilings or floors.
7. Fire watches, where required, are assigned.
8. Approved actions have been taken to prevent accidental activation of suppression and detection equipment in accordance with Sections 2604.1.8 and 2604.1.9.
9. Fire extinguishers and fire hoses (where provided) are operable and available.

SECTION 2606 - ELECTRIC ARC HOT WORK

Section 2606.4 Emergency disconnect is **REVISED** as follows:

2606.4 Emergency disconnect. A switch or circuit breaker shall be provided so that fixed electric welders and control equipment can be disconnected from the supply circuit. The disconnect shall be installed in accordance with the ICC Electrical Code. The disconnect shall be marked emergency disconnect and shall be visible from the equipment.

CHAPTER 27

HAZARDOUS MATERIALS – GENERAL PROVISIONS

SECTION 2701 – GENERAL REQUIREMENTS

Section 2701.6.2 Permanently out-of-service facilities is **REVISED** as follows:

2701.6.2 Permanently out-of-service facilities. Facilities for which a permit is not kept current or is not monitored and inspected on a regular basis shall be deemed to be permanently out of service and shall be closed in an approved manner. When required by the fire code official, a permitee shall apply for approval to close permanently storage, use or handling facilities. The fire code official is authorized to require that such application be accompanied by an approved facility closure plan in accordance with Section 2701.6.3.

Section 2701.6.3 Facility closure plan is **REVISED** as follows:

2701.6.3 Facility closure plan. When a facility closure plan is required in accordance with Section 2701.5 to terminate storage, dispensing, handling or use of hazardous materials, it shall be submitted to the fire code official at least 30 days prior to facility closure. The plan shall demonstrate that hazardous materials which are stored, dispensed, handled or used in the facility will be transported, disposed of or reused in a manner that eliminates the need for further maintenance and any threat to public health and safety.

TABLE 2703.1.1(1) MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD. Is hereby **AMENDED** by **DELETING** the Table in its entirety and REPLACING with Table 2703.1.1(1) 2000 ed. IFC

TABLE 2703.1.1(1)
MAXIMUM ALLOWABLE QUANTITY PER CONTROL AREA OF HAZARDOUS MATERIALS POSING A PHYSICAL HAZARD[a, j, m]

MATERIAL	CLASS	GROUP WHEN THE MAXIMUM ALLOWABLE QUANTITY IS EXCEEDED	STORAGE[b]			USE-CLOSED SYSTEMS[b]			USE-OPEN SYSTEMS[b]	
			Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)	Gas cubic feet at NTP	Solid pounds (cubic feet)	Liquid gallons (pounds)
Combustible liquid[c, l]	II IIIA IIIB	H-2 or H-3 H-2 or H-3 Not Applicable	Not Applicable	120[d, e] 330 [d, e] 13,200[d]	Not Applicable	Not Applicable	120[d] 330[d] 13,200	Not Applicable	Not Applicable	30[d] 80[d] 3,300
Combustible fiber	Loose Baled	H-3	(100) (1,000)	Not Applicable	Not Applicable	(100) (1,000)	Not Applicable	Not Applicable	(20) (200)	Not Applicable
Cryogenic Flammable	Not Applicable	H-2	Not Applicable	45[d]	Not Applicable	Not Applicable	45[d]	Not Applicable	Not Applicable	10[d]
Consumer fireworks (Class C Common)	1.4G	H-3	125[d, i]	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Cryogenic Oxidizing	Not Applicable	H-3	Not Applicable	45[d]	Not Applicable	Not Applicable	45[d]	Not Applicable	Not Applicable	10[d]
Explosives	Division 1.1 Division 1.2 Division 1.3 Division 1.4 Division 1.4G Division 1.5 Division 1.6	H-1 H-1 H-1 or H-2 H-3 H-3 H-1 H-1	1[e, g] 1[e, g] 5[e, g] 50[e, g] 125[d, e, i] 1[e, g] 1[d, e, g]	(1)[e, g] (1)[e, g] (5)[e, g] (50)[e, g] Not Applicable (1)[e, g] Not Applicable	Not Applicable	0.25[g] 0.25[g] 1[g] 50[g] Not Applicable 0.25[g] Not Applicable	(0.25)[g] (0.25)[g] (1)[g] (50)[g] Not Applicable (0.25)[g] Not Applicable	Not Applicable	0.25[g] 0.25[g] 1[g] Not Applicable Not Applicable 0.25[g] Not Applicable	(0.25)[g] (0.25)[g] (1)[g] Not Applicable Not Applicable (0.25)[g] Not Applicable
Flammable gas	Gaseous Liquefied	H-2	Not Applicable	Not Applicable[d, e] 30[d, e]	1,000[d, e] Not Applicable	Not Applicable	Not Applicable 30[d, e]	1,000[d, e] Not Applicable	Not Applicable	Not Applicable
Flammable liquid[f]	IA IB IC	H-2 or H-3	Not Applicable	30[d, e] 60[d, e] 90[d, e]	Not Applicable	Not Applicable	30[d] 60[d] 90[d]	Not Applicable	Not Applicable	10[d] 15[d] 20[d]
Combination Flammable liquid (IA, IB, IC)	Not Applicable	H-2 or H-3	Not Applicable	120[d, e, h]	Not Applicable	Not Applicable	120[d, h]	Not Applicable	Not Applicable	30[d, h]
Flammable solid	Not Applicable	H-3	125[d, e]	Not Applicable	Not Applicable	125[d]	Not Applicable	Not Applicable	25[d]	Not Applicable
Organic peroxide	UD I II III IV V	H-1 H-2 H-3 H-3 Not Applicable Not Applicable	1[e, g] 5[d, e] 50[d, e] 125[d, e] Not Limited Not Limited	(1)[e, g] (5)[d, e] (50)[d, e] (125)[d, e] Not Limited Not Limited	Not Applicable	0.25[g] 1[d] 50[d] 125[d] Not Limited Not Limited	(0.25)[g] (1)[d] (50)[d] (125)[d] Not Limited Not Limited	Not Applicable	0.25[g] 1[d] 10[d] 25[d] Not Limited Not Limited	(0.25)[g] (1)[d] (10)[d] (25)[d] Not Limited Not Limited

Section 2703.7.1 Smoking is **REVISED** as follows:

2703.7.1 Smoking. Smoking shall be prohibited and "No Smoking" signs provided as follows:

1. In rooms or areas where hazardous materials are stored or dispensed or used in open systems in amounts requiring a permit in accordance with Section 2701.5.
2. Within 25 feet (7620 mm) of outdoor storage, dispensing or open use areas.
3. Facilities or areas within facilities that have been designated as totally "no smoking" shall have "No Smoking" signs placed at all entrances to the facility or area. Designated areas within such facilities where smoking is permitted, either permanently or temporarily, shall be identified with signs designating that smoking is permitted in these areas only.
4. In rooms or areas where flammable or combustible hazardous materials are stored, dispensed or used.

   Signs required by this section shall be in English as a primary language or in symbols allowed by this code and shall comply with Section 310.

TABLE 2703.11.1 MAXIMUM ALLOWABLE QUANTITY PER INDOOR AND OUTDOOR CONTROL AREA IN GROUP M AND S OCCUPANCIES NONFLAMMABLE SOLIDS, NONFLAMMABLE AND NONCOMBUSTIBLE LIQUIDS is **AMENDED** by **DELETING** footnotes G,H, I, and J as follows:

TABLE 2703.11.1
MAXIMUM ALLOWABLE QUANTITY PER INDOOR AND OUTDOOR CONTROL AREA IN GROUP M AND S OCCUPANCIES NONFLAMMABLE SOLIDS, NONFLAMMABLE AND NONCOMBUSTIBLE LIQUIDS [d, e, f]

CONDITION		MAXIMUM ALLOWABLE QUANITY PER CONTROL AREA	
Material [a]	**Class**	**Solids (Pounds)**	**Liquids (Gallons)**
A. HEALTH-HAZARD MATERIALS – NONFLAMMABLE AND NONCOMBUSTIBLE SOLIDS AND LIQUIDS			
1. Corrosives [b,c]	Not Applicable	9,750	975
2. Highly Toxics	Not Applicable	20 [b,c]	2 [b,c]
3. Toxics [b,c]	Not Applicable	1,000	100
B. PHYSICAL-HAZARD MATERIALS – NONFLAMMABLE AND NONCOMBUSTIBLE SOLIDS AND LIQUIDS			
1. Oxidizers [b,c]	4	Not Allowed	Not Allowed
	3	1,150 [g]	115
	2	2,250 [h]	225
	1	18,000 [i,j]	1,800 [i,j]
2. Unstable (Reactives) [b,c]	4	Not Allowed	Not Allowed
	3	550	55
	2	1,150	115
	1	Not Limited	Not Limited
3. Water (Reactives)	3 [b,c]	550	55
	2 [b,c]	1,150	115
	1	Not Limited	Not Limited

For SI: 1 pound = 0.454 kg, 1 gallon = 3.785 L, 1 cubic foot = 0.02832 m3 .

a. Hazard categories are as specified in Section 2701.2.2.
b. Maximum allowable quantities shall be increased 100 percent in buildings equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. When Note c also applies, the increase for both notes shall be applied accumulatively.
c. Maximum allowable quantities shall be increased 100 percent when stored in approved storage cabinets in accordance with Section 2703.8. When Note b also applies, the increase for both notes shall be applied accumulatively.
d. See Table 2703.8.3.2 for design and number of control areas.
e. Allowable quantities for other hazardous material categories shall be in accordance with Section 2703.1.
f. Maximum quantities shall be increased 100 percent in outdoor control areas.

CHAPTER 32

CRYOGENIC FLUIDS

SECTION 3205 - USE AND HANDLING

Section 3205.4.1.1 Ventilation is **REVISED** as follows:

3205.4.1.1 Ventilation. Indoor areas where cryogenic fluids are dispensed shall be ventilated in accordance with the requirements of the International Mechanical Code in a manner that captures any vapor at the point of generation.

CHAPTER 33

EXPLOSIVES AND FIREWORKS

SECTION 3308 – FIREWORKS DISPLAY

Section 3308.10 Disposal is **REVISED** as follows:

3308.10 Disposal. Any shells found during the inspection required in Section 3308.9 shall not be handled until at least 1 hour has elapsed from the time the shells were fired. The fire code official shall then make the determination of the method of disposal in accordance with Section 3304.10.

CHAPTER 34

FLAMMABLE AND COMBUSTIBLE LIQUIDS

SECTION 3404 - STORAGE

Section 3404.2.12 Testing is hereby **AMENDED** by **ADDING** the following subsection:

Section 3404.2.12.3 Existing tanks and piping. Existing underground storage tanks and piping shall be tested for leakage at the owner's or operator's expense at least every 24 months in accordance with this section.

Exception: Underground storage tank systems with an approved method of detecting leaks from any component of the system.

Tanks shall be emptied of flammable or combustible liquids if required tests are not completed within the specified time.

When testing is required, owners or operators shall provide the fire code official with data setting forth the method of testing that is to be used and shall submit the name of a qualified individual who will conduct the test. A testing permit shall be obtained. The method of testing to be used shall consider the effects of temperature, pressure and other variables and shall establish conclusively whether the tank or piping is leaking. Pneumatic testing is prohibited.

The testing company shall submit test results to the code administration division within 30 days of the test. If any component of the system fails a test, the person conducting the test shall be responsible for notifying the Life Safety Division within 24 hours.

Devices used for final testing shall be capable of detecting leaks as small as 0.05 gallons per hour. Leaking piping and equipment shall not be used until repaired or replaced.

The fire code official is authorized to require that the test be conducted in the code official's presence.

Section 3404.3.3.3 Clear means of egress is **REVISED** as follows

3404.3.3.3 Clear means of egress. Storage of any liquids, including stock for sale, shall not be stored within 10 feet of an exit door or be allowed to obstruct physically the route of egress.

SECTION 3406 – SPECIAL OPERATIONS

Section 3406.5.4.5 Commercial, industrial, government or manufacturing is **AMENDED** by **ADDING** the following:

3406.5.4.5 Commercial, industrial, governmental or manufacturing. The transferring of liquids used as fuels from tank vehicles into the fuel tanks of motor vehicles or special equipment located at commercial, industrial, governmental or manufacturing establishments is allowed where permitted, provided such dispensing operations are conducted in accordance with this section.

Prior to dispensing from tank vehicles into the tanks of fleet motor vehicles or special equipment at a fixed facility, a permit shall be obtained from the fire code official, see Section 105.6.17.

1. Dispensing shall occur only at sites that have been permitted to conduct mobile fueling.
2. The owner of a mobile fueling operation shall provide to the jurisdiction a written response plan which demonstrates readiness to respond to a fuel spill and carry out appropriate mitigation measures, and describes the process to dispose properly of contaminated materials.
3. A detailed site plan shall be submitted with each application for a permit. The site plan shall indicate: all buildings, structures and appurtenances on site and their use or function; all uses adjacent to the property lines of the site; the locations of all storm drain openings, adjacent waterways or wetlands; information regarding slope, natural drainage, curbing, impounding and how a spill will be retained upon the site property; and the scale of the site plan.

   Provisions shall be made to prevent liquids spilled during dispensing operations from flowing into buildings or off-site. Acceptable methods include, but shall not be limited to, grading driveways, raising doorsills or other approved means.
4. The fire code official is allowed to impose limits on the times and/or days during which mobile fueling operations may take place, and specific locations on a site where fueling is permitted.
5. Mobile fueling operations shall be conducted in areas not accessible to the public or shall be limited to times when the public is not present. Mobile fueling shall not take place within 15 feet (4572 mm) of buildings, property lines or combustible storage.
6. Mobile fueling shall not take place within 15 feet (4572 mm) of buildings, property lines or combustible storage.
7. The tank vehicle shall comply with the requirements of NFPA 385 and local, state and federal requirements. The tank vehicle's specific functions shall include that of supplying fuel to motor vehicle fuel tanks. The vehicle and all its equipment shall be maintained in good repair.

8. Signs prohibiting smoking or open flames within 25 feet (7620 mm) of the tank vehicle or the point of fueling shall be prominently posted on three sides of the vehicle including the back and both sides.
9. A portable fire extinguisher with a minimum rating of 40:BC shall be provided on the vehicle with signage clearly indicating its location.
10. The dispensing nozzles and hoses shall be of an approved and listed type.
11. The dispensing hose shall not be extended from the reel more than 100 feet (30 480 mm) in length.
12. Absorbent materials, non-water-absorbent pads, a 10-foot-long (3048 mm) containment boom, an approved container with lid and a nonmetallic shovel shall be provided to mitigate a minimum 5-gallon (19 L) fuel spill.
13. Tank vehicles shall be equipped with a "fuel limit" switch such as a count-back switch, to limit the amount of a single fueling operation to a maximum of 500 gallons (1893 L) before resetting the limit switch.

    Exception: Tank vehicles where the operator carries and can utilize a remote emergency shut-off device which, when activated, immediately causes flow of fuel from the tank vehicle to cease.

14. Persons responsible for dispensing operations shall be trained in the appropriate mitigating actions in the event of a fire, leak or spill. Training records shall be maintained by the dispensing company and shall be made available to the fire code official upon request.
15. Operators of tank vehicles used for mobile fueling operations shall have in their possession at all times an emergency communications device to notify the proper authorities in the event of an emergency.
16. The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels.
17. Prior to beginning dispensing operations, precautions shall be taken to ensure ignition sources are not present.
18. The engines of vehicles being fueled shall be shut off during dispensing operations.
19. Nighttime fueling operations shall only take place in adequately lighted areas.
20. The tank vehicle shall be positioned with respect to vehicles being fueled to prevent traffic from driving over the delivery hose.
21. During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place and warning lights shall be in operation.
22. Motor vehicle fuel tanks shall not be topped off.
23. The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the tank vehicle.
24. The fire code official and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.

Section 3406.5.4.5 Commercial, industrial, government or manufacturing is further **REVISED** by **ADDING** the following subsections:

25. Prior to removal of the fuel cap, the bond wire cable shall be securely clamped to the vehicle being fueled.

26. At no time shall the fueling hose extend across a trafficable lane without florescent traffic cones conspicuously placed so that all vehicle traffic is blocked. Vehicles shall not drive over any delivery hose.

27. Fuel expansion space shall be provided in each motor vehicle tank to prevent overflow.

28. The fuel cap of the vehicle being fueled shall be replaced prior to disconnecting the bonding cable.

Section 3406.5.4.6 Prohibition is **ADDED** to read:

3406.5.4.6 Prohibition. Tank vehicles and tank trailers shall not be used as on-site storage containers.

Section 3406.6 Tank vehicles and vehicle operation is **DELETED** (in its entirety) and **REPLACED** as follows:

Section 3406.6 tank vehicles and vehicle operation. Tank vehicles shall be in accordance with the following:

1. The tank vehicle shall be road worthy, licensed by the Department of Motor Vehicles, and meet Arizona Department of Transportation requirements.

2. To ensure proper operation, a daily inspection of the tank vehicle shall be conducted by appropriately qualified and trained personnel. Any equipment or devices found to be defective shall be taken out-of-service immediately and repaired or replaced.

3. The tank vehicle shall be equipped with a readily accessible, operational emergency shut-off valve.

CHAPTER 38

LIQUEFIED PETROLEUM GASES

SECTION 3803 - INSTALLATION OF EQUIPMENT

Section 3803.2.1.7 Use for food preparation is **DELETED** (in its entirety) and **REPLACED** with the following:

3803.2.1.7 USE FOR FOOD PREPARATION. Listed and approved LP-gas commercial food service appliances shall be permitted to be used inside restaurants and in attended commercial food catering operations provided that no commercial food service appliances shall have more than two, 10-oz non-refillable butane gas containers having a maximum water capacity of 1.08 lbs. per container connected directly to the appliance at any time and containers shall not be manifolded. The appliance fuel container(s) shall be an integral part of the listed, approved commercial food service device and shall be connected without the use of a rubber hose. Butane containers shall be listed. Storage in restaurants and at food service locations of 10-oz butane non-refillable containers shall be limited to no more than twenty-four containers.

SECTION 3811 PARKING AND GARAGING

Section 3811.2.2 Durations exceeding 1 hour is **REVISEDB** by **DELETING** item #1.

3811.2.2 Durations exceeding 1 hour. Liquefied petroleum gas tank vehicles parked at any one point for longer than1 hour shall be located as follows:

1. Inside of a bulk plant.
2. At other approved locations not less than 50 feet (15240 mm) from buildings other than those approved for the storage or servicing of such vehicles.

CHAPTER 45

REFERENCED STANDARDS

The list of referenced standards for the NFPA is REVISED as follows:

REVISE NFPA list of standards as follows:

NFPA	**National Fire Protection Association Batterymarch Park Quincy, MA 02269**	
Standard Reference Number	**Title**	**Referenced in code section number**
10 - 2002	Portable Fire Extinguishers Table 901.6.1, 906.2, 906.3	Table 906.3(1), Table 906.3(2), 2106.3 904.7, 3404.2.9.1.2
11 - 2005	Low, Medium- and High-Expansion Foam Systems	904.7, 3404.2.9.1.2
12 - 2005	Carbon Dioxide Extinguishing Systems	Table 901.6.1, 904.8, 904.11
12A - 2004	Halon 1301 Fire Extinguishing Systems	Table 901.6.1, 904.9
13 – 2002	Installation of Sprinkler Systems	Table 704.1, 903.3.1.1 903.3.2, 903.3.5.1.1, 903.3.5.2, 904.11, 907.9, Table 2306.2, 2306.9, 2804.1, 3404.3.7.5.1, 3404.3.8.4
13D - 2002	Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes	903.3.1.3, 903.3.5.1.1
13R - 2002	Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height	903.1.2, 903.3.1.2, 903.3.5.1.1 903.3.5.1.2, 903.4
14 – 2003	Installation of Standpipe, Private Hydrants and Hose Systems	905.2, 905.3.4, 905.4.2, 905.8
15 – 2001	Water Spray Fixed Systems for Fire Protection	3404.2.9.1.3
16 – 2003	Installation of Foam-Water Sprinkler and Foam-Water Spray Systems	904.7, 904.11
17 – 2002	Dry Chemical Extinguishing Systems	Table 901.6.1, 904.6, 904.11
17A – 2002	Wet Chemical Extinguishing Systems	Table 901.6.1, 904.5, 904.11
20 - 2003	Installation of Stationary Pumps for Fire Protection	913.1, 913.2, 913.5.1
22 - 2003	Water Tanks for Private Fire Protection	508.2.2
24 - 2002	Installation of Private Fire Service Mains and their Appurtenances	508.2.1, 1909.5
25 - 2002	Inspection, Testing and Maintenance of Water-Based Fire Protection Systems	508.5.3, Table 901.6.1 904.7.1, 912.6, 913.5,
30 - 2003	Flammable and Combustible Liquids Code	3403.6.2, 3403.6.2.1, 3404.2.7, 3404.2.7.1 3404.2.7.2, 3404.2.7.3.6, 3404.2.7.4, 3404.2.7.6, 3404.2.7.7, 3404.2.7.8, 3404.2.7.9, 3404.2.9.2, 3404.2.9.3, 3404.2.9.5.1.1 3404., 3404.2.9.5.1.3, 3404.2.9.5.1.4, 3404.2.9.5.1.5, 3404.2.9.5.2, 3404.2.9.6.4, 3404.2.10.2, 3404.2.11.4 3404.2.11.5.2, 3404.2.12.1, 3404.3.1, 3404.3.6, 3404.3.7.2.3, 3404.3.8.4, 3406.8.3
30A - 2003	Code for Motor Fuel-Dispensing Facilities and Repair Garages	2201.4, 2201.5, 2201.6, 2206.6.3, 2210.1
30B - 2002	Manufacture and Storage of Aerosol Products 2801.1, 2803.1, 2804.1, Table 2804.3.1, Table 2804.3.2, Table 2804.3.2.2 2804.4.1, 2804.5.2, 2804.6, Table 2806.2, Table 2806.3, 2806.5, 2806.8, 2807.1, Table 2804.3.2, Table 2804.3.2.2,2804.4.1	2804.5.2, 2804.6, Table 2806.2, Table 2806.3
31 – 2001	Installation of Oil-Burning Equipment	603.1.7, 603.3.1, 603.3.3
32 – 2004	Dry Cleaning Plants	1201.1, 1207.1, 1207.3
33 – 2003	Spray Application Using Flammable or Combustible Materials	1504.1.2
34 – 2003	Dipping and Coating Processes Using Flammable or Combustible Liquids	1505.3, 1505.6.1
35 – 2005	Manufacture of Organic Coatings	2001.3, 2005.4
40 – 2001	Storage and Handling of Cellulose Nitrate Motion Picture Film	306.2
50 – 2001	Bulk Oxygen Systems at Consumer Sites	3201.1, 4001.1
50A – 1999	Gaseous Hydrogen Systems at Consumer Sites	2209.2.1, 3501.1
50B – 1999	Liquefied Hydrogen Systems at Consumer Sites	2209.2.1, 3201.1
51 – 2002	Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes	2601.5, 2607.1, 2609.1
51A – 2001	Acetylene Cylinder Charging Plants	2608.1
52 – 2002	Compressed Natural Gas (CNG) Vehicular Fuel Systems	3001.1
57 – 2002	Liquefied Natural Gas (LNG) Vehicular Fuel Systems	3001.1
58 – 2004	Liquefied Petroleum Gas Code	3801.1, 3803.1, 3803.2.1, 3803.2.1.2 3803.2.1.7, 3803.2.2, 3804.1, 3804.3.1 3804.4, 3806.3, 3807.2, 3808.1, 3808.2, 3809.11.2, 3811.3

59A – 2001	Production, Storage and Handling of Liquefied Natural Gas (LNG)	3001.1, 3201.1
61 – 2002	Prevention of Fires and Dust Explosions in Agricultural and Food Products Facilities	Table 1304.1
69 – 2002	Explosion Prevention Systems	911.1, 911.3, Table 1304.1
72 – 2002	National Fire Alarm Code	509.1, Table 901.6.1, 903.4.1, 904.3.5, 907.2, 907.2.1 907.2.1.1, 907.2.10, 907.2.10.4, 907.2.11.2, 907.2.11.3, 907.2.12.2.3, 907.2.12.3, 907.3, 907.5, 907.6, 907.10.2, 907.11, 907.15, 907.17, 907.18, 907.20, 907.20.2, 907.20.5
80 - 1999	Fire Doors and Fire Windows	703.2, 1008.1.3.3
85 - 2004	Boiler and Combustion System Hazards Code (**Note**: NFPA 8503 has been incorporated into NFPA 85)	Table 1304.1
86 – 2003	Ovens and Furnaces	2101.1
99 – 2005	Health Care Facilities	3006.4
101 – 2003	Life Safety Code	1024.6.2
110 – 2005	Emergency and Standby Power Systems	604.1, 604.4, 913.5.2, 913.5.3
111 – 2005	Stored Electrical Energy Emergency and Standby Power Systems	604.1, 604.4
120 - 2004	Coal Preparation Plants	Table 1304.1
160 – 2001	Flame Effects Before an Audience	308.3.6
211 – 2003	Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances	603.2
230 - 2003	Fire Protection Of Storage	2301.1, 2308.2.2, 2308.4, 2310.1, 3404.3.3.9, Table 3404.3.6.3(7)
231D – 1998	Storage of Rubber Tires	2501.1
241 – 2004	Safeguarding Construction, Alteration, and Demolition Operations	1401.1
260 – 2003	Methods of Tests and Classification System for Cigarette Ignition Resistance of Components of Upholstered Furniture	803.6.1, 803.7.1
261 – 2003	Method of Test for Determining Resistance of Mock-Up Upholstered Furniture Material Assemblies to Ignition by Smoldering Cigarettes	803.5.1
265 – 2002	Standard Method of Fire Tests for Evaluating Room Fire Growth Contribution of Textile Wall Coverings	806.2.3, 806.2.3.1, 806.2.3.2
266 - 1998	Method of Test for Fire Characteristics of Upholstered Furniture Exposed to Flaming Ignition Source	803.5.2
267 – 1998	Method of Test for Fire Characteristics of Mattresses and Bedding Assemblies Exposed to Flaming Ignition Source	803.5.3, 803.6.3, 803.7.4
286 – 2000	Standard Method of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth	806.2.1, 806.2.1.1, 806.3
385 – 2000	Tank Vehicles for Flammable and Combustible Liquids	3406.5.4.5, 3406.6, 3406.6.1
407 – 2001	Aircraft Fuel Servicing	1106.2, 1106.3
430 – 2004	Storage of Liquid and Solid Oxidizers	4004.1.4
484 - 2002	Combustible Metals, Metal Powders, And Metal Dusts	TABLE 1304.1
490 – 2002	Storage of Ammonium Nitrate	3301.1.5
495 – 2001	Explosive Materials Code	911.1, 911.4, 3301.1.1, 3301.1.5, 3302.1, 3304.2 3304.6.2, 3304.6.3, 3304.7.1, 3305.1, 3306.1 3306.5.2.1, 3306.5.2.3, 3307.1, 3307.9, 3307.11, 3307.15
498 –2001	Safe Havens and Interchange Lots for Vehicles Transporting Explosives	3301.1.2
505 - 2002	Powered Industrial Trucks, Including Type Designations, Areas of Use, Maintenance, and Operation	2703.7.3
654 – 2000	Prevention of Fire and Dust Explosions from the Manufacturing, Processing and Handling of Combustible Particulate Solids	Table 1304.1
655 – 2001	Prevention of Sulfur Fires and Explosions	Table 1304.1
664 – 2002	Prevention of Fires and Explosions in Wood Processing and Woodworking Facilities	Table 1304.1, 1905.3
701 – 2004	Standard Methods of Fire Tests for Flame-Propagation of Textiles and Films	803.2.2, 805.1, 805.2, 2402.2
703 – 2000	Fire Retardant Impregnated Wood and Fire Retardant Coatings for Building Materials	. 806.2.6
704 – 2001	Identification of the Hazards of Materials for Emergency Response	606.7, 606.9.3.4, 1802.1, 2703.2.2.1, 2703.2.2.2, 2703.5, 2703.10.2, 2705.1.10,2705.2.1.1, 2705.4.4, 3203.4.1, 3404.2.3.2
750 – 2003	Water Mist Fire Protection Systems	Table 901.6.1
1122 – 2002	Model Rocketry	3301.1.4
1123 – 2000	Fireworks Display	3302.1, 3304.2, 3308.1, 3308.2.2, 3308.5, 3308.6
1124 – 2003	Manufacture, Transportation, and Storage of Fireworks and Pyrotechnic Articles	3302.1,3304.2, 3305.1, 3305.3 3305.4 3305.5
1125 - 2001	Manufacture of Model Rocket and High Power Rocket Motors	3301.1.4
1126 – 2001	Use of Pyrotechnics Before a Proximate Audience	3304.2, 3305.1, 3308.1, 3308.2.2, 3308.4, 3308.5
1127 – 2002	High Power Rocketry	3301.1.4
2001 – 2004	Clean Agent Fire Extinguishing Systems	Table 901.6.1, 904.10

APPENDIX A

BOARD OF APPEALS

The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

Appendix A is **REVISED** as follows:

SECTION A101 GENERAL

A101.1 Scope. A Northwest Fire District board of appeals is hereby established for the purpose of hearing applications for modification of the requirements of the Northwest Fire District Fire Code pursuant to the provisions of Section 108. The board shall be established and operated in accordance with this section, and shall be authorized to hear evidence from appellants and the fire code official pertaining to the application and intent of this code for the purpose of issuing orders pursuant to these provisions.

A101.2 Membership. The membership of the board shall consist of all of the voting members of the Northwest Fire District Emergency Services Commission. Members of the Commission shall be appointed in accordance with the by-laws of the fire district, and subject to confirmation by a majority vote of the governing body. Members shall serve without remuneration or compensation, and shall be removed from office prior to the end of their appointed terms only for cause.

A101.3 Terms of office. Members shall be appointed for terms in accordance with district by-laws.

A101.3.1 Initial appointments. Appointments to the board shall be in accordance with district by-laws.

A101.3.2 Vacancies. Vacancies shall be filled in accordance with district by-laws.

A101.3.3 Removal from office. Members shall be removed from office prior to the end of their terms only for cause. Continued absence of any member from regular meetings of the board shall, at the discretion of the applicable governing body, render any such member liable to immediate removal from office.

A101.4 Quorum. A majority of the board members shall constitute a quorum. In varying the application of any provisions of this code or in modifying an

order of the fire code official, affirmative votes of the majority present shall be required.

A101.5 Secretary of board. The District shall provide a secretary to the board, who shall keep a detailed record of all its proceedings, which shall set forth the reasons for its decisions, the vote of each member, the absence of a member and any failure of a member to vote.

A101.6 Legal counsel. The jurisdiction shall furnish legal counsel to the board to provide members with general legal advice concerning matters before them for consideration. Members shall be represented by legal counsel at the jurisdiction's expense in all matters arising from service within the scope of their duties.

A101.7 Meetings. The board shall meet at least once a month. In any event, the board shall meet within 10 days after notice of appeal has been received.

A101.8 Conflict of interest. Members with a material or financial interest in a matter before the board shall declare such interest and refrain from participating in discussions, deliberations, and voting on such matters.
A101.9 Decisions. Every decision shall be promptly filed in writing in the office of the fire code official and shall be open to public inspection. A certified copy shall be sent by mail or otherwise to the appellant, and a copy shall be kept publicly posted in the office of the fire code official for 2 weeks after filing.

A101.10 Procedures. The board shall be operated in accordance with the district's by-laws and the rules and regulations established by the board for the hearing of appeals.

APPENDIX B

FIRE-FLOW REQUIREMENTS FOR BUILDINGS

Section B105.2 Buildings other than one- and two-family dwellings is **REVISED** as follows:

B105.2 Buildings other than one- and two-family dwellings. The minimum fire flow and flow duration for buildings other than one- and two-family dwellings shall be as specified in Table B105.1.

Exception: A reduction in required fire flow of up to 75 percent, as approved, is allowed when the building is provided with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 of the International Fire Code. The resulting fire flow shall not be less than 1,500 gallons per minute (5678 l/min) for the prescribed duration as specified in Table B105.1.

APPENDIX D FIRE APPARATUS ACCESS ROADS is **REVISED** as follows:

APPENDIX D

FIRE APPARATUS ACCESS ROADS

SECTION D101 - GENERAL

D101.1 Scope. Fire apparatus access roads shall be in accordance with this appendix and all other applicable requirements of the *international fire code*.

SECTION D102 - REQUIRED ACCESS

D102.1 Access and loading. Facilities, buildings or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved all-weather fire apparatus access road with an asphalt, concrete or other approved driving surface capable of supporting the imposed load of fire apparatus weighing at least 75,000 pounds (34 050 kg).

SECTION D103 MINIMUM SPECIFICATIONS

D103.1 Access road width with a hydrant. Where a fire hydrant is located on a fire apparatus access road, the minimum road width shall be 26 feet (7925 mm). See Figure D103.1

D103.2 Grade. Fire apparatus access roads shall not exceed 12 percent in grade.

Exception: Grades steeper than 12 percent as approved by the fire chief.

D103.3 Driveways. Driveways exceeding 150 feet in length providing access to dwellings units shall provide a minimum unobstructed width of 14 feet (3658 mm) and a minimum unobstructed height of 13 feet 6 inches (4115 mm). Driveways in excess of 150 feet (45 720 mm) in length shall be provided with turnarounds. Driveways in excess of 200 feet (60 960 mm) in length and less than 20 feet (6096 mm) in width shall be provided with turnouts in addition to turnarounds.

A driveway shall not serve in excess of five dwelling units.

Driveway turnarounds shall have inside turning radii of not less than 30 feet (9144 mm) and outside turning radii of not less than 45 feet (13 716 mm). Driveways that connect with a road or roads at more than one point may be considered as having a turnaround if all changes of direction meet the radii requirements for driveway turnarounds.

Driveway turnouts shall be an all-weather road surface at least 10 feet (3048 mm) wide and 30 feet (9144 mm) long. Driveway turnouts shall be located as required by the code official.

Vehicle load limits shall be posted at both entrances to bridges on driveways and private roads. Design loads for bridges shall be established by the code official.

D103.4 Turning Radius. The minimum turning radius shall be based on a SU-30 design vehicle.

D103.5 Dead ends. Dead-end fire apparatus access roads in excess of 150 feet (45,720 mm) shall be provided with width and turnaround provisions in accordance with Table D103.5.

TABLE D103.5
REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

LENGTH (FEET)	WIDTH (FEET)	TURNAROUNDS REQUIRED
0–150	20	NONE REQUIRED
151–600	20	HAMMERHEAD, "Y" OR CUL-DE-SAC IN ACCORDANCE WITH FIGURES D103.1, D103.2 AT TERMINAL END
601–1200	26	HAMMERHEAD, "Y" OR CUL-DE-SAC IN ACCORDANCE WITH FIGURES D103.1, D103.2 AT TERMINAL END AND MIDWAY
OVER 1200	26	APPROVED AUTOMATIC SPRINKLER SYSTEM INSTALLED THROUGHOUT ALL OCCUPANCIES. HAMMERHEAD, "Y" OR CUL-DE-SAC IN ACCORDANCE WITH FIGURES D103.1, D103.2 AT TERMINAL END AND AT EACH 600 FEET.

D103.6 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum gate width shall be 20 feet (6096 mm) when serving two directions, or 14 feet when serving a single direction.
2. Gates shall be of the swinging or sliding type.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.
5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the fire code official.

6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or a key box containing the key(s) to the lock is installed at the gate location.
7. Locking device specifications shall be submitted for approval by the fire code official.

D103.6.1 Existing Fire Apparatus Access Road Gates. Existing gates securing fire apparatus access roads shall comply with d103.6.

Exception: existing electric gates shall have installed approved preemptive control opening equipment compatible with the fire department's existing system within 18 months from the effective date of this code.

D103.7Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with District standards. Signs shall have a minimum dimension of 12 inches (305 mm) wide by 18 inches (457 mm) high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.7 .1 or D103.7.2. Compliance with the provisions of this section shall be at no expense to the District.

D103.7.1 Roads 20 feet wide, but less than 26 feet in width. Fire apparatus access roads less than 26 feet wide (6096 to 7925 mm) shall be posted on both sides as a fire lane.

D103.~~6~~ 7. 2 Roads 26 feet wide, but less than 32 in width. Fire apparatus access roads 26 feet wide (7925 mm) but less than 32 feet wide (9754 mm) shall be posted on one side of the road as a fire lane. Where parking lanes are provided, they must be 8 feet in width. This is measured from the back of a wedge or rolled curb or the face of a vertical curb.

SECTION D104 COMMERCIAL AND INDUSTRIAL DEVELOPMENTS

D104.1 Buildings exceeding three stories or 30 feet in height. Buildings or facilities exceeding 30 feet (9144 mm) or three stories in height shall have at least three means of fire apparatus access for each structure.

D104.2 Buildings exceeding 62,000 square feet in area. Buildings or facilities having a gross building area of more than 62,000 square feet (5760 m2) shall be provided with two separate and approved fire apparatus access roads.

D104.3 Remoteness. Where two access roads are required, they shall be placed a distance apart equal to not less than one half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

SECTION D105 – AERIAL FIRE APPARATUS ACCESS ROADS

D105.1 Where required. Buildings or portions of buildings or facilities exceeding 30 feet (9144 mm) in height above the lowest level of fire department vehicle access shall be provided with approved fire apparatus access roads capable of accommodating fire department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway.

D105.2 Width. Fire apparatus access roads shall have a minimum unobstructed width of 26 feet (7925 mm) in the immediate vicinity of any building or portion of building more than 30 feet (9144 mm) in height.

D105.3 Proximity to building. At least one of the required access routes meeting this condition shall be located within a minimum of 15 feet (4572 mm) and a maximum of 30 feet (9144 mm) from the building, and shall be positioned parallel to one entire side of the building.

D106 – MULTI-FAMILY RESIDENTIAL DEVELOPMENTS

D106.1 Projects having more than 100 dwelling units. Multiple-family residential projects having more than 100 dwelling units shall be equipped throughout with two separate and approved fire apparatus access roads, and shall meet the requirements of D104.3.

D106.2 Projects having more than 200 dwelling units. Multiple-family residential projects having more than 200 dwelling units shall be provided with two separate and approved fire apparatus access roads regardless of whether they are equipped with an approved automatic sprinkler system, and shall meet the requirements of D104.3.

SECTION D107 ONE- AND TWO-FAMILY RESIDENTIAL DEVELOPMENTS

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 30 shall be provided with separate and approved fire apparatus access roads, and shall meet the requirements of Section D104.3

Exceptions:

1. Where there are 30 or fewer dwelling units on a single public or private access way and all dwelling units are protected by approved residential sprinkler systems, access from two directions shall not be required.
2. The number of dwelling units on a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.

Appendix H is **ADDED** as follows:

APPENDIX H

INSPECTION, TESTING AND RECORDKEEPING REQUIREMENTS FOR WATER-BASED FIRE PROTECTION SYSTEMS AND FIRE ALARM SYSTEMS (SEE IFC SECTION 901.6)

SECTION H101 – GENERAL

H101.1 Scope. Water-based fire protection systems and fire alarm systems shall be inspected and tested in accordance with this appendix.

SECTION NUMBER	SYSTEM COMPONENT	ACTIVITY	
		INSPECTION	TEST
H102.1	FIRE DEPARTMENT CONNECTION	X	
H102.2	VALVES CONTROLLING WATER SUPPLIES	X	X
H102.3	MAIN DRAIN		X
H102.4	ALARM DEVICES AND OFF PREMISES MONITORING		X
H102.5	DRY PIPE, PRE-ACTION AND DELUGE SYSTEM VALVES		X
H102.6	SPRINKLERS	X	
H102.7	PRESSURE GAUGES	X	X
H102.8	STANDPIPES	X	
H102.9	WATER TANKS	X	
H102.10	FIRE PUMPS	X	X
H102.11	CHECK VALVES	X	X
H102.12	BACK FLOW PREVENTION ASSEMBLIES	X	X

H101.2 Frequency. Inspection and testing of systems prescribed in this appendix shall be conducted annually or as specified herein except that the fire code official may determine that additional inspection and/or testing is necessary to insure that systems or devices will operate properly in an emergency.

H101.3 Testing Personnel. The inspections and testing prescribed by this appendix shall be conducted by personnel demonstrated to be qualified to

perform the full procedure for the particular system or device being inspected and/or tested.

H101.4 RECORDS. Written records of required inspections and tests shall be maintained on forms approved by the fire code official. A copy of these records shall be kept available at the protected property and a copy shall be submitted to the code official.

H101.5 Notification Of Inoperable System. The code official shall be notified immediately of any system or device regulated in this appendix that is found to be inoperable. The person conducting the inspection shall be responsible for notification.

H101.6 Notification To Supervisory Service. Where a supervisory service is provided, the alarm receiving facility shall always be notified prior to conducting a test or procedure that could result in the activation of an alarm and after such tests or procedures are concluded.

H101.7 Responsibility. The property owner or manager is responsible for assuring that the inspection and testing requirements of this appendix are performed.

H101.8 Definitions. For the purpose of this appendix, certain terms are defined as follows:

Test. Physical checks conducted on the system, part of the system or device to determine the serviceability of the system or device.

Inspection. A visual examination of the system, a portion of the system or a device to verify that the system or device appears to be in proper working condition, not blocked or obstructed and that the system or device is free from physical damage.

SECTION H102 - FREQUENCY AND SPECIFIC REQUIREMENTS FOR WATER-BASED FIRE PROTECTION SYSTEMS

H102.1 Fire Department Connections.

H102.1.1 Inspection. (Annually)

1. The fire department connection is visible and accessible.
2. Couplings or swivels are not damaged and rotate smoothly.
3. Plugs or caps are in place and undamaged.
4. Gaskets are in place and in good condition.
5. Identification signs are in place.
6. The check valve is not leaking.

7. Remove plugs or caps and visually inspect the interior of the pipe for obstructions or foreign materials.

H102.2 Valves Controlling Water Supplies.

H102.2.1 Inspection. (Annually)

1. Determine that the valve is fully open, accessible and has no signs of physical damage.
2. Determine that the valve is properly supervised, sealed or locked in the open position.

H102.2.2 Test. (Annually)

1. Exercise the valve to insure that it moves freely.
2. Test electronic valve supervision for proper operation and transmission to off premises monitoring if provided.

H102.3 Main Drain.

H102.3.1 Test. (Annually)

1. Conduct a main drain flow test. Record results.
2. Determine that the drain discharges at a point where it is least likely to cause water damage.
3. Determine that the valve does not leak and that it moves freely.

H102.4 Alarm Devices and Off Premises Monitoring of Waterflow Alarm

H102.4.1 Test (Annually)

1. Test the waterflow alarm on wet pipe systems by opening the inspector's test valve full open. Alarms should sound within not less than 30 seconds nor more than two minutes.
2. Waterflow alarms on dry pipe, pre-action or deluge systems shall be tested by using the by pass connection.
3. If provided, contact the off premises monitoring agency to verify receipt of the water flow alarm.

H102.5 Dry Pipe, Pre-action and Deluge Valves

H102.5.1 Test (Annually)

Systems shall be trip tested annually.

H102.6 Sprinklers

H102.6.1 Inspection (Annually)

1. Sprinklers shall be inspected from the floor level annually.
2. Sprinklers shall be free of corrosion, foreign materials, paint and physical damage and shall be installed in the proper orientation (e.g., upright, pendant or sidewall). Any sprinkler shall be replaced that is painted, corroded, damaged, or in the improper orientation.
3. Determine that there are no obstructed sprinklers and that spacing and temperature rating are proper.

H102.7 Pressure Gauges

H102.7.1 Inspection (Annually)

1. Inspect gauges on wet pipe systems to assure that they are in good condition and that normal water pressure is being maintained.
2. Gauges on dry, preaction and deluge systems shall be inspected to ensure that normal air pressure and water pressure are being maintained.

H102.8 Standpipes

H102.8.1 Inspection (Annually)

1. Inspect all hose outlets to ensure that they are accessible, protected caps are in place and the valve is fully closed.
2. Control valves for water supplies to wet standpipe systems shall be inspected to assure that the valve is full open and supervised.
3. Remove and re-rack each hose. Check each hose for mildew, cuts or other deterioration. Ensure that nozzles are in place.
4. Check all hose couplings gaskets and nozzles for serviceability and obstructions.

H102.9 Water Tanks

H102.9.1 Inspection (Annually)

1. Visually inspect tank for leaks, signs of corrosion or physical damage.
2. Determine the automatic filling system is operational.

H102.10 Fire Pumps

H102.10.1 Inspection (Annually)

1. Fire pumps shall be inspected annually in accordance with NFPA 20.

H102.10.2 Test (Annually)

1. Flow tests shall be conducted annually in accordance with NFPA 20. The minimum acceptable flow test shall include pressure and flow results at churn, capacity and 150% of rated capacity.

H102.11 Check Valves.

H102.11.1 Inspection (Annually)

1. Check valves shall be internally inspected every five years to verify that all components operate properly and are in good condition.

H102.12 Backflow Prevention Assemblies

H102.12.1 Inspection (Annually)

1. Assemblies shall be inspected annually to assure that control valves are in the full open position and properly supervised.

H102.12.2 Test (Annually)

1. All backflow prevention assemblies installed in fire protection systems shall be flow tested annually at the design flow rate of the sprinkler system, including appropriate hose stream demands. Friction loss across the device shall be measured and compared to the device manufacturer's specifications.

2. Where connections of a size sufficient to conduct a full flow test are not available, test shall be conducted at the maximum flow rate possible.

Section H103 - Frequency and Specific Requirements for Fire Alarm Systems

Visual inspections and testing methods for components and devices indicated shall be in accordance with NFPA 72 table 7-2.2.

COMPONENT	ACTIVITY TYPE	
	INSPECTION	TEST
FIRE ALARM CONTROL AND ANNUNCIATOR PANELS	X	X

BATTERY(S)		X
INITIATING DEVICES	X	X
INITIATING DEVICES, SUPERVISORY		X
ALARM NOTIFICATION APPLIANCES	X	X
OTHER CONTROL FEATURES*		X
OFF-PREMISES MONITORING		X

* If present, exit doors equipped with delayed egress locks shall unlock upon testing of initiating devices.