

# *City and County of Honolulu Fire Code*

Based on the NFPA 1 Fire Code 2021

#### Chapter 20

#### FIRE CODE OF THE CITY AND COUNTY OF HONOLULU

#### Articles:

- 1. Adoption of the State Fire Code
- 2. Life Safety Requirements for Existing Hotel Buildings and Existing Business Buildings
- 3. Examination and Approval of Plans by Fire Chief
- (4. Fireworks Control. Repealed by Ord. 02-47)
- 4. Article 4. Fire and Life Safety Evaluation of Existing High Rise Residential Buildings
- 5. Requirements for Smoke Detectors in Existing Highrise Residential Buildings
- 6. **Regulation of Fireworks**

#### Article 1. Adoption of the State Fire Code

#### Sections:

#### 20-1.1 Fire Code of the City and County of Honolulu.

#### Sec. 20-1.1 Fire Code of the City and County of Honolulu.

The State Fire Code, as adopted by the State of Hawaii (State) on January 20, 2023, pursuant to Chapter 132 of the Hawaii Revised Statutes (HRS), which adopts, with modifications, the 2021 National Fire Protection Association (NFPA) 1 Fire Code that is published and copyrighted by the NFPA, is adopted by reference and made a part hereof, subject to the following amendments, which, unless stated otherwise, are in the form of amendments to NFPA 1:

(1) Amending Section 1.1.2. Section 1.1.2 is amended to read:

**1.1.2 Title.** This code shall be known and cited as the "Fire Code of the City and County of Honolulu" and will be referred to herein as "this code."

(2) Amending Section 1.10. Section 1.10 is amended to read:

**1.10 Board of Appeals.** See Chapter 16 (Building Code), Article 1, Revised Ordinances of Honolulu (ROH).

(3) Amending Section 1.12.8. Section 1.12.8 is amended to read:

**1.12.8 Permits, Licenses, and Fees.** A permit or license shall be obtained from the Honolulu Fire Department's (HFD) Fire Prevention Bureau or designated agency prior to engaging in the following activities, operations, practices, or functions:

1. Places of Assembly. To operate a place of assembly. For permit requirements, see Section 20.1.1.1.

Annual Permit Fee: \$200

2. Tents and Canopies. For permit requirements, see Section 25.1.2.

Permit Fee: \$200

3. Flammable and Combustible Liquid Tank Installation. For permit requirements, see Section 66.1.5.

One-time Permit Fee:

\$150 for a tank capacity of 61 to 4,999 gallons\$200 for a tank capacity of 5,000 gallons or greater

4. Liquefied Petroleum Gas (LPG) Container (Tank) Installation. For permit requirements, refer to Section 69.1.2.

**One-time Permit Fee:** 

\$200 for a single container or the aggregate of interconnected containers of 125-gallon water capacity or more

5. Licenses to inspect, test, and maintain the following fire protection systems:

Fire Alarm Systems - Three-Year License Fee: \$100 Portable Fire Extinguishers - Three-Year License Fee: \$100 Private Fire Hydrants - Three-Year License Fee: \$100 Water-Based Systems - Three-Year License Fee: \$100 Other Fire Extinguishing Systems - Three-Year License Fee: \$100

- 6. Fireworks. For permits and license requirements, see Chapter 20, Article 6, ROH.
- 7. Automatic Fire Extinguishing Systems for Commercial Cooking Equipment Inspection Fee.

Initial Inspection Fee: \$100 Reinspection Fee: \$100

8. Fire Alarm Systems Acceptance Test Inspection Fee. Inspection fees are as follows:

1-100 devices or appliances:

Initial Fee: \$100 Retest Fee: \$200

101-250 devices or appliances:

Initial Fee: \$250 Retest Fee: \$250

More than 250 devices or appliances:

Initial Fee: \$500 Retest Fee: \$500

9. Fire Plans Review Fee:

- a. When plans or other specifications are submitted to the fire department per the Building Code, a plans review fee shall be paid at the time of submittal. The fees collected are hereby deemed appropriated upon receipt and may be expended for fire prevention activities relating to public education, fire investigations, plans checking, permit processing, fire inspections, and certifications.
- b. The Fire Plans Review Revolving Fund is established and created herewith as a repository for such fees. The Fire Plans Review Fee shall be ten (10) percent of the building permit fee payable to the City and County of Honolulu prior to the issuance of the building permit.

**EXCEPTION:** Where an automatic fire sprinkler system is elected to be installed in accordance with NFPA 13D, NFPA 13R, or NFPA 13, the Fire Plans Review Fee shall be waived.

10. Fireworks Public Display Inspection Fee. For permit requirements, see Section 20-6.12.

Inspection Fee: \$200

(4) Amending Section 1.16.2.2. Section 1.16.2.2 is amended to read:

**1.16.2.2** A copy of such order or final notice may be posted on the premises in a conspicuous place at or near the entrance to such premises and the order or notice may be disseminated in accordance with the following:

Mailed to the last known address of the owner, occupant, or registered agent

(5) Amending Section 1.16.4. Section 1.16.4 is amended to read:

**1.16.4 Citations.** Any person, firm, corporation, or entity who fails to comply with the provisions of this code or carry out an order made pursuant to this code or violates any condition attached to a permit, approval, or certificate shall be deemed guilty of a misdemeanor.

(6) Amending Section 1.16.4.4. Section 1.16.4.4 is amended to read:

**1.16.4.4 Failure to Comply.** Each person, firm, corporation, or entity shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any provisions of this code is committed, continued, or permitted. Upon conviction of any such violation, such person, firm, corporation, or entity shall be punished by a fine of not more than \$1,000 or imprisonment of not more than one year or both such fine and imprisonment.

(7) Amending Section 4.1.3.2.2.5. Section 4.1.3.2.2.5 is amended by adding Subsection 4.1.3.2.2.5.1 to read:

**4.1.3.2.2.5.1** The Authority Having Jurisdiction (AHJ) may require signage to be visible at the main entrance to the building and/or tenant space. Any required signage shall be made with lettering on a contrasting background as determined by the AHJ.

(8) Amending Section 10.10.1. Section 10.10.1 is amended to read:

**10.10.1 Open Burning Fires.** Open burning shall be conducted in accordance with this section and may be prohibited when the AHJ determines such fires are a hazard.

**10.10.1.1 Compliance.** Open burning shall comply with the following:

1. Fires for Cooking Food. Persons responsible for such fires not contained within an appliance, such as an imu, shall notify the HFD's Fire Communication Center (FCC) 15 minutes prior to lighting such fires.

2. Fires for Recreational, Decorative, or Ceremonial Purposes. Obtain written permission from the property owner. Submit a letter to the AHJ for approval at least 14 days prior to the event, noting the date, time, and location of the fire. Persons responsible shall notify the HFD's FCC 15 minutes prior to lighting such fires.

3. Fires to Abate a Fire Hazard. Obtain written permission from the property owner. Submit a letter to the AHJ for approval at least 14 days prior to the event, noting the date, time, and location of the fire. Persons responsible shall notify the HFD's FCC 15 minutes prior to lighting such fires.

4. Fires for Prevention or Control of Disease or Pests. Obtain written permission from the property owner. Submit a letter to the AHJ for approval at least 14 days prior to the event, noting the date, time, and location of the fire. Persons responsible shall notify the HFD's FCC 15 minutes prior to lighting such fires.

5. Fires for Training of Fire Fighting Personnel. Fires for the training of fire fighting personnel shall be in accordance with NFPA 1403 and conducted only with the AHJ's approval. Persons responsible shall notify the HFD's FCC 15 minutes prior to lighting such fires.

6. Fires for Disposal of Dangerous Materials. Submit a letter to the AHJ for approval at least 14 days prior to the event, noting the date, time, and location of the fire. Persons responsible shall notify the HFD's FCC 15 minutes prior to lighting such fires.

7. Fires for Residential Bathing Purposes. Notify the HFD's FCC at least 15 minutes prior to lighting such fires.

**10.10.1.2 Responsibility.** Fires for open burning allowed under Section 10.10.1 shall be the responsibility of the person igniting and maintaining the fire.

10.10.1.3 Incinerators. Private incineration is prohibited by State health laws.

**EXCEPTION:** Closed incinerators approved by the State Department of Health shall be in accordance with NFPA 82.

(9) Amending Section 10.10.6.1. Section 10.10.6.1 is amended to read:

**10.10.6.1** For other than one- and two-family dwellings, no hibachi, grill, or other similar devices used for cooking, heating, or any other purpose shall be used or kindled on any balcony, under any overhanging portion, or within ten feet (three meters) of any structure without the AHJ's approval.

(10) Amending Section 10.10. Section 10.10 is amended by adding Subsection 10.10.11 to read:

#### 10.10.11 Open-Flame Performances Before a Proximate Audience.

**10.10.11.1** Open-flame performances before a proximate audience shall comply with the following:

1. Performances that use an open flame, such as, but not limited to "fire dancing" and "logo burns," shall be held outdoors or within a building protected with an automatic sprinkler system in accordance with Section 20.1.5.3.

- 2. Performances shall be in an area provided with at least 25 feet of clearance to readily combustible materials.
- 3. A minimum clearance of 25 feet shall be kept between the performance and the audience at all times. This distance may be reduced, provided an AHJ-approved noncombustible safety net is in place in accordance with Section 20.1.5.3.
  - a. Fuel shall be stored in an approved container at least 25 feet away from the performance and the audience. The quantity of fuel stored shall only suffice for a single performance.
  - b. Performers shall not throw any open-flame props over the audience.
- 4. A fire extinguisher with a minimum 4-A: 80-BC rating shall be readily available and within 30 feet of the performance. The fire extinguisher shall be constantly attended by a competent adult trained in the use of portable fire extinguishers.
- 5. Fire props shall be adequately extinguished immediately after performances by soaking it in a bucket of water or other approved method.
- 6. Additional clearances and/or means of fire extinguishment shall be provided if deemed necessary by the AHJ.
- (11) Amending Section 11.12.3.2.3. Section 11.12.3.2.3 is amended by adding an exception to read:

**EXCEPTION:** One- and two-family dwellings shall require only one three-foot wide access pathway from the eave to the ridge on each roof slope where the photovoltaic arrays are located. The access pathway shall be located at a structurally strong location of the building, such as a bearing wall.

(12) Amending Section 11.12.3.2.4. Section 11.12.3.2.4 is amended by adding an exception to read:

**EXCEPTION:** Photovoltaic arrays for one- and two-family dwellings shall be located not less than 18 inches below the ridge.

(13) Amending Section 12.6.9.1.1. Section 12.6.9.1.1 is amended to read:

**12.6.9.1.1** Christmas tree placement within buildings shall comply with Table 12.6.9.1.1.

#### **EXCEPTIONS:**

- 1. Natural-Cut Christmas trees shall be allowed in assembly occupancies that are protected throughout with an approved automatic fire sprinkler system that is installed and maintained in accordance with NFPA 13.
- 2. Natural-cut Christmas trees shall be allowed in hotel occupancies that are protected throughout with an approved automatic fire sprinkler system that is installed in accordance with NFPA 13. An approved fire watch shall be provided for the duration in which the Christmas trees remain in the hotel.
- (13) Amending Section 13.1.1. Section 13.1.1 is amended by adding Subsections 13.1.1.2 and 13.1.1.3 to read:

**13.1.1.2 Halon and Clean Agent Systems.** Condition of acceptance of halon and clean agent systems shall be satisfactory passage of a final approval of an installation test in accordance with nationally recognized standards and the manufacturer's instructions prior to final acceptance of the system. The test shall be witnessed by the AHJ.

**13.1.1.3 Nonwater-based Fire Extinguishing Systems.** Upon completion of the installation of a nonwater-based fire extinguishing system that is required by this code, a satisfactory final approval of the system's installation test shall be made in accordance with nationally recognized standards and the manufacturer's instructions. Nonwater-based systems include, but are not limited to dry chemical and carbon dioxide extinguishing systems. The test shall be witnessed by the AHJ.

(15) Amending Section 13.1.5. Section 13.1.5 is amended by adding Subsection 13.1.5.2 to read:

**13.1.5.2** Fire department hose connections serving standpipe and sprinkler systems shall be located within 20 feet of a fire apparatus access road, not less than 18 inches and not more than 4 feet above grade, or as approved by the AHJ. Each fire department connection shall be designated by a sign with letters at least 1 inch (25.4 millimeter) in height.

If automatic sprinklers are also supplied by the fire department connection, the sign or combination of signs shall indicate both designated services.

- For manual wet standpipe systems, the sign shall read as follows: Manual Wet Standpipe \_\_\_\_\_ PSI Top Most Outlet Pressure, FDC System Demand \_\_\_\_\_ GPM @ \_\_\_\_\_PSI
- For manual dry standpipe systems, the sign shall read as follows: Manual Dry Standpipe \_\_\_\_\_ PSI Top Most Outlet Pressure, FDC System Demand \_\_\_\_\_ GPM @ \_\_\_\_PSI
- For automatic wet standpipe systems that are combined with a sprinkler system, the sigh shall read as follws:
   Automatic Wet Standpipe \_\_\_\_\_ PSI Top Most Outlet Pressure, FDC System Demand \_\_\_\_\_ GPM @ \_\_\_\_\_ PSI and Automatic Sprinkler
- For manual wet standpipe systems that are combined with a sprinkler system, the sign shall read as follows:
   Manual Wet Standpipe \_\_\_\_\_ PSI Top Most Outlet Pressure, FDC System Demand \_\_\_\_\_ GPM @ \_\_\_\_\_PSI and Automatic Sprinkler
- 5. For all other standpipe systems, the signage shall be approved by the AHJ.
- (16) Amending Section 13.3.2.19.1. Section 13.3.2.19.1 is amended to read:

**13.3.2.19.1** When required by the county building code, all new one- and two-family dwellings shall be protected throughout by an approved automatic sprinkler system in accordance with Section 13.3.2.19.2.

(17) Amending Section 13.3.2.25.2. Section 13.3.2.25.2 is amended to read:

**13.3.2.26.2** Compliance shall be with an automatic fire sprinkler system throughout the building or alternative fire prevention and fire safety systems in accordance with the requirements of a building fire and life safety evaluation as achieved by a passing score on a building fire and life safety evaluation pursuant to Ordinance 18-14. Existing high-rise residential buildings not

protected throughout by an automatic fire sprinkler system shall be subject to building fire and life safety evaluations, which shall consist of an assessment of building safety features and fire protection systems in accordance with this code and the building code on a form prescribed by the AHJ in accordance with Section 20-4.4. Existing high-rise residential buildings that opt to install an automatic fire sprinkler system throughout the building shall not be required to undergo the building fire and life safety evaluation; provided all buildings continue to maintain a passing status on their respective building fire and life safety evaluation or maintain the codes and standards for automatic fire sprinkler systems that are current and applicable at the time the building permit application is submitted for approval. An acceptable score on the evaluation provides a minimum level of fire and life safety to fire fighters and occupants that is approved by the AHJ. A building fire and life safety evaluation shall be prepared by a licensed design professional or a building's authorized representative under the supervision of a licensed design professional, be stamped with the licensed design professional's authorized seal or stamp, and authenticated as provided under Hawaii Administrative Rules, Section 16-115-9. The licensed design professional shall provide the scores by each category of the building fire and life safety evaluation to the association of apartment owners of a condominium or the housing cooperative housing corporation. A building fire and life safety evaluation shall be conducted by no later than August 31, 2022, and the licensed design professional shall submit a copy of the authenticated building fire and life safety evaluation to the AHJ in accordance with Section 20-4.3. Existing high-rise residential buildings must comply by receiving an acceptable score on the building fire and life safety evaluation by no later than May 3, 2038, unless compliance is met with an automatic fire sprinkler system as indicated in Table 8 of the building fire and life safety evaluation form.

The AHJ may grant an extension pursuant to Section 13.3.2.25.7 if automatic fire sprinkler systems are used to achieve compliance. All buildings must continue to maintain a passing status on their respective building fire and life safety evaluation assessments or maintain an automatic sprinkler system that complies with this chapter and the building code at the time of the evaluation. For the purposes of this paragraph (17) "existing high-rise residential building" means the same as "existing high-rise residential building" as defined in Section 20-5.1.

**13.3.2.25.2.1** The association of apartment owners of a condominium or the cooperative housing corporation of an existing high-rise residential building may appeal the final building fire and life safety evaluation score, the resulting fire safety requirements for the building, as assessed by the licensed design professional, or the determination of the AHJ by filing a written request for an appeal to the director or the head of the AHJ within 45 days of the date of the completed building fire and life safety evaluation or the AHJ's determination of the building's fire and life safety requirements, whichever is later. The request for an appeal shall include a statement of the basis for appeal, supporting documentation, if any, and the relief requested. The director or head of the AHJ shall render a decision on the appeal no later than 30 calendar days from the receipt of the appeal. The AHJ shall submit an annual report to the City Council on the appeals filed for existing high-rise residential buildings and the disposition of the appeals.

**13.3.2.25.2.2** Except as otherwise provided in this paragraph (17), which establishes the life safety evaluation system and authorizes owners of existing high-rise residential buildings to opt out of approved automatic sprinkler systems through a life safety evaluation process, existing high-rise residential buildings shall be protected throughout by an approved automatic fire sprinkler system in accordance with this chapter and the building code. Existing high-rise residential buildings that opt to install an automatic fire sprinkler system throughout the building shall not be required to undergo a building fire and life safety evaluation, but shall be required to

apply for and obtain a building permit through a State-licensed specialty contractor for the automatic fire sprinkler system or select the option on the building fire and life safety evaluation code assessment form, Table 8.

**13.3.2.25.2.3** Notwithstanding any other provision of this paragraph (17), the association of apartment owners of a condominium or the cooperative housing corporation of an existing high-rise residential building 10 floors or higher may opt out of the automatic fire sprinkler system requirement, provided that the building receives an acceptable score on the building fire and life safety evaluation, or alternative fire prevention and fire safety systems to obtain an acceptable life safety evaluation score have been implemented.

An association of apartment owners of a condominium or a cooperative housing corporation that has opted out of the automatic fire sprinkler system requirement shall provide verifiable disclosure of its action to all current and future owners, shareholders, and residents. Verifiable disclosure shall include real estate sales disclosures as may be required by Hawaii real estate industry practices.

**13.3.2.25.2.4** No later than May 3, 2030, each building owner shall meet with unit owners or, in the case of an apartment building, with tenants, to discuss a design plan, financing options, and implementation timelines to obtain an acceptable life safety evaluation score by the required date. A statement describing the building owner's design plan and implementation timelines to obtain an acceptable life safety evaluation score by the required date. A statement describing the building owner's design plan and implementation timelines to obtain an acceptable life safety evaluation score and the building owner's intent to comply with this paragraph (17) must be filed no later than May 3, 2030, with the AHJ for approval.

**13.3.2.25.2.5** The AHJ shall review and respond to the written statement of the owner's intent to comply within 60 days of receipt of the statement of intent to comply.

**13.3.2.25.2.6** Subject to the exceptions in Section 13.3.2.25.2.7, the entire building shall be required to be protected by:

- a. An approved automatic fire sprinkler system; or
- b. Alternative fire prevention and fire safety systems as approved by the AHJ.

by May 3, 2038, except where an extension is approved by the AHJ as provided in Section 13.3.2.25.2.7. A financial and design plan for existing high-rise residential buildings that opt to install an automatic fire sprinkler system must be filed with the AHJ for approval no later than May 3, 2030.

**13.3.2.25.2.7** Compliance with the automatic fire sprinkler system throughout the building or alternative fire prevention and fire safety systems provisions of Section 13.3.2.25.2.2 shall be achieved as follows: Common areas for all buildings shall be completed by May 3, 2038. An extension to no later than May 3, 2048 may be approved by the AHJ; provided that compliance using an automatic fire sprinkler system in the common areas related to building egress path has been achieved.

**EXCEPTION:** Existing high-rise residential buildings are exempted from the automatic fire sprinkler system requirements in Section 13.3.2.25.2.2 if all dwelling units have exterior access and a continuous egress path to exit the building and have no full-length interior corridors.

**EXCEPTION:** Existing high-rise residential buildings less than 10 floors in height can receive an acceptable score on the building fire and life safety evaluation in lieu of the approved automatic sprinkler system requirements in Section 13.3.2.25.2.2.

**EXCEPTION:** Existing high-rise residential buildings may be protected throughout by an approved automatic fire sprinkler system per NFPA 13R when approved by the AHJ.

**EXCEPTION:** Private balconies that have at least one long side that is 50 percent open are not required to have automatic fire sprinkler protection.

**EXCEPTION:** Elevator hoist ways and machine rooms are not required to have automatic fire sprinkler protection.

**EXCEPTION:** Class II wet standpipe systems may be removed when buildings are protected throughout by automatic fire sprinkler systems pursuant to Section 13.3.2.25.2.2.

**EXCEPTION:** Combined standpipe and automatic fire sprinkler systems using existing standpipes shall be permitted to utilize pump sizing for the fire sprinkler demand.

**EXCEPTION:** The time periods and deadlines for compliance set forth in Section 13.3.2.25.2 and Section 13.3.2.25.2.7 shall be paused, tolled, or suspended where a building permit application, or other code application, for projects that relate to those sections or are required for the building to achieve compliance with the requirements of Section 13.3.2.25.2.2 for an automatic fire sprinkler system throughout the building or alternative fire prevention and fire safety systems, when the application is duly filed by a State-licensed specialty contractor for the design, installation, or upgrade of such system, and the review and issuance of the building permit or other code application has not been completed by the reviewing agency within 90 days of such submission to the reviewing agency. The period of time in excess of the 90-day period following timely filing of a complete application, but before issuance of the permit or approval of the application, shall constitute the period of time in which the time period and deadline are paused, tolled, or suspended. The reviewing agency shall process applications filed pursuant to Section 13.3.2.25.2 and Section 13.3.2.25.2.7 in a timely manner, provided that no penalties shall be imposed upon those buildings whose applications have not been processed by the reviewing agency before the deadlines to achieve compliance with the requirements set forth in Section 13.3.2.25.2 and Section 13.3.2.25.2.7 and were submitted to the reviewing agency at least 90 days prior to the respective deadline

- (18) Amending Section 13.7.1.1. Section 13.7.1.1 is amended byadding Subsection 13.7.1.1.1 to read: 13.7.1.1.1 When a fire alarm control unit is replaced, it shall be considered as newly introduced equipment, as stated in 1.3.6.4, and shall comply with requirements for new construction.
- (19) Amending Section 13.7.1.9.5. Section 13.7.1.9.5 is further amended to read:

**13.7.1.9.5** When approved by the AHJ and where permitted by Chapters 11 through 43 of NFPA 101, a positive alarm sequence shall be permitted, provided it is in accordance with NFPA 72. The following additional requirements shall also apply:

1. An automatic fire sprinkler system installed in conformance with the building code shall be provided throughout the building or facility.

- 2. Written fire emergency procedures and an evacuation plan for the building or facility shall be reviewed by the AHJ prior to approval testing. The procedures and plan shall include, but not be limited to, immediate notification to the fire department, use of primary and secondary exits, and the use of fire protection appliances for the building(s) or facility(ies).
- 3. Trained personnel shall respond to emergencies on a 24-hour basis. The staff shall be instructed in fire emergency procedures and the use and operation of in-house fire appliances. Documentation of such training shall be maintained and filed on the premises.
- 4. Immediate notification to the fire department shall take place upon activation of any fire alarm initiating device.
- 5. If a fire alarm system's initiating device is activated, acknowledgement at the control unit by trained personnel shall be accomplished within 15 seconds in order to initiate the alarm investigation phase. If the signal is not acknowledged within 15 seconds, all building or facility and remote signals shall be activated immediately and automatically (general alarm).
- 6. If a fire alarm system's initiating device is activated, notification devices in that zone shall be activated. The zone notification shall include the floor of, the floor above, and the floor below the activated device. The zone notification areas may be modified with the AHJ's approval. This zone notification shall be for a maximum of three minutes, during which trained personnel shall initiate the alarm investigation phase, communicate their findings immediately to the fire department, and reset the system if appropriate. After three minutes or activation of any other initiating device(s), the fire alarm system shall be activated immediately and automatically for the entire building or facility (general alarm). At no time shall the fire alarm system be silenced until verification of the alarm is accomplished.
- 7. The fire alarm system shall provide a means to bypass the positive alarm sequence and immediately activate the general alarm for the entire building or facility.
- 8. The AHJ shall conduct a test of the positive alarm sequence prior to implementation.
- 9. The AHJ may disapprove or rescind approval of the fire alarm system's positive alarm sequence if all of the abovementioned requirements are not met and shall require the fire alarm system to be reprogrammed to meet a general alarm notification at the owner's expense.
- (20) Amending Section 13.7.3.2.1. Section 13.7.3.2.1 is amended to read:

**13.7.3.2.1** Approval and Acceptance. The AHJ shall be notified prior to the installation or alteration of equipment or wiring [72:10.20.2]. The documentation requirements of 13.7.3.2.2 and 13.7.3.2.3 shall be required.

(21) Amending Section 17.3.5.2.1.11. Section 17.3.5.2.1.11 is amended by adding Subsection 17.3.5.2.1.11.6 to read:

#### 17.3.5.2.1.11.6 Clearance of Brush or Vegetative Growth from Structures.

Persons owning, leasing, controlling, operating, or maintaining buildings or structures in, upon, or adjoining hazardous fire areas and persons owning, leasing, or controlling land adjacent to such buildings or structures shall at all times:

1. Maintain an effective firebreak by removing and clearing flammable vegetation and combustible growth from areas within 30 feet of such buildings or structures.

**EXCEPTION**: Single specimens of trees, ornamental shrubbery, or similar plants used as ground covers, provided they do not form a means of rapidly transmitting fire from the native growth to any structure.

2. Maintain additional fire protection or firebreak by removing brush, flammable vegetation, and combustible growth located from 30 to 100 feet from such buildings or structures when required by the AHJ because of hazardous conditions causing a firebreak of only 30 feet, which is insufficient to provide reasonable fire safety.

**EXCEPTION:** Grass and other vegetation located more than 30 feet from buildings or structures and less than 18 inches in height above the ground need not be removed where necessary to stabilize the soil and prevent erosion.

- 3. Remove portions of trees which extend within ten feet of a chimney's outlet.
- 4. Maintain trees adjacent to or overhanging a building free of deadwood.
- 5. Maintain the structure's roof free of leaves, needles, or other dead vegetative growth.
- (22) Amending Section 18.2.3.1.3. Section 18.2.3.1.3 is amended to read:

18.2.3.1.3 The provisions of 18.2.3.1 through 18.2.3.2.2 shall be permitted to be modified by the AHJ where any of the following conditions exist:

- 1. Not more than two one- and two-family dwellings protected by an approved automatic sprinkler system in accordance with Section 13.1
- 2. Not more than two existing one- and two-family dwellings
- 3. Private garages having an area not exceeding  $400 \text{ ft}^2 (37 \text{ m}^2)$
- 4. Carports having an area not exceeding  $400 \text{ ft}^2 (37 \text{ m}^2)$
- 5. Agricultural buildings having an area not exceeding  $400 \text{ ft}^2 (37 \text{ m}^2)$
- 6. Sheds and other detached buildings, not classified as a residential occupancy, having an area not exceeding 400 ft<sup>2</sup> (37 m<sup>2</sup>)
- (23) Amending Section 18.2.3.2.2.1. Section 18.2.3.2.2.1 is amended to read:

**18.2.3.2.1 Automatic Sprinkler Systems.** When buildings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13, NFPA 13D, or NFPA 13R, an increase in distance in Section 18.2.3.2.2 shall be permitted as set forth by the AHJ.

(24) Amending Section 18.2.3.2. Section 18.2.3.2 is amended by adding Subsection 18.2.3.2.3 to read:

**18.2.3.2.3 Access for High-Piled Storage.** When high-piled storage areas exceed 12,000 square feet, one or more access doors shall be provided in each 100 lineal feet, or major fraction thereof, of the exterior walls which face required access roadways. Required access doors shall be a minimum of three feet wide and six feet eight inches high. Roll-up doors shall not be allowed as access doors, unless approved by the AHJ.

(25) Amending Section 18.2.3.5.6.1. Section 18.2.3.5.6.1 is amended to read:

**18.2.3.5.6.1** Fire department access roads shall not exceed 10 percent in grade.

**EXCEPTION:** Grades steeper than 10 percent as approved by the AHJ.

(26) Amending Section 18.4.5.1 and Subsection 18.4.5.1.1. Section 18.4.5.1 and Subsection 18.4.5.1.1 are amended to read:

### **18.4.5.1** One- and Two-Family Dwellings Not Exceeding 3,500 square feet (325.2 square meters).

**18.4.5.1.1** The minimum fire flow and flow duration requirements for one- and two-family dwellings having a fire flow area that does not exceed  $3,500 \text{ ft}^2 (325.2 \text{ m}^2)$  shall be 1,000 gallons per minute (3,785 liters per minute) for one hour.

- (27) Amending Section 18.5.2. Section 18.5.2 is amended by adding Item (3) to read:
  - When detached one- and two-family dwellings are protected throughout with an approved automatic sprinkler system that is installed in accordance with NFPA 13D, an increase in distance shall be permitted as set forth by the AHJ.
- (28) Amending Section 20.1.1.1. Section 20.1.1.1 is amended to read:

**20.1.1.1 Permits and Plans.** A permit is required for each place of assembly with an occupant load capacity of 300 or more persons, such as restaurants, nightclubs, and dancing and drinking establishments. The permit shall be posted in a conspicuous location on the premises. At the time of applying for a permit, the applicant shall submit to the AHJ two copies of the establishment's floor plan indicating the square footage (gross), seating arrangements (if more than one seating configuration is used by the establishment), occupancy load, aisle widths, exits and access ways to exits, and compliance with other fire code requirements in accordance with Chapter 20 of this code. See also amended Section 1.12.8.

(29) Amending Section 20.1.5.10.4.1. Section 20.1.5.10.4.1 is amended to read:

**20.1.5.10.4.1** Any room or area constituting an assembly, regardless of seating arrangements, shall have a permanent occupant load sign posted in a conspicuous place near the main exit from the room. The occupant load shall be established in accordance with the current building code.

(30) Amending Section 25.1.2. Section 25.1.2 is amended by adding Subsection 25.1.2.1 to read:

**25.1.2.1 Tents and Canopies.** A permit is required to erect or operate a tent or canopy having an area in excess of 2,100 square feet. At the time of application, two copies of the plot plan shall be submitted to the AHJ indicating distances to property lines, buildings, other tents and canopies, parked vehicles, or internal combustion engines. Refer to amended Section 1.12.8.

**EXCEPTION:** Permits are not required for temporary tents or other coverings used for private family parties or for camping for periods not to exceed 14 consecutive days.

(31) Amending Section 50.4.4.3.1. Section 50.4.4.3.1 is amended to read:

**50.4.4.3.1** In existing systems when changes in the cooking media, positioning, operation and use, or replacement of cooking equipment, or changes in ownership occur, the fire extinguishing system shall be made to comply with Sections 50.4.4.3 and 50.4.11.

(32) Amending Section 50.4.10.2. Section 50.4.10.2 is amended by adding Subsection 50.4.10.2.3 to read:

**50.4.10.2.3 Acceptance Test.** Prior to commencing initial cooking operations, a satisfactory acceptance test of the system shall be made in accordance with the manufacturer's instructions. The acceptance test shall be of an approved method and witnessed by the AHJ.

(33) Amending Section 65.1.1. Section 65.1.1 is amended to read:

**65.1.1** The storage, use, and handling of explosives, fireworks, and model rocketry shall comply with the requirements of this chapter, NFPA standards referenced within this chapter, Sections 60.1 through 60.4 of this code, and applicable county laws and rules.

(34) Amending Section 66.1.5. Section 66.1.5 is further amended by adding Subsection 66.1.5.1 to read:

**66.1.5.1 Permits and Plans.** A permit is required to install or operate equipment in connection with the storage, handling, use, or sale of flammable or combustible liquids regulated under Chapter 66 of this code. Permits are not transferable, and any change in use, occupancy, operation, ownership, vendor, or capacity shall require a new permit.

At the time of application, two copies of the plot and cross-sectional plans indicating distances from property lines, buildings, other fuel tanks located on the premises, dispensers, emergency electrical shutoff, vent lines and diameter, piping, location of fire extinguisher, and necessary signage and placards shall be submitted to the AHJ.

Tank installations within the jurisdiction of the City shall be approved by the Honolulu Department of Permitting and Planning (DPP) prior to submitting an application for the HFD's flammable and combustible liquid tank installation permit.

(35) Amending Section 69.1.1.3. Section 69.1.1.3 is amended by adding Subsection 69.1.1.3.1 to read:

**69.1.1.3.1 Records**. Installers shall maintain a record of installations for permits not required by Section 1.12.8, and such record shall be available for inspection by the AHJ.

**EXCEPTION:** Installation of gas-burning appliances and replacement of portable cylinders.

(36) Amending Section 69.1.2. Section 69.1.2. is amended by amending Subsection 69.1.2.1 to read:

**69.1.2.1 Permits and Plans.** A permit is required to install or dispense LPG or maintain an LPG container (tank).

**EXCEPTION**: A permit is not required to install or maintain a portable container or the aggregate of interconnected containers of less than a 125-gallon water capacity. Permits shall not be transferable, and any change in use, occupancy, operation, ownership, vendor, or capacity

shall require a new permit. Distributors shall not fill an LPG container for which a permit is required, unless a permit for installation has been issued for that location by the AHJ.

Where a single container or the aggregate of interconnected containers is of a 125-gallon water capacity or more, the installer shall submit plans to the AHJ. LPG installations requiring a permit shall have the permit on site and available for inspection by the AHJ.

At the time of permit application, the installer shall submit to the AHJ two copies of the plot and cross-sectional plans indicating distances from property lines, buildings, other fuel tanks located on the premises, dispensers, emergency electrical shutoff, vent lines and diameter piping, location of fire extinguisher(s), and necessary signage and placards.

Container installations within the City's jurisdiction shall be approved by the DPP prior to submitting an application for the HFD's LPG tank installation permit. For installations in State preservation-zoned areas, container installations shall be reviewed by the State DLNR. Refer to amended Section 1.12.8.

(37) Amending Section 69.3.8.1.2. Section 69.3.8.1.2 is amended to read:

**69.3.8.1.2** LPG containers or systems that are installed within 10 feet (3 meters) of public vehicular thoroughfares shall be provided with a means of vehicular barrier protection in accordance with Section 60.5.1.9.

(Added by Ord. 25-4)

#### Article 2. Life Safety Requirements for Existing Hotel Buildings

#### and Existing Business Buildings

#### Sections:

20-2.1 General.

20-2.2 Definitions.

20-2.3 Requirements--Hotels.

20-2.3A Requirements--Existing business buildings.

**20-2.4 Permit required.** 

20-2.5 Compliance.

20-2.6 Appeals.

20-2.7 Severability.

20-2.8 Rules and regulations.

Sec. 20-2.1 General.

- (a) Purpose. The purpose of this article is to provide for a reasonable degree of public safety by establishing minimum life safety requirements for existing hotel buildings and existing business buildings.
- (b) Scope. The provisions of this article shall apply to every existing hotel building and every existing business building as defined in this article. A determination that an existing building is "an existing business building" subject to this article shall be made by the fire chief. Any appeal from the decision of the fire chief may be submitted to the board of appeals for hearing and determination as provided in Chapter 16.

(Sec. 19A-2.1, R.O. 1978 (1983 Ed.); Am. Ord. 01-53)

#### Sec. 20-2.2 Definitions.

For purposes of this article:

"Annunciator" means a unit containing two or more identified targets or indicator lamps in which each target or lamp indicates the circuit, condition and location to be annunciated.

"Building code" means:

- (1) With respect to an existing hotel building, the provisions of Chapter 16 which were in effect on the date of approval of Ordinance 83-58; and
- (2) With respect to an existing business building, the provisions of Chapter 16 which are in effect on January 1, 2002.\*

"Building official" means the same as defined under Section 16-1.1.

"Business building" means a building to which both of the following apply:

- (1) At least 50 percent of the building is classified as "group B -- business" occupancy by the building official pursuant to the building code; and
- (2) Has floors used for human occupancy located more than 75 feet above the lowest level of fire department vehicle access.

"Existing business building" means a business building erected before January 1, 2002\* or one for which a legal building permit has been issued before that date.

"Existing hotel building" means a hotel building erected prior to the date of approval of Ordinance 83-58 or one for which a legal building permit was issued before that date.

"Guest" means a person whose principal place of residence is other than the dwelling or lodging unit rented or hired out, or in instances involving time sharing units occupied, by the person for sleeping purposes.

"Guest room" means any dwelling or lodging unit intended or designed to be rented, or hired out to be occupied, for sleeping purposes by guests, and includes units subject to the provisions of HRS Chapter 514E (Time Sharing).

"Hotel" means any building which has floors used for human occupancy located more than 75 feet above the highest grade and which contains dwelling and/or lodging units 50 percent or more of which are guest rooms. A hotel license issued pursuant to HRS Section 445 92 shall be prima facie

evidence that the building licensed is a hotel subject to the provisions of this article. (Sec. 19A-2.2, R.O. 1978 (1983 Ed.); Am. Ord. 01-53)

[\*Editor's Note: "January 1, 2002" is substituted for "the effective date of Ordinance 01-53."]

#### Sec. 20-2.3 Requirements--Hotels.

For hotels subject to the provisions of this article:

- (a) Automatic Sprinkler Systems. An automatic sprinkler system shall be provided throughout the entire hotel. The installation of the system shall be in conformance with the building code.
- (b) Smoke Detectors. Smoke detectors shall be provided in every guest room, interior exit corridor, mechanical equipment, electrical, transformer, telephone equipment, elevator machine or similar room. The installation of the smoke detectors shall be in conformance with the building code. Any smoke detector installed in an interior exit corridor shall be connected to an annunciator.
- (c) Corridor Doors. All doors opening into interior exit corridors shall be in conformance with the building code, except that 1 3/4-inch bonded, solid core wood doors need not be replaced.
- (d) Exit Stairwell Doors. All stairwell doors, which are to be locked to prevent entry from the stairwell side, shall be automatically unlocked without unlatching when the fire alarm system activates or upon power failure.
- (e) Fire Alarm Systems. All fire alarm systems shall be designed to be heard clearly within all habitable areas of the hotel and shall be connected to an annunciator. The annunciator shall be located in the first floor lobby area or other area approved by the fire chief.
- (f) Emergency Power. Emergency power shall be provided for exit signs, exit illumination and fire alarm systems. Such emergency power shall be supplied by a generator, or an approved battery or other approved source of energy.
- (g) Emergency Plan. The management for each hotel shall establish and maintain a written fire and life safety emergency plan, which is to be approved by the fire chief. The fire chief shall develop written criteria and guidelines upon which all plans shall be based.
- (h) Exiting Plans and Placards.
  - (1) Exiting Plans. Exiting plans which are to be approved by the fire chief shall be posted on the room side of the entry door for each guest room.
  - (2) Placards. Placards with exit instructions for elevators and stairwells and other placards shall be posted in locations approved by the fire chief.
- (i) Fire Drills. The management for each hotel subject to the provisions of this article shall conduct fire drills for staff and employees at least once every 180 days. A written record of each drill shall be maintained in the hotel management's office and made available to the fire department for review.

(Sec. 19A-2.3, R.O. 1978 (1983 Ed.); Am. Ord. 01-53)

#### Sec. 20-2.3A Requirements--Existing business buildings.

For an existing business building:

- (a) Automatic Sprinkler System.
  - (1) An automatic sprinkler system shall be provided throughout the entire existing business building. The installation of the system shall be in accordance with the building code.
  - (2) This subsection shall not apply to a telecommunications building for which the council approves a fire safety agreement\* which includes the following requirements:

(A) All exit stairwells are automatically pressurized for smoke control when the fire alarm system activates;

(B) Smoke seals are installed on all exit stairwell doors and exit stairwell door frames;

(C) Smoke detectors are provided in all offices or other occupied spaces;

(D) All exit stairwells that service floors located more than 100 feet above the lowest level of fire department vehicle access have a standpipe system;

(E) The maximum travel distance to a fire extinguisher in the building is 50 feet; and

(F) Such other requirements for the protection of public safety.

- (3) For the purposes of this subsection:
  - (A) "Access tandem" means a switching system that:
    - Provides a traffic concentration and distribution function for interstate telecommunications services originating from or terminating in the state; and
    - Enables any person engaged for hire in providing interstate telecommunications services to reach all local telecommunications users through facilities connected to all central offices in the state;
  - (B) "Central office" means a switching unit having the necessary equipment and operating arrangements for terminating or interconnecting access lines, toll lines, and trunks;
  - (C) "Enhanced 911 switch" means a switch that permits a wire line telecommunications user to call emergency services through a public safety answering point operated by an authorized government entity that includes the ability to provide automatic number identification to enable the public safety answering point to call the wire line telecommunications user if the call is disconnected, and automatic location identification for emergency service providers to identify the listed address or geographic location of the wire line telecommunications user;
  - (D) "Interstate telecommunications services" means telecommunications services between a point located in the state and a point located outside the state;
  - (E) "Telecommunications building" means any existing business building with a central office used by a telecommunications carrier to provide telecommunications services, provided that the building contains:

(i) An access tandem; or

- (ii) An enhanced 911 switch;
- (F) "Telecommunications carrier" means any person that owns, operates, manages, or controls any facility used to furnish telecommunications services for profit to the public, or to classes of users so as to be effectively available to the public, engaged in the provision of services, such as voice, data, image, graphics, and video services, that make use of all or part of the person's transmission facilities, switches, broadcast equipment, signaling, or control devices; and
- (G) "Telecommunications services" means the offering of transmission between or among point specified by a user, of information of the user's choosing, including voice, data, image, graphics, and video without change in the form or content of the information, as sent and received, by means of electromagnetic transmission, or other similarly effective means of transmission, with or without benefit of any closed transmission medium; provided, however, that the term does not include the one-way transmission to subscribers of video programming or other programming service, regardless of whether subscriber interaction is required for the selection of video programming or other programming service.
- (4) If a building ceases to be a telecommunications building, the building owner or an authorized representative shall notify the fire chief in writing within 60 days that the building is no longer a telecommunications building, and shall submit with the notice a schedule for compliance with this subsection. A building that ceases to be a telecommunications building shall comply with this subsection within three years following the date the notice and schedule for compliance with this subsection are received by the chief.
- (b) Smoke Detectors. Smoke detectors shall be provided in every mechanical equipment, electrical, transformer, telephone equipment, elevator machine or similar room and in elevator lobbies. The installation of the smoke detectors shall be in accordance with the building code. Smoke detectors shall be connected to an automatic fire alarm system installed in accordance with the fire code.
- (c) Corridor Doors. All doors opening into interior exit corridors shall be in accordance with the building code; except that 1 3/4-inch bonded, solid core wood doors need not be replaced.
- (d) Exit Stairwell Doors. All stairwell doors, which are to be locked to prevent entry from the stairwell side, shall be automatically unlocked without unlatching when the fire alarm system activates or upon power failure.
- (e) Fire Alarm Systems. When actuated, fire alarm-initiating devices shall activate an alarm signal which is audible throughout the existing business building or in designated portions of the building when approved by the fire chief. The alarm signal shall be a distinctive sound, which is not used for any purpose other than the fire alarm. Fire alarm-initiating devices shall be connected to an annunciator panel which panel shall be located in the first floor lobby area or other area approved by the fire chief.
- (f) Emergency Power. Emergency power shall be provided for exit signs, exit illuminations, and fire alarm systems. Such emergency power shall be supplied by a generator or an approved battery or other approved source of energy.
- (g) Emergency Plan. The management or owner of each existing business building shall establish and maintain a written fire and life safety emergency plan, which is to be reviewed by the fire chief

and which shall be updated annually. The fire chief shall develop written criteria and guidelines upon which all plans shall be based.

- (h) Exiting Plans and Placards.
  - (1) Exiting Plans. Exiting plans which are to be reviewed by the fire chief shall be posted on each floor at each elevator lobby.
  - (2) Placards. Placards with exit instructions for elevators and stairwells and other placards shall be posted in locations approved by the fire chief.
- (i) Fire Drills. The management or owner of each existing business building shall conduct fire drills for staff and employees at least once every 180 days. A written record of each drill shall be maintained in the management office of the building and made available to the fire chief for review.

(Added by Ord. 01-53; Am. Ord. 02-65)

[\*Editor's Note: A fire safety agreement is attached to Ord. 02-65 as "Exhibit A" and is on file with the office of the city clerk.]

Sec. 20 2.4 Permit required. A building permit shall be obtained whenever required by Chapter 18, ROH 1990. (Sec. 19A 2.4, R.O. 1978 (1983 Ed.))

#### Sec. 20-2.4 Permit required.

A building permit shall be obtained whenever required by Chapter 18, ROH 1990. (Sec. 19A-2.4, R.O. 1978 (1983 Ed.))

#### Sec. 20-2.5 Compliance.

- (a) Authority. The fire chief is authorized to require compliance with the provisions of this article.
- (b) Examination and Furnishing of List to Owner or Operator. The fire chief shall examine each hotel and existing business building subject to this article. Upon the completion thereof the fire chief shall immediately furnish to the owner or operator of the hotel or existing business building a written list of items required to achieve compliance with this article.
- (c) Compliance Schedule.
  - (1) Sixty Days. Each hotel or existing business building shall comply with subsections (g),
     (h), and (i) of Section 20-2.3 or 20-2.3A, as applicable, within 60 days after the receipt of the written list.
  - (2) One Year. The owner or an authorized representative of each hotel or existing business building shall submit plans to the fire chief showing intended methods of compliance with subsections (a) through (f) of Section 20-2.3 or 20-2.3A, as applicable, within one year after receipt of the written list.
  - (3) Five Years. Each hotel or existing business building shall comply with subsections (a) through (f) of Section 20-2.3 or 20-2.3A, as applicable, within five years after receipt of the written list.
- (d) Deviation and Extension of Time. Deviations or extensions of time shall be allowed by the fire chief for good cause shown for a period not to exceed two years.

(Sec. 19A-2.5, R.O. 1978 (1983 Ed.); Am. Ord. 01-53)

#### Sec. 20-2.6 Appeals.

Any appeal from the decision of the fire chief involving the denial of any deviation or extension of time may be submitted to the board of appeals as specified in the building code. The board may grant a deviation or extension of time if it finds that the time period appealed from poses an undue hardship, provided the total time of compliance shall not exceed seven years from the receipt of the written list of items as specified in Section 20-2.5. (Sec. 19A-2.6, R.O. 1978 (1983 Ed.))

#### Sec. 20-2.7 Severability.

If any section, subsection, paragraph, sentence, clause or phrase of this article is declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this article. (Sec. 19A-2.7, R.O. 1978 (1983 Ed.))

#### Sec. 20-2.8 Rules and regulations.

Subject to HRS Chapter 91, the fire chief shall promulgate rules and regulations having the force and effect of law for the implementation, administration and enforcement of this article. (Sec. 19A-2.8, R.O. 1978 (1983 Ed.))

#### Article 3. Examination and Approval of Plans by Fire Chief

#### Sections:

20-3.1 Submission of building plans for approval to fire chief.

(20-3.2 Scope. Repealed by Ord. 02-47.)

20-3.2 Reserved.

20-3.3 Approval or disapproval of plans.

(20-3.4 Penalty. Repealed by Ord. 02-47.)

20-3.4 Reserved.

(20-3.5 Enforcement of fire regulations--Hearings and appeals. Repealed by Ord. 02-47.)

20-3.5 Reserved.

#### Sec. 20-3.1 Submission of building plans for approval to fire chief.

The submission of building plans shall be pursuant to the requirements of HRS Section 132-9. (Sec. 13-26.1, R.O. 1978 (1983 Ed.); Am. Ord. 96-58, 02-47)

- (Sec. 20-3.2 Scope. Repealed by Ord. 02-47.)
- Sec. 20-3.2 Reserved.

#### Sec. 20-3.3 Approval or disapproval of plans.

The fire chief shall approve or disapprove plans and specifications within 30 calendar days after their receipt; otherwise, the plans and specifications shall be deemed to be approved. Whenever the fire chief finds that the building to be constructed, or upon which alterations and additions are to be made, is for any reason not reasonably safe from loss or damage to property or loss of life or injury to persons by fire, the fire chief shall disapprove the plans and specifications, and return them with a written statement setting forth the reasons for the disapproval. (Sec. 13-26.3, R.O. 1978 (1983 Ed.); Am. Ord. 02-47)

(Sec. 20-3.4 Penalty. Repealed by Ord. 02-47.)

Sec. 20-3.4 Reserved.

(Sec. 20-3.5 Enforcement of fire regulations--Hearings and appeals. Repealed by Ord. 02-47.)

Sec. 20-3.5 Reserved.

#### (Article 4. Fireworks Control. Repealed by Ord. 02-47.)

Article 4. Fire and Life Safety Evaluation of Existing High Rise

#### **Residential Buildings**

#### Sections:

**20-4.1 Definitions.** 

20-4.2 Requirement for building fire and life safety evaluations.

20-4.3 Compliance..

20-4.4 Building fire and life safety evaluation form

#### Sec. 20-4.1 Definitions.

As used in this article, unless the context requires otherwise:

"Building code" means the provisions of Chapter 16, ROH 1990.

"Building fire and life safety evaluation" means an assessment of building safety features and fire protection systems providing a minimum level of fire and life safety to occupants and firefighters that is approved by the AHJ and is prescribed by the AHJ for assessing the safety features and fire protection systems of an existing high-rise building.

"Existing high-rise residential building" means the same as "existing highrise residential building" as defined in Section 20-5.1.

(Added by Ord. 21-31)

#### Sec. 20-4.2 Requirement for building fire and life safety evaluations.

Existing high-rise residential buildings not protected throughout by an automatic fire sprinkler system shall receive a building fire and life safety evaluation in accordance with Section 13.3.2.26.2 on a form that is prescribed by the AHJ.

(Added by Ord. 21-31)

#### Sec. 20-4.3 Compliance.

- (a) A building fire and life safety evaluation code assessment shall be prepared by a licensed design professional or a building's authorized representative under the supervision of a licensed design professional using the building fire and life safety evaluation prescribed by the AHJ in accordance with Section 13.3.2.26.2; provided that existing high-rise residential buildings that opt to install an automatic fire sprinkler system throughout the building shall not be required to undergo a building fire and life safety evaluation for initial compliance. The AHJ may grant an extension per Section 13.3.2.26.2.7 if automatic fire sprinkler systems in common areas are used to achieve compliance. All buildings that are required to undergo a building fire and life safety evaluation must continue to maintain a passing status on their respective building fire and life safety evaluation.
- (b) The licensed design professional shall submit a copy of the authenticated building fire and life safety evaluation to the AHJ within five business days of its completion.

(Added by Ord. 21-31)

#### Sec. 20-4.4 Building fire and life safety evaluation form.

The AHJ shall prescribe the building fire and life safety evaluation form for conducting building fire and life safety evaluations. No changes or modifications shall be made to the building fire and life safety evaluation form that is prescribed by the AHJ according to this article, or the procedures and process of utilizing the building fire and life safety evaluation form in assessing existing high-rise residential buildings, without the approval of the Council. The AHJ shall make the building fire and life safety evaluation readily available to the public through all reasonable means, including but not limited to, providing copies through the United States Postal Service or by making electronic copies available for downloading from the AHJ's website.

(Added by Ord. 21-31)

#### Article 5. Requirements for Smoke Detectors in Existing Highrise

#### **Residential Buildings**

#### Sections:

20-5.1 Definitions.20-5.2 Requirements for smoke detectors.20-5.3 Public awareness program.

20-5.4 Compliance and penalties.

20-5.5 Rules.

#### Sec. 20-5.1 Definitions.

For purposes of this article:

"Building code" means the provisions of Chapter 16, ROH 1990, which are in effect on the date of approval of this article.

"Dwelling unit" means any portion of an existing highrise residential building that contains living facilities, including provisions for sleeping, eating, cooking and sanitation, as required by the building code, for not more than one family.

"Existing highrise residential building" means any building that has floors used for human occupancy located more than 75 feet above the highest grade, contains dwelling units, and which was erected prior to the date of approval of this article, or one for which a legal building permit has been issued.

"Smoke detector" means an independent, stand-alone approved device as defined in the building code. (Added by Ord. 92-61)

#### Sec. 20-5.2 Requirements for smoke detectors.

- (a) Within one year from June 12, 1992,\* every dwelling unit in all existing highrise residential buildings shall be equipped with smoke detectors. The installation of the smoke detectors shall be in conformance with Section 1210(a) of the building code.
- (b) By January 1, 1994, the fire chief shall give written notice to the owner or owners of every dwelling unit in an existing highrise residential building subject to the provisions of this article of the requirements of this article. The notice shall be sent in a form to be returned to the fire department with the return postage prepaid, and shall contain:
  - (1) The date of the notice;
  - (2) A description of the requirements of this article;
  - (3) Space for recipients to indicate whether they are already in compliance with the provisions of this article or that they intend to comply within the next 30 days; and

(4) A statement that the premises shall be subject to inspection by the fire department if the notice is not returned to the fire department within 30 days from the date of notice.

Subsequent notices of compliance shall be mailed periodically and at the discretion of the fire chief.

(Added by Ord. 92-61)

[\*Editor's Note: "June 12, 1992" is substituted for "the effective date of this ordinance."]

#### Sec. 20-5.3 Public awareness program.

The fire chief shall establish a public awareness campaign to familiarize the general public with the requirements of this article. The fire chief shall conduct the first public awareness campaign upon the effective date of this article and shall emphasize the duty of the public to comply. Subsequent public awareness campaigns shall be conducted on a regular basis and as determined by the fire chief. (Added by Ord. 92-61)

#### Sec. 20-5.4 Compliance and penalties.

The fire chief is authorized to inspect all dwelling units within existing highrise residential buildings for compliance with the provisions of this article. Two weeks prior to conducting any inspection, the fire chief shall give written notice of the inspection to the occupants and to the owner or owners of every dwelling unit in an existing highrise residential building. The fire chief shall enforce compliance with subsection 20-5.2(a) in accordance with the procedures established in the fire code of the City and County of Honolulu, and violators shall be subject to the fines and penalties established therein. (Added by Ord. 92-61)

#### Sec. 20-5.5 Rules.

The fire chief is authorized to adopt rules pursuant to HRS Chapter 91 for the implementation, administration and enforcement of this article. (Added by Ord. 92-61)

#### **Article 6. Regulation of Fireworks**

Sections:

20-6.1 Definitions.

20-6.2 Prohibitions; Permitted uses.

20-6.3 Exceptions.

20-6.4 License to import, store and sell display fireworks or firecrackers.

20-6.5 Requirements of licensee.

20-6.6 Fees—Use of revenues.

20-6.7 Minors.

20-6.8 Liability of parents or guardians.

20-6.9 Penalty.

20-6.10 Notice requirements.
20-6.11 Forfeiture.
20-6.12 Permit for display fireworks.
20-6.13 Permit for firecrackers.
20-6.14 Severability.

#### Sec. 20-6.1 Definitions.

As used in this article:

"Aerial device" means any fireworks containing 130 milligrams or less of explosive materials that produces an audible or visible effect and is designed to rise into the air and explode or detonate in the air or to fly about above the ground. "Aerial devices" classified as fireworks under UN0336 and UN0337 by the United States Department of Transportation as set forth in Title 49 Code of Federal Regulations include firework items commonly known as bottle rockets, sky rockets, missile-type rockets, helicopters, torpedoes, daygo bombs, roman candles, flying pigs, and jumping jacks that move about the ground farther than a circle with a radius of 12 feet as measured from the point where the item was placed and ignited, aerial shells, and mines.

"Articles pyrotechnic" means pyrotechnic devices for professional use similar to consumer fireworks in chemical composition and construction but not intended for consumer use that meet the weight limits for consumer fireworks but are not labeled as such, and that are classified as UN0431 or UN0432 by the United States Department of Transportation.

"City" means the City and County of Honolulu.

"Consignee" means a merchant to which goods are delivered in a consignment.

"Consignment" means a transaction, regardless of its form, in which a person delivers goods to a merchant for the purpose of sale and:

- (1) The merchant:
  - (A) Deals in goods of that kind under a name other than the name of the person making delivery;
  - (B) Is not an auctioneer; and
  - (C) Is not generally known by its creditors to be substantially engaged in selling the goods of others;
- (2) With respect to each delivery, the aggregate value of the goods is \$1,000 or more at the time of delivery;
- (3) The goods are not consumer goods immediately before delivery; and
- (4) The transaction does not create a security interest that secures an obligation.

"Consumer fireworks" means any fireworks designed primarily for retail sale to the public during authorized dates and times, and produces visible or audible effects by combustion, and that is designed to remain on or near the ground and, while stationary or spinning rapidly on or near the ground, emits smoke, a shower of colored sparks, whistling effects, flitter sparks, or balls of colored sparks, and includes combination items that contain one or more of these effects. "Consumer fireworks" include firecrackers, snakes, sparklers, fountains, and cylindrical or cone fountains that emit effects up to a height not greater than 12 feet above the ground, illuminating torches, bamboo cannons, whistles, toy smoke devices, wheels, and ground spinners that when ignited remain within a circle with a radius of 12 feet as measured from the point where the item was placed and ignited, novelty or trick items, combination items, paperless firecrackers, and other fireworks of like construction that are designed to produce the same or similar effects.

"Display fireworks" means: 1) any fireworks used for exhibition display by producing visible or audible effects and classified as display fireworks or contained in the regulations of the United States Department of Transportation and designated as UN0333, UN0334, or UN0335, and includes salutes containing more than two grains (130 milligrams) of explosive materials, aerial shells containing more than 40 grams of pyrotechnic compositions, and other display pieces which exceed the limits of explosive materials for classification as "consumer fireworks"; 2) any fireworks or articles pyrotechnic used for movie or television production activities; and 3) any fireworks or articles pyrotechnic used for a theatrical production or sporting event. This term also includes fused set pieces containing components, which together exceed 50 milligrams of salute power.

"Firecracker" means single paper cylinders not exceeding one and one-half inches in length excluding the fuse and one quarter of an inch in diameter and containing a charge of not more than 50 milligrams of pyrotechnic composition.

"Fireworks" means any combustible or explosive composition, or any substance or combination of substances, or article prepared for the purpose of producing a visible or audible effect by combustion, explosion, deflagration, or detonation including, but not limited to, aerial devices, articles pyrotechnic or consumer or display fireworks as defined by this article or contained in the regulations of the United States Department of Transportation as set forth in Title 49 Code of Federal Regulations. The term "fireworks" shall not include any explosives or pyrotechnics regulated under Chapter 396 of the Hawaii Revised Statutes or automotive safety flares, nor shall the term be construed to include toy pistols, toy cannons, toy guns, party poppers, pop-its, or other devices which contain twenty-five hundredths of a grain or less of explosive substance.

"Import" means to transport or attempt to transport fireworks into the city or to cause fireworks to be transported into the city.

"License" means a formal authorization issued by the fire chief pursuant to this chapter to engage in the specifically designated act or acts.

"Permit" means a formal authorization issued by the fire chief to engage in the specifically designated act or acts.

"Place of entertainment" means a theater, dinner theater, hall, coliseum, convention center, arena, auditorium, stadium, concert hall, garden, outdoor space or other place of amusement at which theatrical productions, sporting events or other events are presented.

"Pyrotechnic composition" or "pyrotechnic contents" means the combustible or explosive component of fireworks.

"Sporting event" means those contests, games, or other events involving athletic or physical skills which are shown to the public in a place of entertainment.

"Theatrical production" means live-staged dramatic productions, musical productions and concerts, which are shown to the public at a place of entertainment as defined in this section.

(Added by Ord. 10-25)

#### Sec. 20-6.2 Prohibitions; Permitted uses.

Except as otherwise provided in this article:

- (a) It shall be unlawful for any person to possess, use, explode or cause to explode any consumer fireworks within the city.
- (b) It shall be unlawful for any person to possess, use, explode or cause to explode any aerial device, articles pyrotechnic or display fireworks within the city.
- (c) It shall be unlawful for any person to import, store, sell, keep or offer for sale, expose for sale any fireworks within the city.

(Added by Ord. 10-25)

#### Sec. 20-6.3 Exceptions.

The prohibitions in Section 20-6.2 shall not apply to:

- (a) The import, storage, sale and use by a person having obtained a license or permit for display fireworks pursuant to Sections 20-6.4 and 20-6.12;
- (b) The import, storage, sale and use by a person having obtained a license or permit for firecrackers pursuant to Sections 20-6.4 and 20-6.13;
- (c) The use of flares, noisemakers, or signals for warning, pest control, or illumination purposes by the police and fire departments, utility companies, transportation agencies, and other governmental or private agencies or persons, including agricultural operations, in connection with emergencies, their duties, or business; or
- (d) The sale or use of blank cartridges for a show or theater, or for signal, commercial, or institutional purposes in athletics or sports.

(Added by Ord. 10-25)

#### Sec. 20-6.4 License to import, store and sell display fireworks or firecrackers.

- (a) License Required. It shall be unlawful for any person to import, store, offer to sell, sell, at wholesale or retail, for use in the city, any display fireworks or firecrackers, unless such person shall first secure a license.
- (b) Said licenses shall be issued by the fire chief and shall be nontransferable. Licenses shall specify the date of issuance or effect and the date of expiration, which shall be March 31 of each year. The application shall be made on a form setting forth the date upon which the importations are to begin, the address of the importer, and the name of the proprietor or, if a partnership, the name of

the partnership and the names of all partners or, if a corporation, the name of the corporation and the names of its officers. If the fire chief discovers at a later date that a licensee has been convicted of a violation of any provision of this article, the licensee's license shall be revoked and no new license shall be issued to the licensee for two years.

- (c) Each storage, wholesaling, and retailing facility or site shall be required to obtain a separate license. Any license issued pursuant to this article may be revoked by the fire chief if the licensee violates any provision of this article or if the licensee stores or handles the fireworks in such a manner as to present an unreasonable safety hazard.
- (d) Display fireworks or firecrackers shall only be sold or transferred by a seller to a person with a valid permit under Sections 20-6.12 or 20-6.13. No person with a valid permit under Sections 20-6.12 or 20-6.13 shall sell or transfer display fireworks or firecrackers to any other person.
- (e) Any license issued pursuant to this article shall be prominently displayed in public view at each licensed location.
- (f) Display fireworks or firecrackers shall only be imported and stored, if necessary, in an amount sufficient for an anticipated three-month inventory; provided that if a licensee provides display fireworks, firecrackers or articles pyrotechnic more than once a month, the licensee may import or store, if necessary, sufficient display fireworks, firecrackers or articles pyrotechnic for a sixmonth inventory.

(Added by Ord. 10-25)

#### Sec. 20-6.5 Requirements of licensee.

- (a) Any person who has obtained a license under Section 20-6.4 and imports display fireworks or firecrackers into the city or transports such items within the city shall:
  - (1) Clearly designate the types of display fireworks or firecrackers in each shipment on the bill of lading or shipping manifest with specificity;
  - (2) Declare on the bill of lading or shipping manifest the gross weight of display fireworks or firecrackers to be imported in each shipment and the location of the storage facility, if applicable, in which the display fireworks or firecrackers are to be stored;
  - (3) Prior to shipment and when booking each shipment of display fireworks or firecrackers notify the fire chief regarding whether the shipment will be distributed from:
    - (A) Pier to pier;
    - (B) Pier to warehouse or storage facility; or

(C) Pier to redistribution; and

- (4) At the time shipping is booked, the licensee shall notify the fire chief in writing of the expected shipment's landing date.
- (b) The fire chief may inspect any shipment declared on the shipping manifest as fireworks or articles pyrotechnic.

- (c) The facility in which display fireworks or firecrackers are to be stored shall have received approval 15 days prior to the shipment's arrival from the fire chief and meet all state and city fire and safety codes.
- (d) Any shipping company that receives fireworks that are imported into the city shall notify the fire chief as to whether the shipment will be distributed from:
  - (1) Pier to pier;
  - (2) Pier to warehouse or storage facility; or
  - (3) Pier to redistribution.

(Added by Ord. 10-25)

#### Sec. 20-6.6 Fees—Use of revenues.

The fee for the license required under Section 20-6.4 shall be \$3,000 for importers, \$2,000 for each wholesaler's site, \$1,000 for each storage site, and \$500 for each retailer's site for each year for fraction of a year in which the licensee plans to conduct business and shall be payable to the city. The license fees shall be used solely by the fire department to pay for:

- (1) Expenses relating to the audit of fireworks, including the inspection of inventory and storage facilities, maintenance of required records, and the training of auditors;
- (2) Expenses relating to education regarding compliance with this article; and
- (3) Expenses relating to the enforcement of this article.

(Added by Ord. 10-25)

#### Sec. 20-6.7 Minors.

It shall be unlawful for any person to offer for sale, sell, or give any display fireworks or firecrackers to minors, and for any minor to possess, purchase, sell, or set off, ignite, or otherwise cause to explode any display fireworks or firecrackers. (Added by Ord. 10-25)

#### Sec. 20-6.8 Liability of parents or guardians.

The parents, guardian, and other persons having the custody or control of any minor, who knowingly permits the minor to possess, purchase, or set off, ignite, or otherwise cause to explode any fireworks or articles pyrotechnic, shall be deemed to be in violation of this article and shall be subject to the penalties in Section 20-6.9. (Added by Ord. 10-25)

#### Sec. 20-6.9 Penalty.

(a) Any person violating Section 20-6.2(a) shall be sentenced to a fine of not less than \$200 and not more than \$1,000 or by imprisonment of not more than 30 days or by both such fine and imprisonment.

- (b) Any person violating any provision of this article, other than Section 20-6.2(a) shall be sentenced to a fine of not less than \$250 and not more than \$2,000 or by imprisonment of not more than one year or by both such fine and imprisonment.
- In addition to the penalties provided in subsections (a) and (b), if the person is licensed to sell fireworks, the court may, in addition to the foregoing penalties, revoke or suspend such license. No license shall be issued to any person whose license has been so revoked or suspended until the expiration of two years after such revocation or suspension.

(Added by Ord. 10-25)

#### Sec. 20-6.10 Notice requirements.

Each licensed retail outlet shall post adequate notice that clearly cautions each person purchasing display fireworks or firecrackers of the prohibitions, liabilities, and penalties set forth in Sections 20-6.7, 20-6.8 and 20-6.9.

(Added by Ord. 10-25)

#### Sec. 20-6.11 Forfeiture.

Any property used or intended for use in the commission of, attempt to commit, or conspiracy to commit any violation of this article, or that facilitated or assisted such activity, and any proceeds or other property acquired or maintained with the proceeds from the violation of this article may be subject to forfeiture pursuant to Hawaii Revised Statutes Chapter 712A. (Added by Ord. 10-25)

#### Sec. 20-6.12 Permit for display fireworks.

- (a) Any person desiring to set off, ignite, or discharge display fireworks for a display shall apply to, and obtain a permit from the fire chief not less than 20 days before the date of the display.
- (b) The application shall state, among other things:
  - (1) The name, age, and address of the applicant;
  - (2) The name, age, and address of the person who will operate the display fireworks, and verification that the person is a licensed pyrotechnic operator;
  - (3) The time, date, and place of the use of the display fireworks;
  - (4) The type and quantity of aerial devices, display fireworks, or articles pyrotechnic to be used; and
  - (5) The purpose or occasion for which the display fireworks will be presented.
- (c) Liability Coverage Required.
  - (1) In addition to any other requirements, an applicant for a display fireworks permit must submit to the fire chief evidence of a general liability insurance policy in an amount of not less than \$1,000,000. A display fireworks permit may not be issued without evidence of general liability insurance as required by this section.

- (2) The general liability insurance policy shall cover bodily injury and property damage caused by an occurrence involving the insured or the insured's servant, officer, agent, or employee in the use of display fireworks. The policy must continue to be in full force and effect for not less than 10 days after the date of the display.
- (3) Evidence of the liability insurance policy required by this section must be in the form of a certificate of insurance issued by an insurer authorized to do business in the State of Hawaii and countersigned by an insurance agent licensed in the State of Hawaii.

The fire chief may require coverage in amounts larger than the minimum amounts set forth in subdivision (1) above if he deems it necessary or desirable in consideration of such factors as the location and scale of the display, the type of fireworks to be used and the number of spectators expected.

- (d) The fire chief, pursuant to duly adopted rules, shall issue the permit after being satisfied that the requirements of subsection (c) have been met, the display will be handled by a pyrotechnic operator duly licensed by the state, the display will not be hazardous to property, and the display will not endanger human life. The permit shall authorize the holder to display aerial devices, display fireworks, or articles pyrotechnic only at the place and during the time set forth therein, and to acquire and possess the specified aerial devices, display fireworks, or articles pyrotechnic between the date of the issuance of the permit and the time during which the display of those aerial devices, display fireworks, or articles pyrotechnic is authorized.
- (e) The fee for the permit to use display fireworks shall be \$110.00.

(Added by Ord. 10-25)

#### Sec. 20-6.13 Permit for firecrackers.

- (a) Any person desiring to set off, ignite, discharge or otherwise cause to explode firecrackers on New Year's Eve, New Year's Day, Fourth of July, Chinese New Year's Day, or for cultural uses, such as, but not limited to, births, deaths, weddings, grand openings, blessings, anniversaries and other cultural uses shall apply to and obtain a permit from the fire chief.
- (b) The permit application shall be submitted to the fire chief not less than 10 days before the date of the use of the firecrackers, and shall state, among other things:
  - (1) The name, age, and address of the applicant;
  - (2) The purpose of the event or celebration for which the permit is requested; and
  - (3) The date, time and location of the use of the firecrackers.
- (c) No permit shall be allowed at any location where the fire chief deems that use of the firecrackers will pose a threat to public health or safety.
- (d) The permit shall allow the use of firecrackers from 9:00 p.m. on New Year's Eve to 1:00 a.m. on New Year's Day; from 7:00 a.m. to 7:00 p.m. on Chinese New Year's Day; or from 1:00 p.m. to 9:00 p.m. on the Fourth of July. A permit for a cultural use shall allow use from 9:00 a.m. to 9:00 p.m. on the day of the requested use.
- (e) Each permit shall allow the purchase and use of up to 5,000 individual firecrackers.
- (f) The fee for the permit to use firecrackers shall be \$25.00.

- (g) The permit shall be nontransferable, and the permittee shall have the permit available for inspection at the location where the firecrackers are to be used.
- (h) The fire chief shall adopt rules for the administration and implementation of the permit program.

(Added by Ord. 10-25)

#### Sec. 20-6.14 Severability.

If any section, subsection, paragraph, sentence, clause, or phrase of this article is declared unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of this article. (Added by Ord. 10-25)



HONOLULU CITY COUNCIL KE KANIHELA O KE KALANA O HONOLULU

CITY AND COUNTY OF HONOLULU

ORDINANCE 25-4

BILL 55 (2024), CD2

#### A BILL FOR AN ORDINANCE

SECTION 4. This ordinance takes effect upon its approval.

**INTRODUCED BY:** 

Tommy Waters (br)

DATE OF INTRODUCTION:

October 2, 2024 Honolulu, Hawai'i

Councilmembers

APPROVED AS TO FORM AND LEGALITY:

Deputy Corporation Counsel GABRIFLE V. PROVENZA January, 20 25. APPROVED this 3rd day of

**RICK BLANGIARDI, Mayor** City and County of Honolulu



## Hawaii State Fire Code

Based on the NFPA 1 Fire Code 2021

#### State Fire Council

#### HAWAII STATE FIRE CODE

#### Effective Date: January 20, 2023

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#### RULES OF GENERAL APPLICABILITY

**1. Purpose.** The purpose of this chapter is to adopt the state fire code as required by section 132-3, Hawaii Revised Statutes (HRS).

#### (HRS 132-3 authorizes the State Fire Council (SFC) to adopt a state fire code establishing minimum requirements relative to the protection of persons and property from fire loss. The provisions of this chapter establish a reasonable level of fire and life safety from fire to building occupants, property protection, and enhanced emergency responder safety. HRS 107-25 also requires the state fire council to adopt the state fire code & becomes part of the Hawaii state building codes.)

**2. Scope.** This chapter sets forth minimum requirements necessary to establish a reasonable level of fire and life safety and property protection from the hazards created by fire, explosion, and dangerous conditions.

(The existing scope only addressed "fire loss" and this code does more than that. This takes text from the "purpose" section of NFPA 1 because it is more encompassing and reflects the provisions of the code. The scope of the state fire code include the diverse aspects relating to fire protection embodied in the latest edition of a national fire code with applicable state amendments.) **3. Definitions.** In this chapter, unless the context otherwise requires:

"Annex" means the explanatory material attached to the NFPA 1, Fire Code.

"Authority having jurisdiction" or "AHJ" means an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.

"NFPA" means the National Fire Protection Association.

(This provision carries over from the previous edition, but with some revisions. The definition of "Authority having *jurisdiction"* is deleted from this amendment section because it is already in the code. Annexes and Table 13.2.3.4.3A are used in §12-45.4-4. The definition of "building code" is changed to match the definition in the amendment to section 3.3.53.1 of this code. It is not deleted because it is important to clearly delineate that the building code is whatever the county has adopted. The definition of NFPA 1 Fire Code is not needed in the definition section as it is stated in Section 12-44.4-4 below. Definition of Section is deleted because it commonly refers to a specific part of a chapter. These definitions seek to clarify terms used in this document to avoid confusion with similar terms in other documents or terms that are unfamiliar to the reader. The NFPA 1, Fire Code, Chapter 3, has a comprehensive list of definitions as used in this and other related NFPA documents. -"Inoperable System Sign", and "Water-based fire extinguishing system" in the "Definitions" section were moved to Section §12-45.4-20.)

**4.** Adoption of the 2021 NFPA 1, Fire Code. The NFPA 1, Fire Code, 2021 edition is made a part of this chapter, subject to the amendments provided in this chapter. The annexes to the NFPA 1, Fire Code are not adopted except as provided in this chapter.

#### <u>(Clarifies that the NFPA 1 Fire Code, 2021 edition is the</u> referenced national model fire code document with statewide application as amended herein. The annexes are reference

#### *documents to the fire code and unless specifically adopted, are not requirements.)*

**5.** County permit authorization. Each county may, by ordinance, require that a permit be obtained from the AHJ for any area regulated by this chapter.

<u>(Under the authority of this code, there are no state fire code</u> <u>permits.</u> <u>Permit authorization fall under the jurisdiction of each</u> <u>adopted county fire code and is specifically authorized by HRS</u> <u>107-28(a).</u>)

#### AMENDMENTS TO THE NFPA 1, FIRE CODE

**6. Title.** Section 1.1.2 is amended to read as follows: 1.1.2 Title. This code shall be known as the State Fire Code, may be cited as such, and will be referred to in this chapter as this code.

## <u>(This has been in several previous state fire codes and gives the title to the state amendments to the NFPA 1 Fire Code, 2021 edition.)</u>

**7. Conflicts.** Section 1.3.3.3 is added to read as follows: 1.3.3.3 When a difference occurs in the requirements for design and construction for new construction of buildings between this code and the building code, the building code shall apply.

Exception: This code does not apply to new construction except when this code is specifically referenced from the building code.

#### (This clarifies that the county building codes take precedence for design and construction of new buildings. The exception allows the fire code to apply to new construction when the building code authorizes it.

**8.** Building code. Section 1.3.6.3 is amended to read as follows: 1.3.6.3 Repairs, renovations, alterations, reconstruction, change of occupancy, and additions to buildings shall conform with the building code.

#### <u>(This clarifies that the general adoption by reference of NFPA 101,</u> <u>Life Safety Code does not apply to renovations, because it is not</u> <u>currently adopted by the building departments for new</u> <u>construction.)</u>

**9.** Administration and enforcement authority. Section 1.6 is amended to read as follows: 1.6 Administration and enforcement

authority. This Code shall be administered and enforced by the AHJ designated by HRS 132.

(This was changed to match the text in section 1.6, which uses the term "enforcement." It adds the reference to the overarching requirements for the Hawaii Revised Statutes section 132 that provide all the enforcement authority. This has been in-previous state fire codes. Fire Chief was changed to AHJ to be consistent with NFPA 1. The term AHJ will usually apply to the Chief, but could include other authorities, such as the building official, if that authority applies. Also, "Chief is not defined in this code, but AHJ is defined. Nine previous amendments were deleted because this amendment authorizes the AHJ to administer & enforce this code as delineated in HRS 132)

**10. Fire insurance records and reports.** Section 1.11.4 is added to read as follows: 1.11.4 Upon the AHJ's request, every company or agent transacting the business of fire insurance in this State shall be required to file with the AHJ in each county a monthly record of fire losses paid or incurred on forms prescribed, permitted, or furnished by the AHJ. These forms shall contain information on each fire loss such as the name of the insured, name of the adjuster, date and time of fire, construction of building or structure burned, amount of insurance paid, and apportionment of the loss where more than one company insured the risk. The current National Fire Incident Reporting System report forms may be used.

#### <u>(This was in several previous state fire codes. In addition to</u> requirements for county records it adds an authorization for the AHJ to review insurance carrier's records of fire losses.)

**11. Permits.** Section 1.12.8 and Tables 1.12.8(a), (b), and (c) are deleted in their entirety.

#### (This was in several previous state fire codes. There are no state fire code permit requirements. Permits are authorized by county ordinance through the respective adopted county fire code.)

**12. Certificates of fitness authorization.** Section 1.13.1 is amended to read as follows: See Hawaii Administrative Rules (HAR) 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems.

#### *This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication.*

**13. Mandatory certificates of fitness.** Section 1.13.2 is amended to read as follows: See HAR 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems.

#### (This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication. The HAR authorizes the county fire departments to issue the COF's and collect fees.

**14. Certification of applicant general.** Section 1.13.5.1 is amended to read as follows: See HAR 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems.

## <u>(This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication. HAR provides a list of general COF provisions.</u>

**15. Certification of applicant transfer.** Section 1.13.6 is amended to read as follows: See HAR 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems. (This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication. COF's are non-transferable.

**16.** Certification of applicant issuing period. Section 1.13.7 is amended to read as follows: See HAR 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems.

#### (This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication. HAR §12-44 .1 states a COF to be valid for 3 years before a renewal is required.)

**17. Revocation or suspension of certificates of fitness conditions.** Section 1.13.12.1 is amended to read as follows: See HAR 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems.

#### (This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication. It authorizes the county fire departments to have regulatory authority to deny, revoke, or suspend COF's based on the violations listed in HAR Section 12-44.1-4.

**18.** Revocation or suspension of certificates of fitness new issuance period. Section 1.13.12.1.1 is amended to read as follows: See HAR 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems.

<u>(This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication. The issuance of a new COF after a revocation or</u>

### suspension will depend on the seriousness of the violation(s) & is subject to a one year maximum.

#### **19. Revocation or suspension of certificates of fitness appeals.** Section 1.13.12.4 is amended to read as follows: See HAR 12-44.1 Testing, Certifying, and Credentialing Individuals Who Perform Maintenance and Testing of Portable Fire Extinguishers, Fire Protection Systems, and Fire Alarm Systems.

#### (This amendment was revised per the DAG recommendation to cite HAR as the referenced document to avoid conflict & duplication. Criteria for appeals are found in HAR Section 12-44.1.5 and are filed with the county fire departments.

**20. NFPA publications.** Section 2.2 is amended to replace NFPA 1124 to read as follows: 2.2 NFPA 1124: Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, 2013 Edition.

#### (This was added because it was deleted out of the NFPA 1 Fire Code 2015 Edition, but is included to allow the use of requirements for storage & retail sales of consumer fireworks from NFPA 1124 Chapter 6 & 7, 2013 Edition, in Section 65.10. It also allows the use of other 1124 Sections that are adopted by the counties.)

**21. NFPA official definitions.** Section 3.2 is amended by adding as follows:

"Inoperable system sign" means a weather resistant sign denoting "Inoperable" having a white background with red letters. The letters shall be a minimum height of three inches and a minimum width of one-fourth of an inch stroke.

"Water-based fire extinguishing system" means any class I, II, and III and combined standpipe system, automatic sprinkler system, fire pumps or automatic water spray fixed system utilizing water as an extinguishing agent. (These definitions were moved from §12-45.4-3 Definitions to Chapter 3.2 NFPA Official Definitions in the state fire code.) Building code definition was removed as 3.3.54.1 in the fire code states that the building code is the code adopted by the jurisdiction.)

**22. Electrical code.** Section 3.3.56.2 is amended to read as follows: 3.3.56.2 Electrical Code. The electrical code is the electrical code adopted by the jurisdiction.

#### (This was in the previous state fire code. Each county adopts its own electrical code that is based on the adopted state electrical code. Jurisdiction is consistent with the building code definition in the fire code.)

**23.** Mechanical code. Section 3.3.56.3 is amended to read as follows: 3.3.56.3 Mechanical Code. The mechanical code is the mechanical code adopted by the jurisdiction.

(This was in the previous state fire code. The State Department of Health has ad rules for A/C & ventilation which are based on national standards & the International Mechanical Code The counties do not adopt the mechanical code. Honolulu reviews A/C & ventilation exempt from State requirements. Residential ventilation systems, except for one- & two-family dwellings are reviewed for Housing Code Compliance.

**24. Plumbing code.** Section 3.3.56.4 is amended to read as follows: 3.3.56.4 Plumbing Code. The plumbing code is the plumbing code adopted by the jurisdiction.

(Jurisdiction is consistent with the building code definition in the fire code. This was in the previous state fire code. Each county adopts its own plumbing code that is based on the adopted state plumbing code. The county plumbing code takes precedence for new building construction.)

#### 25. Maintenance, inspection, and testing general

**requirements.** Section 4.5.8.1 is amended to read as follows: 4.5.8.1 Whenever or wherever any device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or any other feature is required for compliance with the provisions of this *Code*, such device, equipment, system, condition, arrangement, level of protection, fire-resistive construction, or other feature shall thereafter be continuously maintained. Maintenance shall be provided in accordance with applicable NFPA requirements and the building code or requirements developed as part of a performance-based design, or as directed by the AHJ.

## (This adds "and the building code" with applicable NFPA requirements for maintenance.

**26.** Authorization to witness maintenance, inspection, and testing. Section 4.5.8.8 is added to read as follows: 4.5.8.8 The AHJ is authorized to witness any maintenance, or test of a portable fire extinguisher, fire protection system, and fire alarm system by a certificate of fitness holder to determine if the maintenance or test meets the minimum requirements set forth by this code, applicable rules, and statutes.

(This was relocated from 13.1.1.2.1 which only included fire protection systems a new section of the fire code that includes witnessing any inspection test or maintenance of any device, equipment, system. etc. by a COF holder by the AHJ. This gives the AHJ authority to inspect or witness any fire protection system to ensure it meets minimum requirements and allows the AHJ to observe COF holders to determine if ITM of these appliances or systems are being conducted as required. The importance of the proper operation of these life safety devices and appliances cannot be overemphasized.)

**27. Owner/occupant responsibilities of unsafe buildings.** Section 10.2.4 is amended by adding a sentence at the end to read as follows: For abatement of unsafe buildings, see the building code.

# (This was in previous state fire codes. Clarifies that the requirement for the abatement of unsafe buildings is authorized by the building code.)

#### 28. On-premises fire fighting organization fire reporting.

Section 10.6.1.2 is amended to read as follows: 10.6.1.2 Facilities that have established on-premises fire-fighting organizations and have coordinated and arranged procedures approved by the AHJ, shall notify the fire department in accordance with the approved plan.

(The reference to 10.7.1.2 was changed to 10.6.1.2 because the section changed in the 2015 edition. This was in the previous state fire code. Requires notification, submittal and approval of an on-premises fire fighting plan to the county fire department. This is to facilitate cooperation and awareness of the capabilities and expectations in the event of a mutual aid response to an incident.)

**29.** Posting of emergency action plans. Section 10.8.2.1 is amended as follows: 10.8.2.1 (7) Posting of emergency evacuation diagrams and other items required by the AHJ.

(This is added to allow the AHJ to require posting evacuation diagrams. This is required in the code already for hotel rooms, but the AHJ may want to require this for classrooms and other rooms. Also leaving this amendment in this section allows the AHJ the flexibility for requirements concerning posting of exit plans.)

**30.** Open flames, candles, open fires, and incinerators permits. Sections 10.10.1, 10.10.1.1, 10.10.1.2, 10.10.1.3, and 10.10.1.4 are deleted and replaced with sections 10.10.1 and 10.10.1.1 to read as follows: 10.10.1. Agricultural Burning. See Department of Health, Clean Air Branch, regulation of fires for agricultural burning.

 Except for closed incinerators approved by the state health department, private incineration is prohibited by state health laws. Clearance by the state health department for, and notification of, all agricultural fires either by telephone or written notice shall be on file with the AHJ before these fires are permitted.

(2) For fire safety regulations, see county requirements and 10.10.1.1.

#### (Agricultural burning is requlated by the State Department of Health, Clean Air Branch. Safety requirements are found in the fire code.)

10.10.1.1 Open Fires in Counties. Control of the following fires shall be established by each county:

- (1) Fires for agricultural purposes;
- (2) Fires for recreational, decorative, or ceremonial purposes;
- (3) Fires to abate a fire hazard;
- (4) Fires for prevention or control of disease or pests;
- (5) Fires for training of fire fighting personnel;
- (6) Fires for disposal of dangerous materials;
- (7) Fires for residential bathing purposes and
- (8) Fires for cooking of food.

This was in the previous state fire codes. These types of fires mirror state administrative rules (HAR Title 11, Chapter 60, Subchapter 3 "Open Burning", but their control is under the jurisdiction of the county fire departments and are not subject to state air pollution laws. Fires for agricultural purposes require a permit from the State Department of Health. Section 10.10.1 (b) was moved from Open Fires in Counties and placed with the State's Agricultural Burning section.)

**31.** Open flames, candles, open fires, and incinerators hazardous conditions. Section 10.10.2 is amended to read as follows: 10.10.2 The AHJ shall have the authority to prohibit any or all open flames, candles, and open, recreational, and cooking fires or other sources of ignition, or establish special regulations on the use of any form of fire or smoking material where circumstances make such conditions hazardous. Open flame devices utilizing gas or liquid fuel, such as but not limited to tiki torches, shall keep a minimum of three feet clearance

from the flame to combustibles, and shall maintain a vertical height of seven feet from grade to flame. The AHJ is authorized to modify these clearances based on site conditions.

#### (This adds gas or liquid fueled open flames, such as tiki torches, with acceptable distances to nearby combustible material.)

**32.** Outdoor fires. Section 10.10.3.1 is amended to read as follows: 10.10.3.1 Outdoor fires shall not be built, ignited, or maintained in or upon hazardous fire areas, without approval from the AHJ.

### (This removes the permit requirement from the fire code, but still requires AHJ approval.)

**33. Open fires.** Section 10.10.4.1 is amended to read as follows: 10.10.4.1 Open fires shall be located not less than fifty feet (fifteen meters) from structures or as approved by the AHJ.

#### (This adds "or as approved by the AHJ" to the fire code. There may be cases where the minimum distance cannot be met, but other requirements may be substituted.)

**34. Cooking equipment on balconies.** Section 10.10.6.2 is deleted in its entirety.

The purpose for deleting this section is to not tell apartment owners they cannot store a hibachi or other device on the balcony because they might store it in their apartment, which would be worse. 10.10.6.1 still says they cannot cook on the balcony. This was a 2015 amendment. This requirement was felt to be unenforceable by the fire departments to inspect all balconies and would be better left to each building's homeowner's association to prohibit. Also, if residents were not allowed to store on the balcony, even though they are prohibited from using it on the balcony, but use it for the beach or camping, would they then bring it indoors and create a greater potential hazard by storing a propane tank indoors?) **35.** Storage of combustible materials. Section 10.19.1.1 is added to read as follows: 10.19.1.1 Signage posting. In storage and mercantile occupancies, a sign shall be posted on the automatic sprinkler riser stating the maximum allowable storage height for the design of the sprinkler system as approved by the AHJ.

This was in previous state fire codes & adds an additional requirement. It addresses the allowable storage height in these occupancies based on the original design of the sprinklers system. Businesses lease spaces in warehouses with high ceilings and bring in high-piled storage racks, which the original sprinkler system was not designed to control. This amendment assists the fire inspector with identifying these cases. Lloyd relocated this amendment into the general category instead of being in the ceiling clearance section.)

**36.** Elevators, escalators, and conveyors. Section 11.3 is deleted in its entirety.

## (11.3 is deleted since the state elevator code will apply.) DLIR has Elevator Code.

**37. Waste chutes, incinerators, and laundry chutes installation and maintenance.** Section 11.6.2 is amended to read as follows: 11.6.2 Waste chutes, incinerators, and laundry chutes maintenance standards. Waste chutes, laundry chutes, and incinerators shall be maintained in accordance with NFPA 82, unless such installations are approved existing installations, which shall be permitted to be continued in service.

#### *"Installation" is addressed in building code so it was removed. This was in previous State Fire Codes.*

**38. Emergency command center.** Section 11.9.5 is amended by adding Items 12, 13, and 14 to read as follows:

- (12) The room shall be accessible from the exterior of the building.
- (13) Control panels in the emergency command center shall be permanently identified as to its function.
- (14) Alarm, supervisory and trouble signals shall be annunciated in compliance with the fire code in the emergency command center by means of an audible and visual indicator.

#### (These requirements were in the adopted state fire code Title 12 amendments to the 1997 edition of the Uniform Fire Code. They provide more direct room access and increased identification of control panel indicating devices.)

**39.** Roof access for one- and two-family dwellings and townhouses. Section 11.12.3.2.1 is amended to read as follows: 11.12.3.2.1 Roof access for one- and two-Family Dwellings and Townhouses for photo-voltaic systems. One- and two-family dwellings need not comply with this section.

#### (This amendment is being kept because Honolulu, Hawaii and Kauai counties don't currently review plans for PV installations for one- and two-family dwellings. This also coincides with Fire Operations strategies regarding structure fires involving one- and two-family dwellings.)

**40.** Fire door identification. Section 12.4.3 is added to read as follows: 12.4.3 Fire door identification. When required by the AHJ, a sign shall be displayed permanently near or on each required fire door in letters not less than one inch (twenty-five.four millimeters) high. The wording of the required sign can only be modified with prior written approval of the AHJ. The sign shall read as follows:

#### FIRE DOOR DO NOT OBSTRUCT KEEP CLOSED

#### (This came from the 1997 UFC section 1111.2.3. This amendment was revised because both messages are important & shall be provided. Originally there was an option to do "FIRE DOOR DO NOT OBSTRUCT" or "FIRE DOOR KEEP CLOSED".

**41. Fire protection systems general.** Section 13.1 is amended by adding a new first paragraph and exception to read as follows: 13.1 Fire protection systems general. The provisions of this chapter for new construction do not apply. For new construction see the building code. Existing buildings shall be maintained to the requirements to which it was built unless specifically indicated it applies to existing facilities.

Exception: When the building code does not require fire alarm systems, fire alarm systems shall be required according to Section 13.7. When the building code does require a fire alarm system, the requirements of the building code shall apply.

(This was in the previous state fire code. The building code regulates requirements for new construction. Each county has the authority to adopt the state fire code with local amendments with provisions for new construction. Existing buildings are not required to comply with newer editions of the fire code unless there is a change in occupancy use or conditions exists that pose imminent danger to building occupants. This was relocated to 4.5.8.8 a new section of the fire code that includes any device, equipment, system. etc.)

**42. Fire protection systems hose connection.** Section 13.1.5.2 is added to read as follows: 13.1.5.2 Fire department hose connections serving standpipe and sprinkler systems shall be located within twenty feet of a fire apparatus access road, not less than eighteen inches and not more than four feet above grade, or as approved by the AHJ. Appropriate identification signs shall be provided as required by the AHJ.

<u>(This has been in previous state fire codes. It requires</u> <u>connections to be in readily accessible locations to roadways for</u> <u>fire department use. It incorporated two amendments, one for</u> <u>standpipes and one for sprinklers into one amendment for both</u>

#### <u>types of connections. The heading title was changed to</u> <u>correspond with the chapter title in the fire code.</u>

**43.** Fire protection systems records. Section 13.1.6 is amended to read as follows: 13.1.6 Detailed records documenting all systems and equipment inspections, testing, and maintenance shall be kept by the property owner and shall be made available upon request for review by the AHJ.

#### <u>This amendment was in previous state fire codes. It only adds the</u> <u>word "inspections" to the records required to be kept by the</u> <u>owner and the title was changed to correspond with the chapter</u> <u>title in the fire code.</u>

**44.** Fire protection systems authority having jurisdiction (AHJ) reports. Section 13.1.6.1 is added to read as follows: 13.1.6.1 A copy of a system's unsatisfactory inspection and maintenance test report shall be submitted to the AHJ by the testing company within five (5) working days after the completion of the test.

This was in previous state fire codes. This authorizes the appropriate county agency i.e. fire hydrants (Board of Water Supply), fire sprinklers and standpipes installation (Building Department), to meet its respective requirements. (This sentence was deleted because BWS does its own maintenance testing so an unsat report would be kept internally). The fire department does acceptance testing for fire alarm systems and commercial cooking fire extinguishing systems. This specifies that installation and location must be approved by the AHJ on these specific items. Amendment to section 13.1.5 was in in the previous state fire code. It coincides and reinforces the amendment to section 13.1.2. Section heading was amended to mirror the 2018 edition. Made revision to 13.1.5 to ITM to be consistent in the order.)

**45.** Fire protection systems out of service. Section 13.1.10 is amended to read as follows: 13.1.10 The AHJ shall be verbally notified

immediately when any fire protection system is out of service and on restoration of service.

#### (This has been in previous state fire codes. Any fire protection system that is not operational requires an immediate evaluation of the response and strategies to develop an action plan with alternatives in mitigating a fire incident.)

**46.** Fire protection systems advanced notification. Section 13.1.10 is amended by adding Sections 13.1.10.1, 13.1.10.2, and 13.1.10.3 as follows: 13.1.10.1 The county fire department shall be given a seventy-two hour notification prior to a scheduled inspection, testing, maintenance, or retesting of any fire protection system (including class I, II, and III, and combined systems, automatic fire sprinkler systems, and other fire extinguishing systems) and fire alarm systems within their respective jurisdiction in the State.

13.1.10.2 Failure to comply with the requirements of this section will result in the county fire department deeming it an invalid test. A retest may be required to be performed at the testing company's expense.

13.1.10.3 The certificate of fitness holder shall immediately notify the county fire department of any system inspection, testing or maintenance cancellations or changes to the scheduled date and time.

## <u>(This was in previous state fire codes. This allows the enforcing authority time to schedule or reschedule availability to witness any maintenance test by a COF holder.)</u>

**47. Fire protection systems inspection, testing, and maintenance labeling.** Section 13.2.3 is amended by adding sections 13.2.3.3.1, 13.2.3.3.2, 13.2.3.3.2.1, 13.2.3.3.3, 13.2.3.3.1, 13.2.3.3.4, 13.2.3.3.4.1, 13.2.3.3.5, 13.2.3.3.5.1, and 13.2.3.3.5.2 as follows: 13.2.3.3.1 Inspection Label and Collar. An approved label and verification collar signifying successful passing of the system shall be provided when inspecting, testing, or maintaining any class I, II, III, and combined standpipe fire extinguishing system.

#### 13.2.3.3.2 Five Year Inspection Label

13.2.3.3.2.1 Class I, II, and III, and combined standpipe fire extinguishing systems passing a five-year inspection (annual inspection for class II hoses) shall have an approved, weatherproof, inspection label affixed to the fire department connection. If the system does not have a fire department connection, labels shall be affixed to hose cabinets located on the ground floor and the top-most floor.

- (1) The label shall indicate the type of system, month and year the system was inspected, tested, and maintained; the certificate of fitness holder's name and certificate number; and the company name, address, and contact information.
- (2) The label shall be yellow, at least two and one-fourth inches in width and three and one-fourth of an inch in length, and clearly visible without obstructing the operation of the fire extinguishing system.
- (3) The label shall be constructed of a durable material approved by the AHJ.
- (4) The label shall be punched with no more than one year and one month.

13.2.3.3.3 Verification Service Collar.

13.2.3.3.1 The verification of service collar shall be a circular, solid of continuous plastic with at least a three inch diameter hole in the center and shall slide onto each hose length approximately midway from the male and female couplings after the physical inspection has been completed and deemed satisfactory. The verification service collar shall:

- (1) Indicate the month and year the hose was inspected; the certificate of fitness holder's name and number; and company name, address and contact information; and
- (2) Be constructed of other suitable materials when approved by the AHJ.

13.2.3.3.4 Inoperable system sign

13.2.3.3.4.1 Systems that cannot be utilized for firefighting operations shall have an inoperable system sign affixed to the fire department connection.

- (1) The sign shall have a white background with red lettering and be constructed of wood, metal, or plastic.
- (2) The letters shall be a minimum height of three inches and a minimum width of one-fourth of an inch stroke.
- (3) If the system does not have a fire department connection, inoperable system signs shall be affixed to hose cabinets located on the ground floor and the top-most floor.
- (4) The sign shall remain in place until all repairs have been made and a satisfactory system test is completed.

13.2.3.3.5 Inspection, Testing, and Maintenance Report.

13.2.3.3.5.1 An inspection, testing, and maintenance report entitled "Standpipe and Hose Systems" available on the State Fire Council's website and at each county fire department's fire prevention bureau, or a similar report approved by the AHJ, shall be provided to the property owner or agent within fourteen days after the inspection, testing, and maintenance date.

13.2.3.3.5.2 An electronic copy of the unsatisfactory test report shall be submitted to the AHJ within five working days of the inspection, testing, and maintenance date. Submittals of satisfactory inspection, testing, and maintenance report shall be determined by the AHJ.

# (This revision standardizes the ITM report form & where it may be found. These amendments standardize the ITM of fire protection systems identification and AHJ notification requirements).

**48.** Fire protection systems reference dates table. Sections 13.2.3.4.3 and 13.2.3.4.4 are added to read as follows: 13.2.3.4.3 Table 13.2.3.4.3A entitled "Fire Protection Systems Reference Dates" dated 1/12/2023 may be used as a reference for applicable codes and standards in effect when the building was permitted.

#### <u>(This is a convenient table for ITM codes & NFPA standards that</u> were in effect when buildings were permitted.

13.2.3.4.4 Fire department connection gaskets shall be replaced with new gaskets during the required inspection, testing and maintenance of the system.

### Gaskets have been known to deteriorate over time, causing leaks & even be missing.

Building	Codes	NFPA References
Permit Date All Buildings up to March 15, 1988 March 16,	Ordinance 4598 (June 14, 1976) and the "Rules of the Fire Department City and County of Honolulu on Matters Related to the Testing of Fire Extinguishing Systems" (January 12, 1977). 1967 UBC Vol.1 1985 Uniform Fire Code Appendix	1. NFPA 13 Water-Based Systems
1988 to July 20, 1992	III-A and referenced NFPA standards	<ol> <li>NFPA 25 - Water-Based Fire Protection Systems - Not Applicable</li> <li>NFPA 13A - Recommended Practice for the Care and Maintenance of Sprinkler System - 1978 Edition. Referenced by 1985 UFC Standard, Appendix B.</li> <li>NFPA 15 - Water Spray Fixed Systems for Fire Protection- 1979 Edition. As referenced by 1985 UFC Standard, #79-2</li> </ol>
		Other Systems 1. NFPA 11 - Low-Expansion Foam – 1983 Edition 2. NFPA 11A - Medium- and High- Expansion Foam Systems - 1983 Edition 3. NFPA 12 - Carbon Dioxide Extinguishing Systems - 1985 Edition 4. NFPA 12A - Halon 1301 Fire Extinguishing Systems - 1980 Edition

## Table 13.2.3.4.3A Fire Protection Systems Reference Dates(1/12/2023)

5.	NFPA 17 - Dry Chemical Extinguishing Systems - 1985 Edition
6.	NFPA 96 - Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment - 1984 Edition

Building Permit Date	Codes	NFPA References
July 21, 1992 to October 9, 2002	1988 Uniform Fire Code Appendix III-C and referenced NFPA standards	<ul> <li>Water-Based Systems</li> <li>1. 1988 Uniform Fire Code - Appendix III-C (Testing Fire- Extinguishing Systems, Standpipes and Combination Systems).</li> <li>2. NFPA 13A - Recommended Practice for the Care and Maintenance of Sprinkler Systems - 1978 Edition. As referenced by 1985 UFC Standards, Appendix B.</li> <li>3. NFPA 15 - Water Spray Fixed Systems - 1988 UFC Standards (Volume II) which references NFPA 15, 1979 Edition with amendments. NOTE: The 1988 NFC references the 1985 Edition.</li> </ul>
		Other Systems 1. NFPA 11 - Foam Extinguishing Systems - 1988 UFC Standards (Volume II) which references NFPA 11, 1978 Edition with amendments.
		<ol> <li>NFPA 11A - Medium and High- Expansion Foam Systems - 1988 Edition.</li> <li>NFPA 12 - Carbon dioxide Extinguishing Systems - 1985</li> </ol>
		Edition. 4. NFPA 12A - Halon 1301 fire Extinguishing Systems - 1987 Edition.
		<ol> <li>5. NFPA 17 - Dry Chemical Extinguishing Systems - 1985 Edition.</li> <li>6. NEPA 17A - Wet Chemical</li> </ol>
		<ol> <li>NFPA 17A - Wet Chemical Extinguishing Systems - 1986 Edition.</li> <li>NFPA 96 - Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment - 1987 Edition.</li> </ol>

Building	Codes		NFPA References
Permit Date			
October 10, 2002 to January	1997 Uniform Fire Code Appendix III-C and referenced NFPA standards	1.	Water-Based Systems NFPA 25 - Water-Based Fire
1, 2010			Protection Systems - 1997 UFC Appendix Standard A-III-C-1
			(Volume II) which references and amends NFPA 25, 1992 Edition
		2.	NFPA 15 - Water Spray Fixed Systems - 1997 UFC Standards
			(Volume II) which references NFPA 15, 1990 Edition
			Other Systems
		1.	NFPA 11 - Low-Expansion Foam - 1997 UFC Standards (Volume II) which references NFPA 11, 1988 Edition
		2.	NFPA 11A - Medium-and High- Expansion Foam Systems - 1994 Edition
		3.	NFPA 12 - Carbon Dioxide Extinguishing Systems - 1993 Edition
		4.	NFPA 12A - Halon 1301 Fire Extinguishing Systems - 1997 Edition
		5.	NFPA 17 - Dry Chemical Extinguishing Systems - 1994 Edition
		6.	NFPA 17A - Wet Chemical Extinguishing Systems - 1994 Edition
		7.	NFPA 96 - Ventilation Control and Fire Protection of Commercial
			Cooking Operations - 1994 Edition
		8.	NFPA 2001 - Clean Agent Fire Extinguishing Systems - 1996
			Edition
		1	Fire Alarm Systems
		1.	NFPA 72 – Installation, Maintenance, and Use of Fire-
			Protection Signaling Systems -
			1997 UFC Standard 10-2 which
			references NPFA 72, 1993 Edition

Building Permit Date	Codes	NFPA References
January 2, 2010 to July , 2014	Hawaii State Fire Code (NFPA 1, 2006 edition) and referenced NFPA standards	<ul> <li>Water-Based Systems</li> <li>1. NFPA 15 - Standard for Water Spray Fixed Systems for Fire Protection, 2001 Edition</li> <li>2. NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2002 Edition.</li> </ul>
		Other Systems 1. NFPA 11 – Standard for Low-, Medium-, and High-Expansion Foam - 2005 Edition
		<ol> <li>NFPA 12 - Standard on Carbon Dioxide Extinguishing Systems, 2005 Edition</li> </ol>
		3. NFPA 12A – Standard on Halon 1301 Fire Extinguishing Systems, 2004 Edition
		<ol> <li>NFPA 17 – Standard for Dry Chemical Extinguishing Systems, 2002 Edition</li> </ol>
		5. NFPA 17A - Standard for Wet Chemical Extinguishing Systems, 2002 Edition
		<ul> <li>6. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking</li> </ul>
		Operations, 2004 Edition 7. NFPA 2001 - Standard on Clean Agent Fire Extinguishing
		Systems, 2004 Edition Fire Alarm Systems 1. NFPA 72 – National Fire Alarm Code, 2002 Edition

Building	Codes		NFPA References
Permit Date			
July 2014 to January 18, 2021	Hawaii State Fire Code (NFPA 1, 2012 edition) and referenced NFPA standards	1. NFP	Vater-Based Systems A 15 – Standard for Water ay Fixed Systems for Fire
		Prot	ection, 2012 Edition A 25, Standard for the
		Insp	pection, Testing, and ntenance of Water-Based Fire
			ection Systems, 2011 Edition.
			Other Systems
		Med	A 11 – Standard for Low-, lium-, and High-Expansion m - 2010 Edition
		2. NFP Diox	A 12 – Standard on Carbon xide Extinguishing Systems,
		3. NFP	1 Edition A 12A – Standard on Halon 1 Eiro Extinguishing Systems
		200	1 Fire Extinguishing Systems, 9 Edition A 17 – Standard for Dry
		Che	mical Extinguishing Systems, 9 Edition
			A 17A - Standard for Wet mical Extinguishing Systems,
		200	9 Edition
			A 96 - Standard for
		Prot	tilation Control and Fire rection of Commercial Cooking
		•	erations, 2011 Edition
			A 2001 - Standard on Clean nt Fire Extinguishing
			tems, 2012 Edition
			Fire Alarm Systems
			A 72 – National Fire Alarm
		Cod	e, 2010 Edition

Building	Codes	NFPA References
Permit Date		
January 19, 2021 to present	Hawaii State Fire Code (NFPA 1, 2018 edition) and referenced NFPA standards	<ul> <li>Water-Based Systems</li> <li>1. NFPA 15 – Standard for Water Spray Fixed Systems for Fire Protection, 2017 Edition</li> <li>2. NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire</li> </ul>
		Protection Systems, 2017 Edition.
		Other Systems 1. NFPA 11 – Standard for Low-, Medium-, and High-Expansion Foam - 2016 Edition
		<ol> <li>NFPA 12 – Standard on Carbon Dioxide Extinguishing Systems, 2015 Edition</li> </ol>
		<ol> <li>NFPA 12A – Standard on Halon 1301 Fire Extinguishing Systems, 2015 Edition</li> </ol>
		<ol> <li>NFPA 17 – Standard for Dry Chemical Extinguishing Systems, 2017 Edition</li> </ol>
		5. NFPA 17A - Standard for Wet Chemical Extinguishing Systems, 2017 Edition
		6. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2017 Edition
		<ol> <li>NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems, 2015 Edition</li> </ol>
		Fire Alarm Systems
		1. NFPA 72 – National Fire Alarm Code, 2016 Edition

#### (The table reference fire code and NFPA standards and editions corresponding to the permitted date of the building. It was inserted as a table in the main body of the code and not in an annex.

**49.** Fire protection systems existing assembly occupancies. Section 13.3.2.7 is deleted in its entirety.

(This was in previous state fire codes. It recognizes that this code does not retroactively apply to existing assembly occupancies that were constructed to requirements to the building code of that time.)

**50.** Fire protection systems new educational occupancies. Section 13.7.2.3.1.1 is amended by adding a second paragraph to read as follows: An annunciator panel shall be provided in the office of each school.

#### <u>(This provision facilitates consistent fire operations by</u> <u>standardizing the location of the fire alarm annunciator panel</u> within school campuses dispersed over a large geographic area.)

**51.** Fire protection systems existing educational occupancies. Section 13.7.2.4.1.1 is amended by adding a second paragraph to read as follows: An annunciator panel shall be provided in the office of each school.

#### <u>(This provision facilitates consistent fire operations by</u> <u>standardizing the location of the fire alarm annunciator panel</u> within school campuses dispersed over a large geographic area.)

**52.** Fire protection systems existing health care occupancies. Section 13.3.2.11 is deleted in its entirety.

(This was in previous state fire codes. It recognizes that this code does not retroactively apply to existing health care occupancies that were constructed to requirements to the building code of that time.)

**53.** Fire protection systems existing detention and correctional facilities. Section 13.3.2.13 is deleted in its entirety.

(This was in previous state fire codes. It recognizes that this code does not retroactively apply to existing detention and

#### <u>correctional occupancies that were constructed to requirements</u> to the building code of that time.)

**54.** Fire protection systems existing hotels and dormitories. Section 13.3.2.15 is deleted in its entirety.

#### (This was in previous state fire codes. It recognizes that this code does not retroactively apply to existing hotels and dormitories occupancies that were constructed to requirements to the building code of that time.)

**55.** Fire protection systems existing residential board and care facilities. Section 13.3.2.21 is deleted in its entirety.

#### (This was in previous state fire codes. It recognizes that this code does not retroactively apply to existing residential board and care facility occupancies that were constructed to requirements to the building code of that time.)

**56.** Fire protection systems existing mercantile occupancies. Section 13.3.2.23 is deleted in its entirety.

#### (This was in previous state fire codes. It recognizes that this code does not retroactively apply to existing mercantile occupancies that were constructed to requirements to the building code of that time.)

**57. Fire protection systems high-rise buildings.** Section 13.3.2.25.2 is deleted in its entirety.

(This was in previous state fire codes and requires retrofitting with fire sprinklers. It recognizes that this code does not retroactively apply to existing high-rise occupancies, that were constructed to requirements to the building code of that time.)

# <u>(§12-45.5-57 deletes Section 13.3.2.25.2 in its entirety. It would have required high rise buildings to be retrofitted with sprinklers within 12 years)</u>

**58.** Fire protection systems table. Sections 13.3.3.2.1, 13.3.3.2.2, 13.3.3.2.3, 13.3.3.2.4, 13.3.3.2.5, and 13.3.3.2.6 are added to read as follows: 13.3.3.2.1 Table 13.2.3.4.3A entitled "Fire Protection Systems Reference Dates" dated 7/18/2019 may be used as a reference for applicable codes and standards in effect when the building was permitted.

#### (This is useful information for the licensed COF and the AHJ in determining testing requirements. The fire code committee discussed this issue and determined to include the table in the main body of the document (Table 13.2.3.4.3A) CORRECTED by moving to appropriate section 10/17/17)

13.3.3.2.2 Pretest. The following requirements apply to all pretesting procedures:

- (1) An air test shall be conducted on the piping between the fire department connection and the sprinkler riser.
- (2) The piping shall be filled with twenty-five psi of air and held for fifteen minutes. No drop in pressure is allowed.
- (3) An air test need not be conducted when the piping is above ground and less than five feet in length.
- (4) Automatic fire sprinkler system without a fire department connection does not require an air test.

13.3.3.2.3 Inspection, Testing, and Maintenance Label. It shall be unlawful to inspect, test, or maintain any automatic fire sprinkler system without providing an approved label signifying successful testing of the system.

- (1) An approved inspection, testing, and maintenance label affixed to the fire department connection and the sprinkler riser. Automatic fire sprinkler systems that do not have a fire department connection shall have the label affixed to the riser.
- (2) The label shall indicate the type of system, month and year the system was tested; certificate of fitness holder's name

and number; and company's name, address and contact information.

(3) The label shall be clearly visible and punched with no more than one year and one month.

13.3.3.2.4 The fire department shall be verbally notified immediately of any system determined to be out of service. Systems that cannot be utilized for firefighting operations shall have an inoperable system sign affixed to the fire department connection. The sign shall remain in place until all repairs have been made and a satisfactory inspection, test, and maintenance system test is completed.

13.3.3.2.5 Inspection, Testing, and Maintenance Report. An inspection, testing, and maintenance report entitled "Automatic Sprinkler Systems" available on the State Fire Council's website and at each county fire department's fire prevention bureau or a similar report approved by the AHJ, shall be provided to the property owner or agent within fourteen days after the test.

13.3.3.2.6 An electronic copy of the unsatisfactory report shall be submitted to the AHJ within five working days. Submittal of a satisfactory inspection, testing, and maintenance report will be determined by the AHJ.

#### (This revision standardizes the ITM report form & where it may be found. Consistent methods of system identification and reporting to the AHJ are the objectives.)

**59. Stationary fire pump inspection, testing, and maintenance.** Section 13.4.4 is amended to add sections 13.4.4.1 and 13.4.4.2 as follows: 13.4.4.1 Inspection, Testing, and Maintenance Label. Satisfactory inspection, testing, and maintenance system's tests shall have an approved inspection label affixed to the fire pump controller. The label shall follow the guidelines found in the water-based fire extinguishing systems inspection labels, tags, and collars.

13.4.4.2 Inspection, Testing, and Maintenance report. An inspection, testing, and maintenance report entitled "Fire Pumps" available on the State Fire Council's website and at each county fire

department's fire prevention bureau, or a similar report approved by the AHJ shall be provided to the property owner or agent within fourteen days after the test.

#### (This revision standardizes the ITM report form & where it may be found. ITM per NFPA 25 helps ensure that the pump is always ready for service. Amended Sections 13.4.4.1 and 13.4.4.2 ensures consistent testing identification and reporting.)

**60.** Private fire service mains inspection, testing, and maintenance. Section 13.5.4.2 is amended to read as follows: 13.5.4.2 A private fire service main installed in accordance with this code or the AHJ's water department shall be inspected, tested, and maintained in accordance with NFPA 25 or the AHJ's water department's inspection, testing, and maintenance standards.

#### <u>(This revision standardizes the ITM report form & where it</u> <u>may be found. This amendment adds the water department's ITM</u> <u>standards to ensure private hydrants are maintained to same</u> <u>standards as the public hydrants).</u>

**61. Private service mains inspection, testing, and maintenance schedule.** Sections 13.5.4.3, 13.5.4.4, 13.5.4.5, 13.5.4.6, and 13.5.4.7 are added to read as follows: 13.5.4.3 Testing. An annual inspection, testing, and maintenance shall be conducted by the certificate of fitness holder. If, during use, the hydrant does not perform adequately, it shall be tested and, if needed, restored to its proper operation by a licensed certificate of fitness holder.

13.5.4.4 Fire hydrants that fail the inspection, test, and maintenance shall have a readily visible, attached "OUT OF SERVICE" sign. The sign shall have a yellow background with black letters and be constructed of wood, metal, or plastic. The letters shall be a minimum height of three inches and a minimum width of one-fourth of an inch stroke. The sign shall remain in place until all repairs have been made and a satisfactory hydrant inspection, test and maintenance is completed.

13.5.4.5 The fire department shall be verbally notified immediately of any fire hydrant determined to be out of service. Fire hydrants deemed to be permanently inoperable or unusable shall be replaced.

13.5.4.6 Inspection, test, and maintenance report. An inspection, testing, and maintenance report entitled "Private Fire Service Mains" available on the State Fire Council's website and at each county fire department's fire prevention bureau, or a similar report approved by the AHJ, shall be provided to the property owner or agent within fourteen days after the test.

13.5.4.7 An electronic copy of the unsatisfactory test report shall be submitted to the AHJ within five working days of the test. The AHJ shall determine if the submittal of a satisfactory inspection, test, and maintenance report will be required.

(This revision standardizes the ITM report form & where it may be found. Regardless if there were no contractual provisions to conduct ITM annually or after each use, the hydrant needs to be ITM by a COF holder when deficiencies are encountered. NFPA 25 states after each use, but their ITM is not that comprehensive compared to BWS. A one-year annual ITM ensures the hydrant's operational use. This section applies consistent identification, reporting, and notification to the AHJ and the owner.)

**62.** Annual maintenance record keeping. Section 13.6.4.3.4.1.1 is amended to read as follows: The tag or label, as a

minimum, shall entail the following:

- (1) Removing the previous tag or label;
- (2) Indicating the month and year the maintenance was performed;
- (3) Type of portable fire extinguisher tested;
- (4) Certificate of fitness holder's name and number;
- (5) Certificate of fitness holder's company name, address, and contact information;
- (6) Be yellow, at least two and one-fourth of an inch in width, three and one-fourth of an inch in length, and clearly visible without opening any cabinets;
- (7) Be constructed of a durable material approved by the AHJ;

- (8) Be punched with no more than one year and one month of the date of service; and
- (9) Not obstruct the portable fire extinguisher classification or instructions for use.

#### <u>(Required information is needed to identify COF holder's name</u> and provide uniform tag labeling & information. This also amends the previous amendment by replacing it, hence the renumbering.)

#### 63. Extinguisher maintenance six-year internal examination

**label.** Section 13.6.4.3.6.5.3 is amended to read as follows: 13.6.4.3.6.5.3 The 6-year internal examination label, as a minimum shall, entail the following:

- (1) Removing the previous six-year internal examination label;
- (2) Indicating the month and year the six-year internal examination was performed;
- (3) Certificate of fitness holder's name and number;
- (4) Certificate of fitness holder's company name, address, and contact information;
- (5) Type of portable fire extinguisher tested;
- (6) Be silver or white and at least two and one fourth of an inch in width and three and one-fourth of an inch in length; and
- (7) Not obstruct the portable fire extinguisher classification, instructions for portable fire extinguisher use, or manufacturer's labels.

#### <u>(Additional information needed to identify COF holder and provide</u> <u>uniform tag labeling and information).</u>

#### 64. Extinguisher maintenance service collar information.

Section 13.6.4.11.3 is amended to read as follows: 13.6.4.11.3 The verification-of-service collar shall, at a minimum:

- (1) Indicate the month and year the examination was performed;
- (2) Display the certificate of fitness holder's name and number;
- (3) Display the certificate of fitness holder's company name, address and contact information;
- (4) Be a single circular piece of uninterrupted material forming a hole of a size that does not permit the collar assembly to
move over the neck of the container unless the valve is completely removed; and

(5) Not interfere with the operation of the fire extinguisher.

### <u>(Clarifies information needed on the service collar. This also</u> <u>amends the previous amendment by replacing it, hence the</u> <u>renumbering.) The collar was a certain circumference to ensure</u> <u>the extinguisher stem was physically removed & not slipped over</u> <u>the stem, the contents emptied & the cylinder pressure tested.</u> <u>Need to check this.</u>

**65. Positive alarm sequence occupant notification.** Section 13.7.1.9.5 is amended to read as follows: 13.7.1.9.5 Where permitted by Chapter 11 through Chapter 43 of NFPA 101, a positive alarm sequence shall be permitted, provided that it is in accordance with NFPA 72. The following additional requirements shall also apply:

- (1) An automatic fire sprinkler system installed in conformance with the building code shall be provided throughout the building or facility;
- (2) Written fire emergency procedures and an evacuation plan for the building or facility shall be reviewed by the AHJ prior to approval testing. The procedures and plan shall include, but not be limited to immediate notification to the fire department, use of primary and secondary exits, use of fire protection appliances for the building(s) or facility(ies);
- (3) Trained personnel shall respond to emergencies on a twentyfour hour basis. The staff shall be instructed in fire emergency procedures and the use and operation of in-house fire appliances. Documentation of such training shall be maintained and filed on the premises;
- (4) Immediate notification of the fire department shall take place upon activation of any fire alarm initiating device;
- (5) The AHJ shall conduct a test of the positive alarm sequence prior to implementation; and
- (6) The AHJ may disapprove or rescind approval of the positive alarm sequence of the fire alarm system if all of the above requirements are not met and shall require the fire alarm

system to be reprogrammed to meet a general alarm notification at the owner's expense.

(The section changed from 13.7.1.4.10.4 in the 2012 edition to section 13.7.1.9.4 in the 2015 & 2018 editions. The 2015 & 2018 editions references Chapters 11-43 not 11-42. The additional items for positive alarm sequence are above and beyond what NFPA 72 requires. This was added as a Honolulu amendments to the 2012. This is now added to the 2018 State code. Items 5 and 6 shown deleted were part of the 2012 Honolulu amendments, which are in the 2015 NFPA 72. This was in the previous state fire code. It allows with conditions, an exception to the requirement that fire alarm initiating devices produce an audible signal throughout the entire building.)

**66.** New and existing lodging and rooming houses. Sections 13.7.2.14.1, 13.7.2.14.2, 13.7.2.14.3, and 13.7.2.14.4 are deleted in their entirety.

(This section reference changed from 13.7.2.13 & 13.7.2.13.1 in the 2012 edition, which was deleted entirely, to 13.7.2.14.1.1 & 13.7.214.2 in the 2015 & 2018 editions. 13.7.2.14.3 & 4 are deleted because they are also related to the requirement for a fire alarm system. The smoke alarm requirement in 13.7.2.14.5 remains in the code as it did in the 2012 edition as section 13.7.2.13.3. This was in the previous state fire code. It recognizes that this code does not retroactively apply to existing lodging and rooming houses that were constructed to requirements in the building code of that time.

**67.** Existing apartment buildings. Sections 13.7.2.18.1, 13.7.2.18.2, 13.7.2.18.3, and 13.7.2.18.4 are deleted in their entirety.

(This section reference changed from 13.7.2.12.1 & 2 in the 2012 to 13.7.2.18.1 & 2 in the 2015 & 2018 editions. 13.7.2.18.3 & 4 are deleted because they are also related to the requirement for a fire alarm system. The smoke alarm requirement in 13.7.2.18.5 remains in the code as it did in the 2012 edition as section **13.7.2.12.3.** This was in the previous state fire code. It recognizes that this code does not retroactively apply to existing apartment buildings that were constructed to requirements in the building code of that time.)

**68. Existing mercantile occupancies.** Section 13.7.2.24 is deleted in its entirety.

### (13.7.2.18 was the reference in 2012, in the 2015 & 2018 editions it is 13.7.2.24. This was in the previous state fire code. It recognizes that this code does not retroactively apply to existing mercantile occupancies that were constructed to requirements in the building code of that time.

**69. Existing business occupancies.** Section 13.7.2.26 is deleted in its entirety.

#### (13.7.2.20 was the reference in 2012 edition. In the 2015 & 2018 editions it is 13.7.2.26. This was in the previous state fire code. It recognizes that this code does not retroactively apply to existing business occupancies that were constructed to requirements in the building code of that time.

**70. Existing day-care and health care occupancies.** Section 13.7.2.6 & 13.7.2.8 is deleted in its entirety.

### <u>This recognizes that this code does not retroactively apply to</u> <u>existing day-care & health care occupancies that were</u> <u>constructed to requirements in the building code of that time.</u>)

**71.** Fire alarm systems inspection, testing, and maintenance **notification.** Section 13.7.3.2.4 is amended by adding section 13.7.3.2.4.1.1 to read as follows: 13.7.3.2.4.1.1 The county fire department shall be given a seventy-two hour notification prior to a scheduled inspection, testing, maintenance or retesting of any fire alarm systems within their respective jurisdiction.

**72.** Fire alarm systems inspection, testing, and maintenance labels. Section 13.7.3.2.4 (this was misnumbered) is amended by adding sections 13.7.3.2.4.4.1, 13.7.3.2.4.4.2, 13.7.3.2.4.4.3, and 13.7.3.2.4.4.4 to read as follows: 13.7.3.2.4.4.1 Labels. Fire alarm systems passing an annual inspection, testing, and maintenance test shall have an approved label affixed to the annunciator panel or, if not present, the fire alarm system control panel in accordance with section 13.7.3.2. Information on the label, at a minimum shall, entail the following:

- (1) Removal of the previous label;
- (2) Indicate the month and year the satisfactory test was performed;
- (3) Certificate of fitness holder's name and number;
- (4) Certificate of fitness holder's company name, address, and contact information;
- (5) Be yellow, at least two and one-fourth of an inch in width, and three and one-fourth of an inch in length;
- (6) Be clearly visible without obstructing the visibility or operation of the annunciator panel or, if not present, fire alarm system control panel; and
- (7) The label shall be clearly visible and punched with no more than one year and one month.

13.7.3.2.4.4.2 Fire alarm systems failing an annual inspection, test, and maintenance test shall leave the expired inspection tag or label in place on the annunciator panel or, if not present, the fire alarm system control panel until the system is repaired.

13.7.3.2.4.4.3 The AHJ and the building owner shall be verbally notified immediately when a fire alarm system becomes inoperable. Alternative notification and response plans shall be implemented after approved by the AHJ until the fire alarm system is fully operational.

13.7.3.2.4.4.4 An inspection, testing, and maintenance report entitled "System Record of Inspection and Testing", "Notification Appliance Supplementary Record of Inspection and Testing", "Initiating Device Supplementary Record of Inspection and Testing", "Mass Notification System Supplementary Record of Inspection and Testing", "Emergency Communications Systems Supplementary Record of Inspection and Testing", "Interface Component Supplementary Record of Inspection and Testing", available on the State Fire Council's website and at each county fire department's fire prevention bureau, or a similar report approved by the AHJ shall be provided to the property owner or agent within fourteen days after a satisfactory test.

#### <u>(This revision standardizes the ITM report form & where it may be</u> found. This adds additional information to the tag or label and expedites the notification to the AHJ of an inoperable fire alarm system. Exhibit B became Annex G)

**73.** Fire alarm systems inspection, testing, and maintenance tag. Section 13.7.3.2.4.7 is amended by adding as follows: Section 13.7.3.2.4.7 Tag. A tag shall be placed on the fire alarm panel when tested in accordance with NFPA 72. Information on the tag shall include the date of testing, testing company and contact information, technician performing the test and certificate of fitness number, and that the test was satisfactory.

### (This was a consolidated county amendment from the NFPA Fire Code 2006 edition into the 2012 edition. Sections changed from 2012 edition to 2015 & 2018 editions. This moved from 13.7.3.2.5 to 13.7.3.2.4.7. The reference in the amendment to 13.7.3.2 is incorrect. Should be NFPA 72 Chapter 14.)

**74.** Fire alarm systems manually activated alarm-initiating devices. Section 13.7.3.3.9.4 is amended to add a new sentence at the end to read as follows: The location of manual fire alarm boxes may be modified by the AHJ.

(Section 13.7.3.3.6 in the 2012 edition is now 13.7.3.3.8.4 in the 2015 & 2018 editions. This amendment allows alternate locations for fire alarm pull stations by the AHJ. An example is the agreement between the State Department of Education and the State Fire Council to allow pull stations to be placed inside of classrooms with identification signs outside of those classrooms. The justification was to reduce vandalism and false activations with the rooms being accessible during school hours. This

### <u>amendment allows alternate locations for fire alarm pull stations</u> <u>by the AHJ.</u>

**75.** Other fire protection systems compliance. Section 13.8.1 is amended to read as follows: Section 13.8.1. Other Fire Protection Systems. Where other fire protection systems are required to be installed by the provisions of this code, or are installed with the approval of the AHJ as an alternative or equivalency, the design and installation of the system shall comply with the appropriate standards listed in Table 13.8.1. The systems shall be inspected, tested, and maintained in accordance with the appropriate NFPA standard.

### (Appropriate NFPA standards describe maintenance requirements. The reference in the code to Section 10.4 is a reference to Building Evacuation which is incorrect.)

**76.** Other fire protection systems inspection, testing, and maintenance label. Section 13.8 is amended to add as follows: Section 13.8.3 Inspection, Testing, and Maintenance Label. Other fire protection systems satisfactorily passing an inspection, testing, and maintenance test shall have an approved label affixed to the manual activation device or, if not present, actuator valve to the extinguishing agent. The label shall, as a minimum, entail the following:

- (1) Removal of the previous label;
- (2) Indicate the type of system, month and year the system was tested;
- (3) Certificate of fitness holder's name and number;
- (4) Certificate of fitness holder's company name, address and contact information;
- (5) Be yellow, at least two and one-fourth of an inch in width, and three and one-fourth of an inch in length;
- (6) Be constructed of a durable material approved by the AHJ;
- (7) Be clearly visible without obstructing the visibility or operation of the system; and
- (8) Be punched with no more than one year and one month.

13.8.4 <u>Hydrostatic Testing</u>. Every twelve years from the date of manufacture, stored pressure extinguishing agent cylinders shall be

hydrostatically tested.

13.8.5 <u>Hydrostatic Testing Label.</u> Stored pressure extinguishing agent cylinders satisfactorily passing a twelve-year hydrostatic test shall, as a minimum, have a label attached to the cylinder as follows:

- (1) Removal of the previous label.
- (2) Indicate the type of system, and month and year the system was tested.
- (3) Certificate of fitness holder's name and number.
- (4) Certificate of fitness holder's company name, address, and contact information.
- (5) Be yellow, at least two and one-fourth of an inch in width, and three and one-fourth of an inch in length.
- (6) Be constructed of a durable material approved by the AHJ.
- (7) Be clearly visible without obstructing the visibility or operation of the system.
- (8) Be punched with no more than one year and one month.

13.8.6 The fire department shall be verbally notified immediately of any systems determined to be out of service. Systems that cannot be utilized for firefighting operations shall have an inoperable system sign affixed to the manual activation device. The sign shall remain in place until all repairs have been made and a satisfactory system test is completed.

13.8.6 Inspection, testing, and maintenance report. An inspection, testing, and maintenance report entitled "Foam Water Sprinkler System", "Other Fire Protection Systems" available on the State Fire Council's website and at each county fire department's fire prevention bureau, or a similar report approved by the AHJ shall be provided to the property owner or agent within fourteen days after the test.

### (<u>This revision standardizes the ITM report form & where it may be</u> found).

13.8.7 Inspection Report. An electronic copy of the unsatisfactory test report shall be submitted to the AHJ within five working days. The AHJ shall determine if the submittal of a satisfactory test report will be required.

13.8.8 Table 13.2.3.4.3A entitled "Fire Protection Systems Reference Dates" may be used as a reference for applicable codes and standards in effect when the building was permitted.

#### <u>(Table 13.8 lists the various NFPA standards for the different</u> <u>types of systems. Exhibits provide additional system information.</u> <u>It also adds additional information to the tag or label and</u> <u>expedites the notification to the AHJ of a failed system.</u>

**77. Means of egress application.** Section 14.1 is amended to read as follows: 14.1 Means of egress application. Means of egress in existing buildings shall comply with this Code and NFPA 101, Life Safety Code. The provisions of this chapter do not apply for new construction. For new construction see the building code. Existing buildings shall be maintained to meet the requirements of the building code at the time the structure was built, unless specifically indicated for existing facilities. Provisions in this chapter are provided for maintenance purposes.

Exception: Stairway marking requirements set forth in Section 10.11.3 shall apply to new and existing construction.

(This was in the previous state fire code. The reference to 14.6.4.1 in the exception of the NFPA 1 Fire Code, 2006 edition, was changed to 10.12.3 to match the appropriate section in the 2012 edition. Maintenance of building and fire protection systems and appliances are the enforceable objectives of the fire code. NFPA 101 is not a fire or building code, but is concerned with the protection of building occupants. The application to existing buildings eliminates conflicts with building code requirements for new construction. There are about 1500 sections that are extracted from NFPA 101 throughout NFPA 1 Fire Code, but there are other important provisions that are not. This means unless specifically adopted they would not apply. In addition, "grandfathering" in building codes leaves a loophole that NFPA 101 closes when imminent danger exists.)

**78.** Screen door assemblies and storm door assemblies. Section 14.5.1.4 is amended by adding an exception at the end to read as follows: Exception: Double-acting screen doors used in conjunction with exit doors having panic hardware in school cafetoriums do not need to comply with this provision.

(This was in the previous state fire code. This allows double acting screen doors to be allowed in school cafetoriums for egress. It was allowed in previous building code amendments to allow doors that swung in both directions and provided additional ventilation for Hawaii's climatic conditions.) The section heading is amended to mirror NFPA 1 "Screen Door Assemblies and Storm Door Assemblies".)

**79.** Locks, latches, and alarm devices. Section 14.5.2.11 is added to read as follows: 14.5.2.11 In accordance with the building code, security gates may be permitted across corridors or passageways in school buildings if there is a readily visible durable sign on or adjacent to the gate, stating `THIS GATE IS TO REMAIN SECURED IN THE OPEN POSITION WHENEVER THIS BUILDING IS IN USE'. The sign shall be in letters not less than one inch high on a contrasting background. The use of this exception may be revoked by the building official for due cause.

(This was in the previous state fire code. This was allowed in previous editions of the building code as amended, to provide security to corridors and passageways after regular school hours, and still provide clear egress width for occupants when classes are in session. The section heading is amended to mirror NFPA 1 "Locks, Latches, and Alarm Devices".)

**80.** Allowable occupant load increases. Section 14.8.1.3.1 is amended to read as follows: 14.8.1.3.1 The occupant load in any building or portion thereof shall be allowed to be increased from the occupant load established for the given use in accordance with the building code where all other requirements of this Code are also met, based on such increased occupant load. Occupant load increases shall be approved by the AHJ. The fire department shall be notified of any increase in occupant load.

### (This was in the previous state fire code. It allows discretionary

approval by the AHJ, most likely by building/fire officials, for occupant load increases when circumstances or other elements are evaluated to determine whether approval may be granted or not, without compromising life safety. It also provides for fire department notification.)

**81. Egress capacity.** Section 14.8.3.1 is amended to read as follows: 14.8.3.1 Egress capacity for approved components of means of egress shall be based on the capacity factors shown in the building code.

### (This was in the previous state fire code. It requires eqress capacities to be determined by the building code.)

**82.** Arrangement and marking of exit discharge. Section 14.11.3 is amended to add as follows: 14.11.3.4 Emergency exit door and exit discharge signage. When required by the AHJ, a sign shall be displayed permanently near or on the discharge side of each required non-fire-rated exit door or exit discharge in letters not less than two inches (fifty-one millimeters). The wording of the required sign can only be modified with prior written approval of the AHJ. The sign shall read as follows:

### EMERGENCY EXIT DO NOT OBSTRUCT

(This is a new amendment. Many required exit doors are often found to be obstructed by parked vehicles or other objects in front of the discharge side of required exit doors. This is presumably because the doors are unmarked and the public has no indication they are blocking an exit, violating Section 14.10.4.3.)

**83.** Special signs at elevators. Section 14.14.8 is amended to add as follows: 14.14.8.4 At all elevator locations on each floor level above and below the floor of exit discharge, there shall be displayed in a conspicuous location a sign reading: ""IN CASE OF FIRE USE EXIT

STAIRWAYS. DO NOT USE ELEVATORS" ". Lettering shall be not less than 5/8-inch high.

Exception: Signs at least 2-3/4-inches X 2-1/4-inches in overall size with legible wording and approved by the AHJ, may be used as an alternate and shall be affixed at each elevator call button assembly.

Elevator service companies shall have their name and telephone number in the elevator key box.

# <u>(This was in the previous state fire code. This adds a requirement for location and warning signs at every level of each elevator lobby.) The section heading is amended to mirror NFPA 1 "Special Signs".)</u>

**84. Water supply during construction.** Section 16.5.3.1.1 is amended to read as follows: 16.5.3.1.1 A water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material is present.

### (This is a new amendment. It changes as soon as combustible material "accumulates" to "is present" to clarify that a water supply is required as soon as combustible material exists on the property during construction.)

**85. Required access.** Section 18.2.3.1.3 is amended to read as follows: 18.2.3.1.3 The provisions of 18.2.3.1 through 18.2.3.2.2.1 shall be permitted to be modified by the AHJ where any of the following conditions exists:

- (1) Not more than two one- and two-family dwellings protected by an approved automatic sprinkler system in accordance with Section 13.1;
- (2) Not more than two existing one- and two-family dwellings;
- (3) Private garages having an area not exceeding 1000 ft<sup>2</sup>;
- (4) Carports having an area not exceeding 1000 ft<sup>2</sup>;
- (5) Agricultural buildings having an area not exceeding 1000 ft<sup>2</sup>; and
- (6) Sheds and other detached buildings having an area not exceeding  $1000 \text{ ft}^2$ .

(This is a new amendment for the 2012 edition. It changes (1) and (2) to "Not more than two" one- and two-family dwellings and existing one- and two-family dwellings to limit its application. Changed the 400's to 1000 sq. ft. in items 3-6 since MFD and Honolulu have county amendments. 400 is too small it is patterned off a U occupancy type building from the building code.)

**86.** Fire department access road widths. Section 18.2.3.5.1.1 is amended to read as follows: 18.2.3.5.1.1 Fire department access roads shall have an unobstructed width of not less than twenty feet (six.one meters) or as approved by the AHJ.

### <u>(This was in the previous state fire code. It requires a clear 20</u> foot width and allows modifications approved by the fire department for certain circumstances.)

**87.** Fire department access road vertical clearance. Section 18.2.3.5.1.2 is amended to read as follows: 18.2.3.5.1.2 Fire department access roads shall have an unobstructed vertical clearance of not less than thirteen feet six inches (four.one meters) or as approved by the AHJ.

### (This was in the previous state fire code. It requires a 13 feet 6 inch vertical height clearance and allows approved modifications by the fire department for certain circumstances.)

88. Fire department access roads bridges or culverts.

Section 18.2.3.5.5.1 is amended to read as follows: 18.2.3.5.5.1 When a bridge or culvert is required to be used as part of a fire apparatus access road, it shall be constructed and maintained in accordance with county requirements.

<u>(This was in the previous state fire code. County requirements</u> <u>follow national standards to support the weight of fire department</u> <u>apparatus. The term "Culverts" was added because they are not</u> <u>addressed in the national code.)</u> **89.** Fire department access roads bridges or culverts live loads. Section 18.2.3.5.5.2 is amended to read as follows: 18.2.3.5.5.2 The bridge or culvert shall be designed for a live load sufficient to carry the imposed loads of fire apparatus.

### (This was in the previous state fire code. County requirements follow national standards to support the weight of fire department apparatus. The term "Culverts" was added because they are not addressed in the national code.)

**90. Water supply fire flow.** Section 18.3.1 is amended to read as follows: 18.3.1 An approved water supply capable of supplying the required fire flow for fire protection shall be provided to all premises upon which facilities, buildings, or portions of buildings are hereafter constructed or moved into the jurisdiction. The approved water supply shall be in accordance with Section 18.4.

## <u>(Somehow this was left out. The 2015 edition amendment was different & carried over from previous amendment editions. Find out why this changed?)</u>

**91.** Minimum number of fire hydrants for fire flow. Section 18.5.4.1 is amended to read as follows: 18.5.4.1. The minimum number of fire hydrants needed to deliver the required fire flow for new buildings in accordance with Section 18.4 shall be determined in accordance with Section 18.5.4 or as approved by the AHJ.

(This was in the 2012, because it was in the previous state fire code and allowed consistent application of hydrant requirements for each county whether it is from a public or private water supply. In 2015, the annex E for hydrant location and distribution was relocated into Section 18.5.1 which is preferred. But this revision allows the AHJ to accept the county water requirements.)

**92. Hydrants out of service.** Section 18.5.9.1 is amended by adding a paragraph to read as follows: The AHJ shall be notified

whenever any fire hydrant is placed out of service or returned to service. Owners of private property required to have hydrants shall maintain hydrant records of approval, testing, and maintenance. Records shall be made available for review by the AHJ upon request.

(This was in the previous state fire code. It allows additional requirements such as fire hydrant systems to be certified and approved before being placed into service, notification of the fire department when hydrants are placed out of service and owners of private hydrants to maintain records of approval, testing and maintenance. Section 18.5.6 in 2012 was changed to 18.5.9 in 2015. This will allow the engine company to preplan. This is consistent with 13.1.8. The reference to the county requirements is unnecessary since the AHJ already approves. The section heading is amended to mirror NFPA 1 "Hydrants Out of Service".)

**93.** Nonmetallic containers. Section 19.2.1.2.1 is amended by adding an exception at the end to read as follows:

Exception: Containers used by one- and two-family dwellings for refuse pickup.

### (This was in the previous state fire code. It allows non-metallic rubbish containers for private residences and to not be fire rated if over the threshold. Private residences was changed to one- and two-family dwellings to be consistent with the defined term used to establish requirements throughout this code.)

**94.** Flame-retardant requirements. Section 20.1.2.1 is amended by adding a new sentence at the end to read as follows: A record of fire-resistant treatment shall be kept on the premises for review by the AHJ.

(This was in the previous state fire code. It adds a requirement for a record of fire-resistant treatment of decorative materials in assemblies to be kept on the premises for the fire department to verify. The section heading is amended to mirror NFPA 1 "Flame-Retardant Requirements".)

**95. Means of egress floor plan.** Section 20.1.5.1.4 is added to read as follows: 20.1.5.1.4 A floor plan indicating the seating arrangements, and location and width of exit ways and aisles shall be submitted to the AHJ for review for places of assembly with an occupant load of three hundred or more persons. A copy of the plan shall be kept on display on the premises. An exit plan shall also be posted in a conspicuous location near the main entrance and shall be maintained in a legible condition by the building owner or agent. The building owner or agent shall be responsible for the inspection before each show or event of all required means of egress from each part of the building, including stairways, egress doors and any panic hardware installed thereon, aisles, and corridors. Passageways and similar elements of the means of egress shall be available for immediate use and free of all obstructions before each show or event. The building owner or agent shall inform all patrons of all required exit locations before each show or event in places of assembly with an occupant load of three hundred or more persons.

(This was in the previous state fire code. It adds requirements for the maintenance of exit ways and aisles for places of assembly with an occupant load of 300 or more persons. "Management" was changed to "building owner or agent" similar to use in section 20.1.5.1. The section heading is amended to mirror NFPA 1 "Means of Egress Inspection".)

**96. Means of egress inspection overcrowding.** Section 20.1.5.1.5 is added to read as follows: 20.1.5.1.5 Authority to Stop Performance. Overcrowding and admittance of persons beyond the approved capacity of a place of assembly are prohibited. The AHJ, upon finding overcrowding conditions or obstructions in aisles, passageways, or other means of egress, or upon finding a condition which constitutes an imminent danger, is authorized to cause the performance, presentation, spectacle, or entertainment to be stopped until such conditions or obstruction is corrected.

(This was in the previous state fire code. It authorizes fire departments to prevent a potential hazard to life safety due to overcrowding. But this is not just overcrowding. It addresses obstructed exits or other imminent dangers, so the title was changed. Also "Menace to life" was changed to "imminent danger" to be consistent with 1.7.16 and 10.3.2 and 3.3.154.)

### 97. Assembly open flame devices and pyrotechnics general.

Section 20.1.5.3, Item (1) is amended to read as follows:

- (1) Pyrotechnic special effect devices shall be permitted to be used on stages before proximate audiences for ceremonial or religious purposes, as part of a demonstration in exhibits, or as part of a performance, provided that all of the following criteria are met:
  - (a) Precautions satisfactory to the AHJ are taken to prevent ignition of any combustible material;
  - (b) Use of the pyrotechnic device complies with Section 65.3;
  - Use of pyrotechnic devices indoors shall only be allowed in buildings protected throughout with automatic fire sprinklers; and
  - (d) Use of pyrotechnic devices indoors shall only be allowed in buildings where all fire and life safety systems are deemed appropriate as determined by the AHJ.

(This amendment adds two additional requirements (c & d) in Item (1) for pyrotechnic special effects. 65.3 take you to 1126 which has requirement for approval by the AHJ to shut down which includes when systems are not deemed appropriate. There is no requirement they be used in a sprinklered building. So this is more restrictive with the sprinkler requirement.)

**98.** Assembly open flame devices and pyrotechnics fire prevention. Section 20.1.5.3 is amended by adding paragraphs (7) and (8) to read as follows:

(7) When approved by the AHJ, open-flame devices may be used by performers, provided adequate precautions are taken to prevent ignition of combustible materials. Such devices shall not be used except in areas protected by an automatic sprinkler system. In addition, a minimum 20 foot clearance to the viewing audience shall be provided, or an approved barrier shall be erected to prevent accidental release onto the viewing audience. Performances with fire shall provide a plan approved by the AHJ. The plan shall address fuel use and storage, device ignition, device usage, and extinguishment procedures.

(8) Portable heating equipment, not flue-connected, shall be allowed only as follows: Equipment fueled by small heat sources which can be readily extinguished by water, such as candles or alcohol-burning equipment (including solid alcohol) may be used provided adequate precautions approved by the AHJ are taken to prevent ignition of any combustible materials.

(This amendment added additional requirement as a separate Item (7) to address the open flames associated with fire dancing. This provision is similar to Item (1) in the previous amendment, but fire dancing does not use pyrotechnic special effects. The beginning statement "when approved by the AHJ" could be used to prohibit the double knife event. The term "suitable noncombustible net" was changed to "approved barrier" because most nets are not non-combustible and some combustible nets could be suitable, this would also suggest a net or plexiglass as suitable barrier. "Suitable" is not a defined term, but "approved" is. "Minimum" is added to the 20 foot clearance because in some cases the AHJ may want more (think of flaming hula-hoop). The second to last sentence is revised for readability. Item (8) is for when portable heating equipment is used to fuel open flame devices. This is worded similar to 20.1.5.2.4 for cooking. "permitted" is changed to "allowed" because a permit is not required. "Satisfactory" is changed to "approved" to require approval by the AHJ. Items (7) and (8) were separate amendments in the previous state fire code; this year they were added as one amendment.)

**99.** Use of school facilities for sleeping. Section 20.2.2.6 is added to read as follows: 20.2.2.6 Use of Educational Facilities for Sleeping. Educational occupancies that allow sleeping on a temporary basis shall:

(1) Have the sleeping location approved by the AHJ;

- (2) Notify the AHJ no less than five (5) days prior to the event;
- (3) Prohibit smoking and open flames and shall provide one of the following:
  - (a) Smoke alarms in the designated sleeping area. When the facility is provided with a fire alarm system, the smoke alarms shall be connected to the fire alarm system; and
  - (b) A fire watch approved by the AHJ.

(This was in the previous state fire code. It provides a minimum degree of protection in an occupancy not designed for sleeping purposes and for a practice of visiting neighbor island students that travel to another neighbor island and spend the evening prior to or after an athletic event at the host school at a much lower cost than a hotel. Fire watch approval is intended to include fire watch duties to the person performing that function. This would be similar to a dormitory. Dormitories require smoke alarms not interconnected in section 13.7.2.16.5.-Section 13.7.1.8.10 allows smoke alarms to be connected to a fire alarm system). Committee voted to amend the above listed section and provide this information to the Hawaii Department of Education. The committee also added Sections 20.2.4.6.1- 20.2.4.6.3 for the AHJ to use in enforcing the provision.)

**100.** Emergency egress drills in schools. Section 20.2.4.2.3, paragraph (1) is amended by adding a new exception at the end to read as follows:

Exception: Fire drills at high schools, middle schools, and intermediate schools shall be conducted at least quarterly during school sessions.

<u>This was in the previous state fire code. It allows fire drills at</u> <u>high and middle schools to be conducted quarterly instead of</u> <u>monthly. The older age groups should be able to retain the fire</u> <u>drill information and practices better than elementary age</u> <u>students. This is placed at the end of Item (1) because that is</u> <u>where the monthly requirement is located. The section heading is</u> <u>amended to mirror NFPA 1 "Emergency Egress Drills", "in</u> <u>schools" was added in by Lloyd to clarify the application.)</u> **101. Manufactured housing.** Section 20.11.5 is deleted in its entirety.

### (This was in the previous state fire code. It is deleted because it is regulated by the building code.)

**102. Tents and temporary membrane structures.** Section 25.1.1 is amended by adding an exception at the end to read as follows: Exception: The provisions of this section do not apply to tents and temporary membrane structures having an area seven hundred square feet or less.

(This was in the previous state fire code. Requirements for tents and temporary membrane structures are regulated by the building code. However, county fire departments have requirements and approve permits for larger tent sizes. This threshold was increase to the county with the smallest permit threshold of 700 sf. (other counties have a 2100 sf permit requirement.) The permit requirement is when the FD can notify the public of the requirements. If this stayed at 400 sf, there may be many events that the FD is not aware of before a permit is required. The committee thought that membrane structures under 700 sf were fairly safe without these requirements. The section heading is amended to mirror NFPA 1 "General".)

**103.** Physical protection for all outside aboveground tanks. Section 42.3.3.6.2 is amended to read as follows: 42.3.3.6.2 Guard posts or other approved means shall be provided to protect tanks and appurtenances that are subject to vehicular damage in accordance with section 60.5.1.9.

(This was in the previous state fire code. All requirements of 60.5.1.9 apply. This is referenced to require the same provisions for guard posts consistently as they have been historically required in Hawaii. The section heading is amended to mirror NFPA 1 "Physical Protection for All Outside Aboveground Tanks.") **104.** Emergency electrical disconnect signs. Section 42.5.7.9 is amended by adding the following sentences at the end as follows: Such devices shall be distinctly labeled as "EMERGENCY FUEL SHUTOFF DEVICE". Signs shall be provided in approved locations. The signs shall be in red letters on a white background, not less than two inches high, with a one-fourth inch stroke.

### (This was in the previous state fire code. It adds important signage information for emergency shutoffs.)

**105.** Fuel dispensing age limitation. Section 42.7.1.1 is amended by adding to read as follows: 42.7.1.1 Age Limitation. Persons under the eligible age to obtain a driver's license are prohibited from dispensing fuel.

(This was in the previous state fire code. It is believed that a person 15 years or older is likely to understand the dangers involved in improperly dispensing fuel into vehicles and are able to act responsibly. Further, persons of this age are eligible to test for driving permits. The age of 15 was changed to coordinate with the signage requirements in Section 42.7.2.5.4, which requires people of licensed age to dispense fuel. And if the license age changes, this still works. The original language "licensed age" was not clear & Lloyd revised).

**106.** Fuel dispensing prohibition of foreign objects. Section 42.7.1 is amended by adding to read as follows: 42.7.1.2 Foreign Objects. The placement of a foreign object(s), that allows the fuel dispensing lever to remain in the open position, is prohibited at all times.

<u>(This was in the previous state fire code. It prohibits an unsafe practice and requires persons to be in constant attendance when refueling is in progress. The section heading is amended to mirror NFPA 1 "Operational Requirements"</u>

**107. Fuel dispensing signs.** Section 42.7.2.6.4 is amended to

read as follows: 42.7.2.6.4 Signs. Warning signs shall be conspicuously posted in the dispensing area and shall incorporate the following or equivalent wording:

#### WARNING:

It is unlawful and dangerous to dispense gasoline into unapproved containers. No smoking. Stop motor. No filling of portable containers in or on a motor vehicle. Place container on ground before filling. Discharge your static electricity before fueling by touching a metal surface away from the nozzle. Do not re-enter your vehicle while gasoline is pumping. If a fire starts, **do not** remove nozzle — back away immediately. Do not allow individuals under licensed age to use the pump. The placement of a foreign object(s), that allows the fuel dispensing lever to remain in the open position, is prohibited at all times.

(This was in the previous state fire code. It keeps the most important safety information and adds the last two items that is consistent with previous amendment requirements. The second to last amended line is returned to the model code language because the amendment to cite the 15 year age limit was revised to "licensed age." The FPC believed the foreign object prohibition needs to be reinforced with other prohibited requirements.)

**108.** Attended self-service fuel dispensing prohibition of foreign objects. Section 42.7.4 is amended by adding as follows: 42.7.4.3.2 The placement of a foreign object, that allows the fuel dispensing lever to remain in the open position, is prohibited at all times.

Statistical history on fires or mishaps does not justify prohibiting the latch open devices. Existing dispensers may not have latch open devices so this amendment is still needed.

109. Unattended self-service fuel dispensing prohibition of

**foreign objects.** Section 42.7.5.4.1 is added to read as follows: 42.7.5.4.1 The placement of a foreign object, that allows the fuel dispensing lever to remain in the open position, is prohibited at all times.

<u>Statistical history on fires or mishaps does not justify prohibiting</u> <u>the latch open device. Existing dispensers may not have latch</u> <u>open devices so this amendment is still needed. This amendment</u> <u>originally replaced 42.7.5.4, which would have deleted requiring a</u> <u>latch-open device. This needs to be retained & this amendment</u> <u>adds the prohibition of placing foreign objects to keep the nozzle</u> <u>open.</u>

**110.** Flammable finish spray booth inspection, testing, and maintenance. Section 43.1.7 is amended by adding as follows: 43.1.7.1.5 Flammable finishing spray booth and spray room installed in accordance with this code shall be inspected, tested, and maintained in accordance with NFPA 17, 25, 33, 34 and 2001.

43.1.7.1.6 Inspection tag, label, and collar. Refer to the chapter on automatic fire sprinklers and other fire protection systems.

43.1.7.1.7 Inspection Report. Refer to the chapter on automatic fire sprinklers and other fire protection systems for requirements.

### (This adds referenced NFPA standards for maintenance, system tag information, and reporting.)

**111.** Commercial cooking extinguishing system acceptance test. Section 50.4.3 is amended by adding as follows: 50.4.3.4. Prior to the commencement of initial cooking operations, a satisfactory acceptance test of the system shall be made in accordance with the manufacturer's instructions. The acceptance test shall be of an approved method and witnessed by the AHJ.

(This is a consolidated county amendment. It authorizes the AHJ to approve and witness the acceptance test of commercial cooking extinguishing systems before cooking operations commence. The

### <u>section heading is amended to mirror NFPA 1 "General</u> <u>Requirements".)</u>

**112. Inoperable commercial cooking extinguishing or exhaust system.** Section 50.5.1.6.1 is amended to read as follows: Where the fire extinguishing system or exhaust system is inoperable the AHJ shall be verbally notified immediately. Where the systems are tested as unsatisfactory, the system owner or owner's representative shall be notified in writing of the impairment. [Eff ] (Auth: RCH §4-105; ROH §1-9.1; HRS §132-2) (Imp: HRS §132)

### (This adds immediate notification to the AHJ.)

**113.** Commercial cooking inspection, testing, and maintenance reference table. Section 50.6.2.2 is amended by adding as follows: 50.6.2.2.1 A list of the appropriate commercial cooking extinguishing systems are found in Table 13.2.3.4.3.A entitled "Fire Protection Systems Reference Dates". Other systems shall be approved by the AHJ. [Eff ] (Auth: RCH §4-105; ROH §1-9.1; HRS §132-2) (Imp: HRS §132)

### (This adds a referenced table for appropriate NFPA standards with their editions.)

**114.** Commercial cooking extinguishing system inspection, testing, and maintenance reports. Section 50.6.2 is amended by adding Sections 50.6.2.8.2 and 50.6.2.8.3 to read as follows:

50.6.2.8.2 An inspection, test, and maintenance report entitled "Commercial Cooking Extinguishing System Inspection, Testing and Maintenance Report" or similar report available on the State Fire Council's website and approved by the AHJ shall be provided to the property owner or agent within fourteen days after the test.

50.6.2.8.3 An electronic copy of the unsatisfactory test report shall be submitted to the AHJ within five working days. The AHJ shall determine if the submittal of a satisfactory test report will be required.

### (This clarifies reporting requirements to the owner and the AHJ.)

**115.** Commercial cooking extinguishing system inspection, testing, and maintenance tag. 50.6.3.3 is amended by adding Section 50.6.3.3.3 to read as follows: 50.6.3.3.3 Inspection tag. Commercial cooking extinguishing systems passing an inspection shall have an approved tag affixed to the hood's extinguishing system piping near the manual activation device. The tag or label, as a minimum, shall entail the following:

- (1) Removal of the previous label;
- (2) Type of system tested;
- (3) Month and year the system was tested;
- (4) Certificate of fitness holder's name and number;
- (5) Certificate of fitness holder's company name, address and contact information;
- (6) Be yellow, at least two and one-fourth of an inch in width, and three and one-fourth of an inch in length without any visual obstructions;
- (7) Be constructed of a durable material approved by the AHJ; and
- (8) Be punched with no more than one year and one month.

### (Tagging identification is clarified.)

### 116. Hazardous materials management plan (HMMP) on-

**site.** Section 60.1.5 is amended by adding Section 60.1.5.4 to read as follows: The HMMP shall be made available on site.

### (This was in the previous state fire code. It requires the Hazardous Materials Management Plan (HMMP) for buildings containing high hazard contents to be available on the premises for review by the AHJ. The section heading is amended to mirror NFPA 1 "Hazardous Materials Management Plan (HMMP)".)

**117. Hazardous materials protection from vehicles.** Section 60.5.1.9.2, Item (2) is amended to read as follows:

(2) They shall be spaced not more than three feet between posts on center.

### (This was in the previous state fire code. To protect hazardous material storage in tanks from vehicle damage it requires three feet spacing instead of four feet for guard posts.)

**118.** Fireworks removal. Section 65.1 is amended by adding Section 65.1.3 to read as follows: 65.1.3 The AHJ is authorized to require the owner to remove at the expense of the owner, all fireworks offered for sale, stored, or possessed in violation of Chapter 65, or other applicable state or county laws or rules.

## <u>(This was in the previous state fire code. It authorizes the AHJ to have the owner, at their expense, to remove all fireworks from the premises when violations of this chapter or other laws governing fireworks are discovered.</u>

**119. Fireworks regulation.** Section 65.1 is amended by adding Section 65.1.4 to read as follows: 65.1.4 Importation, storage, possession, sale, purchase, transfer, public displays and discharge of fireworks shall be in accordance with chapter 132D, HRS.

### (This was in the previous state fire code. It references HRS 132D, which regulates fireworks in the state. The section heading is amended to mirror NFPA 1 "General".)

**120. Fireworks permits.** Section 65.9.2.2 is deleted in its entirety.

### (This was in the previous state fire code. Fireworks permits are issued and approved by the counties.)

**121. Consumer fireworks retail sales.** Section 65.10 is added to read as follows: Section 65.10 Retail sales of consumer fireworks in

both new and existing buildings, structures, and facilities shall comply with the requirements of Chapter 6 and 7 of NFPA 1124, 2013 Edition.

### (This was added to have requirements for storage & retail sales as NFPA 1124 this was deleted from the 2015 edition. NFPA 1124 is no longer being updated or published, however in lieu of creating requirements not based on a national standard this was referenced. Also added to the References Section.)

### **122.** Flammable and combustible liquid tank permits.

Section 66.1.5 is amended to read as follows: 66.1.5 Permits and Plans. Permits, where required, shall comply with Section 1.12 and applications for permits shall be submitted with a proposed site plan.

### (This was in the previous state fire code. This allows the language for permits to remain because specific permit requirements were deleted in Section 1.12.8 so each county can place them in their county fire code. Plans were added to clarify that they shall be submitted with the permit application.).

**123. Unpermitted flammable and combustible liquid tank prohibition.** Section 66.1.5 is amended by adding Section 66.1.5.1 to read as follows: 66.1.5.1. Filling Unpermitted Tanks Prohibited. No fuel supplier shall fill or cause to be filled, an unpermitted storage tank. It is the supplier's responsibility to request and be presented with a copy of the approved permit issued by the AHJ.

## <u>(This was a consolidated county fire code amendment. It prohibits fuel suppliers from filling an unpermitted tank and requires an copy of the approved permit to be available to the fuel supplier for verification.).</u>

**124.** Underground flammable and combustible liquid tank closure in place. Section 66.21.7.4.3.3 is amended to read as follows: 66.21.7.4.3.3 Underground Tanks\_Permanently Closed in Place. Underground tanks may be permanently closed in place only if a certified

structural engineer confirms that the removal of the tank will jeopardize the structural integrity of the existing building. An affidavit attesting to this determination shall be submitted to the AHJ prior to taking permanent closure measures. Tanks permanently closed in place shall meet all the following requirements:

- (1) All applicable AHJs shall be notified;
- (2) A safe workplace shall be maintained throughout the prescribed activities;
- (3) All flammable and combustible liquids and residues shall be removed from the tank, appurtenances, and piping and shall be disposed of in accordance with regulatory requirements and industry practices, using a written procedure;
- (4) The tank, appurtenances, and piping shall be made safe by either purging them of flammable vapors or inerting the potential explosive atmosphere. Confirmation that the atmosphere in the tank is safe shall be by testing of the atmosphere using a combustible gas indicator if purging, or an oxygen meter if inerting, at intervals in accordance with written procedures;
- (5) Access to the tank shall be made by careful excavation to the top of the tank;
- (6) All exposed piping, gauging and tank fixtures, and other appurtenances, except the vent, shall be disconnected and removed;
- (7) The tank shall be completely filled with an inert solid material;
- (8) The tank vent and remaining underground piping shall be capped or removed;
- (9) The tank excavation shall be backfilled; and
- (10) A record of tank size, location and date of permanent closure shall be retained by the owner and a copy submitted to the AHJ.

Allows abandonment in place for tanks that cannot be removed only due to the structural integrity of existing buildings above or nearby underground fuel storage tanks. The provision keeps items 1-9 in the model code and adds item (5) from the previous amendment about records. This provides reasonable safety precautions for tanks to be left in its underground location.) **125. Unpermitted liquefied petroleum gases and natural gases tank prohibition.** Section 69.1.2 is amended by adding Section 69.1.2.1 to read as follows: 69.1.2.1. Filling Unpermitted Tanks Prohibited. No fuel supplier shall fill or cause to be filled, an unpermitted storage tank. It is the supplier's responsibility to request and be presented with a copy of the approved permit issued by the AHJ.

(This is a consolidated county fire code amendment. It applies to liquefied petroleum gases and liquefied natural gases and prohibits fuel suppliers from filling an unpermitted tank and requires an copy of the approved permit to be available to the fuel supplier for verification. This is the same requirement for flammable liquid tanks. The title was changed to match the amendment 66.1.5.1. The section heading is amended to mirror NFPA 1 "Permits".)