**COUNTY OF HAWAI'I** 



**STATE OF HAWAI'I** 

BILL NO. 221 (DRAFT 3)

### ORDINANCE NO. 23 8

### AN ORDINANCE AMENDING CHAPTERS 17 AND 26 OF THE HAWAI'I COUNTY CODE 1983 (2016 EDITION, AS AMENDED), RELATING TO FIRE.

### BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF HAWAII:

**SECTION 1.** The Hawai'i County Code 1983 (2016 Edition, as amended) is amended by adding a new chapter, relating to fire, to be designated chapter 17, and to read as follows:

### **"CHAPTER 17. FIRE.**

### Article 1. Hawai'i County Fire Code.

### **Division 1. General Provisions.**

Section 17-1-1. Title. This article shall be known as the fire code.

Section 17-1-2. Purpose. The purpose of this article is to adopt the Hawai'i State Fire Code as required by section 107-28, Hawai'i Revised Statutes. This document incorporates, subject to amendment, the 2018 NFPA 1 and the 2018 Hawai'i State Fire Code as adopted in section 12-45.4, Hawai'i Administrative Rule, January 19, 2021. [2018 HSFC: 1]

Section 17-1-3. Scope. This article 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. [2018 HSFC: 2]

Section 17-1-4. Definitions. In this article, unless the context otherwise requires:

"Annex" means the explanatory material attached to the NFPA 1, Fire Code 2018.

"Authority having jurisdiction" or "AHJ" means the Hawai'i fire department.

"Fire chief" means the fire chief of the Hawai'i fire department or the chief's

### designee.

"Fire department" means the Hawai'i fire department.

"New construction" means the scope of a construction project currently permitted under chapter 5.

"NFPA" means the National Fire Protection Association. [2018 HSFC: 3] Section 17-1-5. Permits. A permit from the AHJ may be required for any area regulated by this article. [2018 HSFC: 5]

### **Division 2. Installation Requirements.**

## Section 17-1-21. National Fire Protection Association 1, Fire Code and Hawai'i State Fire Code.

- (a) The National Fire Protection Association (NFPA) 1, Fire Code, 2018 Edition, is adopted and incorporated by reference into this article, subject to the amendments hereinafter set forth. The annexes to the NFPA 1, Fire Code are not adopted except as provided in this article.
- (b) The Hawai'i State Fire Code (2018 HSFC) has also been incorporated into this article, subject to amendment. Relevant provisions of the HSFC 2018 are set out in brackets following each installation provision.

[2018 HSFC: 4]

(1) **Title. Section 1.1.2** is amended to read as follows:

**"1.1.2 Title.** This chapter shall be known as the fire code, may be cited as such, and will be referred to herein as this code." [2018 HSFC: 6]

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(2) **Conflicts. Section 1.3.3.3** is added to read as follows:

"1.3.3.3 When a conflict between this code and the building code, regarding the design and construction of buildings occurs, the building code, chapter 5A, shall apply.

Exception: This code shall not apply to new construction except when this code is specifically referenced in the building code, chapter 5A." [2018 HSFC: 7]

(3) **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 chapter 5A, the building code." [2018 HSFC: 8]

(4) 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." [2018 HSFC: 9]

(5) Section **1.7.12.1.1** is added to read as follows:

**"1.7.12.1.1** Pursuant to HRS 132-9, plans or specifications, or both, shall be submitted to the fire chief, when required by chapter 5, the construction administrative code, to show compliance with this code for the following:

- (1) Construction, alteration, rehabilitation, or addition to any building, structure, or facility;
- (2) Changes in the use of a building or structure, or a change in occupancy; and
- (3) Installation or alteration of any procedures, equipment, property, or structure for any life safety or fire protection systems.

No work shall commence without the necessary permits issued by the AHJ."

(6) Section 1.7.12.1.2. is added to read as follows:

**"1.7.12.1.2** When plans or specifications are required to be submitted to the AHJ under section 1.7.12.1.1 of this code, an additional fire plan review fee shall be paid at the time of submitting plans and specifications for review.

- (1) The plan review fee shall be in the amount of fifteen percent of the building permit plan review fee assessed pursuant to section 5-7-1(a) and shall accompany the application, plans, and specifications that are filed for review pursuant to section 1.7.12.1.1. Plan review fees shall be assessed in addition to the building permit fees.
- (2) No additional plan review fee will be assessed for a corrected submittal."
- (7) Section 1.7.17.4 is added to read as follows:

**"1.7.17.4** Standby and fire watch personnel shall keep documentation on an hourly basis or as often as deemed necessary by the fire chief. Documentation shall be available for review upon request by the fire chief."

(8) **Fire insurance records and reports.** Section **1.11.5** is added to read as follows:

"1.11.5 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 fire chief. 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. Current National Fire Incident Reporting System report forms may be used." [2018 HSFC: 10]

(9) **Permits. Section 1.12.8** and **Tables 1.12.8(a), (b), (c), and (d)** are deleted in their entirety and replaced with the following:

### "1.12.8 Permits required.

Permits shall be required in accordance with Table 1.12.8(a):

Operations and Materials	Permit Required	NFPA 1 Cross Reference Section Number	Assessed Fee
Application of flammable finishes	Annually	43.1.1.4	Annual permit fee: \$200 for each 43.1.1.4 permit
Carnivals and fairs	To conduct a carnival or fair. Permit shall be required for each event and valid for the duration of the event.	10.14.1	Permit and fee: \$200 for each 10.14.1, carnival or fair permit

### Table 1.12.8(a) Permit Fees

Farmers markets, open markets, and flea markets	This permit shall apply to the property owner, lessee, or his or her representative of which the event is occurring. Permits shall be good for up to six months after issuance, and shall expire on September 30 or March 31, whichever comes first. Permit shall be kept on site and available for review upon request by the AHJ during normal business hours.	10.14.1	Bi-annual permit fee: \$100 for each 10.14.1, Farmers Market, Open Market, and Flea Market permit
Fireworks	Use of fireworks	65.2.3 65.4.2 65.5.2	<b>Permits</b> Display: \$110 Fireworks: \$25 Cultural: \$25
Fire alarm systems	Acceptance test	13.1.1.1	Initial Inspection Fees Initial inspection fee: None Subsequent Inspection Fees 1-100 devices or appliances: \$100 101-250 devices or appliances: \$150 More than 250 devices or appliances: \$200
Automatic fire extinguishing systems for commercial cooking equipment	Installation and/or removal	13.1.1.1 50.4.2	Initial inspection fee: None Subsequent inspection fee: \$100

Places of assembly	That serve alcohol or have other hazardous conditions. Permit shall be kept on site and available for review by the AHJ during normal business hours.	20.1.1.1	Annual permit fee: \$200 for each 20.1.1.1 permit
Storage tanks: above-ground or under-ground	Permit, installation and/or removal of an above- ground storage tank or under-ground storage tank containing flammable or combustible liquids in excess of 60 gallons.	66.1.5	One-time permit fee: \$200 for each 66.1.5 permit
Tents, canopies, or temporary structures	Tents, canopies, or temporary structures. A permit shall be required for each event utilizing a tent, canopy, or temporary structure in excess of 700 square feet. Tents greater than 10 feet apart shall be considered to be separate tents. Exception: These permits and fees shall not apply to structures used for camping or private functions on private property or to any section 10.15.1 permit.	25.1.2.	Permit fee: \$50 for each permit
Water based fire protection systems	Acceptance test for automatic sprinkler system, standpipe system, and private fire hydrants	13.1.1.1	Initial inspection fee: None Subsequent inspection fee: \$100"

[2018 HSFC: 11]

(10) **Certificates of fitness authorization. Section 1.13.1** is amended to read as follows:

"1.13.1 See Hawai'i 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." [2018 HSFC: 12]

(11) Mandatory certificates of fitness. Section 1.13.2 is amended to read as follows:

**"1.13.2** 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." [2018 HSFC: 13]

(12) **Certification of applicant general. Section 1.13.5.1** is amended to read as follows:

**"1.13.5.1** 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." [2018 HSFC: 14]

(13) Section 1.13.6 is amended to read as follows:

"1.13.6 Certification of applicant transfer. 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." [2018 HSFC: 15]

(14) **Certification of applicant issuing period. Section 1.13.7** is amended to read as follows:

"1.13.7 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." [2018 HSFC: 16] (15) Revocation or suspension of certificates of fitness conditions. Section 1.13.12.1 is amended to read as follows:

**"1.13.12.1** 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." [2018 HSFC: 17]

(16) **Revocation or suspension of certificates of fitness new issuance period.** Section 1.13.12.1.1 is amended to read as follows:

"1.13.12.1.1 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." [2018 HSFC: 18]

(17) Revocation or suspension of certificates of fitness appeals. Section 1.13.12.4 is amended to read as follows:

**\*1.13.12.4** 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." [2018 HSFC: 19]

(18) Section 1.16.1 is amended to read as follows:

**"1.16.1 Where required.** Whenever the AHJ determines violations of this *Code*, the AHJ shall issue a written warning notice to confirm such findings."

(19) **NFPA publications. Section 2.2** is amended by amending the reference to "NFPA 1124" to read as follows:

"NFPA 1124: Code for the Manufacture, Transportation, Storage, and Retail Sales of Fireworks and Pyrotechnic Articles, 2013 Edition." [2018 HSFC: 20] (20) **NFPA official definitions. Section 3.2** is amended by adding the following new definitions to read as follows:

**"3.2.11 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." [2018 HSFC: 21]

**"3.2.12 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." [2018 HSFC: 21]

(21) Electrical code. Section 3.3.54.2 is amended to read as follows:

"**3.3.54.2 Electrical Code.** The electrical code is chapter 5D, the electrical code." [2018 HSFC: 22]

(22) Mechanical code. Section 3.3.54.3 is amended to read as follows:

"**3.3.54.3 Mechanical Code.** The mechanical code is the mechanical code adopted by the jurisdiction." [2018 HSFC: 23]

(23) **Plumbing code. Section 3.3.54.4** is amended to read as follows:

**"3.3.54.4 Plumbing Code.** The plumbing code is chapter 5F, the plumbing code." [2018 HSFC: 24]

(24) 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." [2018 HSFC: 25]

(25) 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." [2018 HSFC: 26]

(26) **Owner/occupant responsibilities of unsafe buildings. Section 10.2.4** is amended by adding the following sentence at the end of the section:

"For abatement of unsafe buildings, see chapter 5, the construction administrative code." [2018 HSFC: 27]

(27) **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." [2018 HSFC: 28]

- (28) **Posting of emergency action plans. Section 10.8.2.1** is amended by amending paragraph (7) to read as follows:
  - "(7) Posting of emergency evacuation diagrams and other items required by the AHJ." [2018 HSFC: 29]
- (29) 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 in their entirety 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.

(1) 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.

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

### **"10.10.1.1 Open Fires.**

- (1) Planned fires for the cooking of food. Persons responsible for such fires not contained within an appliance, such as an imu or smoke house, shall telephone the fire dispatch center on the non-emergency number at least 15 minutes prior to lighting such fires.
- (2) Fires for recreational, decorative, ceremonial or other purposes shall comply with the following:
  - (a) Obtain written permission from the property owner.
  - (b) Submit a letter and site plan to the AHJ for approval at least 14 days prior to the event, that include the:
    - (i) Contact information of the person(s) responsible;
    - (ii) Location or address of the burn site(s);
    - (iii) Date and time of ignition; and
    - (iv) Distances from the burn area to spectators, structures, and vehicles.
  - (c) Event site shall be subject to inspection.
  - (d) Persons responsible shall telephone the Fire Dispatch Center on the non-emergency number at least 15 minutes prior to lighting such fires.
  - (e) Open fire performances before a proximate audience and open fires for recreational, decorative, or ceremonial purposes such as the "lighting of the letters" shall comply with the most current version of NFPA 160."

[2018 HSFC: 30]

## (30) 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 or regulate 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." [2018 HSFC: 31] (31) **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." [2018 HSFC: 32]

(32) **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." [2018 HSFC: 33]

- (33) Cooking equipment on balconies. Section 10.10.6.2 is deleted in its entirety. [2018 HSFC: 34]
- (34) **Storage of combustible materials. Section 10.18.1.1** is added to read as follows:

**"10.18.1.1 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." [2018 HSFC: 35]

- (35) Elevators, Escalators, and Conveyors. Section 11.3 is deleted in its entirety. [2018 HSFC: 36]
- (36) 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." [2018 HSFC: 37]

- (37) **Emergency command center. Section 11.9.5** is amended by adding paragraphs 12, 13, and 14 at the end of the section, 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."
  - [2018 HSFC: 38]
- (38) Roof access for one- and two-family dwellings and townhouses. Section 11.12.2.2.2 is amended to read as follows:

"11.12.2.2.2 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." [2018 HSFC: 39]

(39) **Fire door identification. Section 12.4.7** is added to read as follows:

**"12.4.7 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 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"

[2018 HSFC: 40]

### (40) Fire protection systems general. Section 13.1 is amended to read as follows:

**"13.1 Fire Protection Systems General.** 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."

[2018 HSFC: 41]

(41) **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." [2018 HSFC: 42]

(42) **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." [2018 HSFC: 43]

### (43) 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 working days after the completion of the test." [2018 HSFC: 44]

(44) **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." [2018 HSFC: 45]

## (45) Fire protection systems advanced notification. Sections 13.1.10.1, 13.1.10.2, and 13.1.10.3 are added to read 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." [2018 HSFC: 46]

"13.1.10.2 Failure to comply with the requirements of this section may 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." [2018 HSFC: 46]

**"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." [2018 HSFC: 46]

 (46) Fire protection systems inspection, testing, and maintenance labeling. Sections 13.2.3.3.1, 13.2.3.3.2, 13.2.3.3.2.1, 13.2.3.3.3, 13.2.3.3.3.1, 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 are added to read 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." [2018 HSFC: 47]

#### "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

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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."

[2018 HSFC: 47]

### "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." [2018 HSFC: 47]

### "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."

[2018 HSFC: 47]

### "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 branch, 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." [2018 HSFC: 47]

"**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." [2018 HSFC: 47]

# (47) 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 7/18/2019 may be used as a reference for applicable codes and standards in effect when the building was permitted." [2018 HSFC: 48]

"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." [2018 HSFC: 48]

Building Permit Date	Codes	NFPA References
Permit Date All buildings with building permit dates up to January 2012	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> <li>1. NFPA 11 - Foam Extinguishing Systems - 1988 UFC Standards (Volume II) which references NFPA 11, 1978 Edition with amendments.</li> <li>2. NFPA 11, 1978 Edition with amendments.</li> <li>3. NFPA 11, 1978 Edition with amendments.</li> <li>3. NFPA 11A - Medium and High- Expansion Foam Systems - 1988 Edition.</li> <li>3. NFPA 12 - Carbon dioxide Extinguishing Systems - 1985 Edition.</li> </ul>
		4. NFPA 12A - Halon 1301 fire Extinguishing Systems - 1987 Edition.
		<ol> <li>NFPA 17 - Dry Chemical Extinguishing Systems - 1985 Edition.</li> </ol>
		<ol> <li>NFPA 17A - Wet Chemical Extinguishing Systems - 1986 Edition.</li> </ol>
		<ol> <li>NFPA 96 - Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment - 1987 Edition.</li> </ol>

### "Table 13.2.3.4.3A Fire Protection Systems Reference Dates (7/18/2019)

Building Permit Date	Codes	NFPA References
January 2012 to August 2016	Hawai'i 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. 2. NFPA 12 – Standard on Carbon Dioxide Extinguishing Systems, 2005 Edition. 3. NFPA 12A – Standard on Halon
		<ol> <li>1301 Fire Extinguishing Systems, 2004 Edition.</li> <li>NFPA 17 – Standard for Dry Chemical Extinguishing Systems, 2002 Edition.</li> <li>NFPA 17A - Standard for Wet Chemical Extinguishing</li> </ol>
		<ul> <li>Systems, 2002 Edition.</li> <li>6. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2004 Edition.</li> <li>7. NFPA 2001 - Standard on Clean Agent Fire Extinguishing</li> </ul>
		Systems, 2004 Edition. <b>Fire Alarm Systems</b> 1. NFPA 72 – National Fire Alarm Code, 2002 Edition.

Building Permit Date	Codes	NFPA References
August 2016 to present	Hawai'i State Fire Code (NFPA 1, 2012 Edition) and referenced NFPA standards	<ul> <li>Water-Based Systems</li> <li>NFPA 15 – Standard for Water Spray Fixed Systems for Fire Protection, 2012 Edition.</li> <li>NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2011 Edition.</li> </ul>
		Other Systems1. NFPA 11 – Standard for Low-, Medium-, and High-Expansion Foam - 2010 Edition.2. NFPA 12 – Standard on Carbon Dioxide Extinguishing Systems, 2011 Edition.
		3. NFPA 12A – Standard on Halon 1301 Fire Extinguishing Systems, 2009 Edition.
		4. NFPA 17 – Standard for Dry Chemical Extinguishing Systems, 2009 Edition.
		5. NFPA 17A - Standard for Wet Chemical Extinguishing Systems, 2009 Edition.
1		6. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2011
		Edition. 7. NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems, 2012 Edition.
		Fire Alarm Systems 1. NFPA 72 – National Fire Alarm Code, 2010 Edition."

[2018 HSFC: 48]

- (48) **Fire protection systems existing assembly occupancies. Section 13.3.2.8** is deleted in its entirety. [2018 HSFC: 49]
- (49) Fire protection systems existing educational occupancies. Section 13.3.2.10 is deleted in its entirety. [2018 HSFC: 50]
- (50) Fire protection systems existing health care occupancies. Section 13.3.2.12 is deleted in its entirety. [2018 HSFC: 51]
- (51) Fire protection systems existing detention and correctional facilities. Section 13.3.2.14 is deleted in its entirety. [2018 HSFC: 52]
- (52) Fire protection systems existing hotels and dormitories. Section 13.3.2.16 is deleted in its entirety. [2018 HSFC: 53]
- (53) Fire protection systems existing residential board and care facilities. Section 13.3.2.22 is deleted in its entirety. [2018 HSFC: 54]
- (54) Fire protection systems existing mercantile occupancies. Section 13.3.2.24 is deleted in its entirety. [2018 HSFC: 55]
- (55) **Fire protection systems high-rise buildings. Section 13.3.2.26** is deleted in its entirety. [2018 HSFC: 56]
- (56) 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." [2018 HSFC: 57]

**"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."

[2018 HSFC: 57]

**"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."

[2018 HSFC: 57]

"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." [2018 HSFC: 57]

"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 branch or a similar report approved by the AHJ, shall be provided to the property owner or agent within fourteen days after the test." [2018 HSFC: 57]

"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." [2018 HSFC: 57]

(57) Stationary fire pump inspection, testing, and maintenance. Sections 13.4.8.1 and 13.4.8.2 are added to read as follows:

**"13.4.8.1 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." [2018 HSFC: 58]

**"13.4.8.2 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 branch, or a similar report approved by the AHJ shall be provided to the property owner or agent within fourteen days after the test." [2018 HSFC: 58]

(58) **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." [2018 HSFC: 59]

### (59) **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." [2018 HSFC: 60]

"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." [2018 HSFC: 60] **"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." [2018 HSFC: 60]

**"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 branch, or a similar report approved by the AHJ, shall be provided to the property owner or agent within fourteen days after the test." [2018 HSFC: 60]

"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." [2018 HSFC: 60]

# (60) **Annual maintenance record keeping. Section 13.6.4.3.4.1.1** is amended to read as follows:

"13.6.4.3.4.1.1 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."

[2018 HSFC: 61]

(61) 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."

[2018 HSFC: 62]

# (62) 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."

[2018 HSFC: 63]

(63) **Positive alarm sequence occupant notification. Section 13.7.1.9.4** is amended to read as follows:

**"13.7.1.9.4** 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 twenty-four 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."

[2018 HSFC: 64]

- (64) 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.
   [2018 HSFC: 65]
- (65) 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. [2018 HSFC: 66]
- (66) Existing mercantile occupancies. Section 13.7.2.24 is deleted in its entirety. [2018 HSFC: 67]
- (67) Existing business occupancies. Section 13.7.2.26 is deleted in its entirety. [2018 HSFC: 68]
- (68) Existing day-care and health care occupancies. Sections 13.7.2.6 and 13.7.2.8 are deleted in their entirety. [2018 HSFC: 69]
- (69) Fire alarm systems inspection, testing, and maintenance notification. Section 13.7.3.2.4.1.1 is added 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." [2018 HSFC: 70] (70) Fire alarm systems inspection, testing, and maintenance labels. 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 are added 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."

[2018 HSFC: 71]

"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." [2018 HSFC: 71]

"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." [2018 HSFC: 71]

"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 branch, or a similar report approved by the AHJ shall be provided to the property owner or agent within fourteen days after a satisfactory test." [2018 HSFC: 71] (71) Fire alarm systems inspection, testing, and maintenance tag. Section 13.7.3.2.4.7 is added to read as follows:

"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." [2018 HSFC: 72]

(72) **Fire alarm systems manually activated alarm-initiating devices. Section 13.7.3.3.8.4** 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." [2018 HSFC: 73]

(73) **Other fire protection systems compliance. Section 13.8** is amended to read as follows:

**"13.8 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. The systems shall be inspected, tested, and maintained in accordance with the appropriate NFPA standard." [2018 HSFC: 74]

(74) Other fire protection systems inspection, testing, and maintenance label. Sections 13.8.1, 13.8.2, 13.8.3, 13.8.4, 13.8.5, 13.8.6, and 13.8.7 are added to read as follows:

**"13.8.1 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." [2018 HSFC: 75]

**"13.8.2 Hydrostatic Testing**. Every twelve years from the date of manufacture, stored pressure extinguishing agent cylinders shall be hydrostatically tested." [2018 HSFC: 75]

**"13.8.3 Hydrostatic Testing Label.** 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."

[2018 HSFC: 75]

**\*13.8.4** 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." [2018 HSFC: 75]

**"13.8.5 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 branch, or a similar report approved by the AHJ shall be provided to the property owner or agent within fourteen days after the test." [2018 HSFC: 75]

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**"13.8.6 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." [2018 HSFC: 75]

"13.8.7 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." [2018 HSFC: 75]

### (75) 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 10.12.3 shall apply to new and existing construction." [2018 HSFC: 76]

(76) 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." [2018 HSFC: 77]

# (77) Locks, latches, and alarm devices. Section 14.5.2.13 is added to read as follows:

"14.5.2.13 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." [2018 HSFC: 78] (78) 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." [2018 HSFC: 79]

### (79) 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." [2018 HSFC: 80]

### (80) Special signs at elevators. Section 14.14.8.4 is added to read 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." [2018 HSFC: 81]

# (81) Water supply during construction. Section 16.4.3.1.1 is amended to read as follows:

"16.4.3.1.1 A water supply for fire protection, either temporary or permanent, shall be made available as soon as combustible material is present." [2018 HSFC: 82]

### (82) 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 ft<sup>2</sup>." [2018 HSFC: 83]

(83) **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 (6.1 meters) or as approved by the AHJ." [2018 HSFC: 84]

(84) **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 (4.1 meters) or as approved by the AHJ." [2018 HSFC: 85]

(85) Fire department access roads (FDAR)-turning radius. Section 18.2.3.5.3.1 is amended to read as follows:

**"18.2.3.5.3.1** Fire department access roads shall have a minimum inside turning radius of thirty feet, and a minimum outside turning radius of fifty feet."

(86) **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." [2018 HSFC: 86]

(87) 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." [2018 HSFC: 87]

(88) 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." [2018 HSFC: 88]

(89) Alternative water supply. 18.3.1.1.1 is added to read as follows:

**"18.3.1.1.1** NFPA 1141 and 1142 shall serve as references for additional water supply and flow information."

(90) 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." [2018 HSFC: 89]

(91) Hydrants out of service. Section 18.5.9.1 is added to read as follows:

"18.5.9.1 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." [2018 HSFC: 90]

(92) 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." [2018 HSFC: 91]

(93) **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." [2018 HSFC: 92]

(94) 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." [2018 HSFC: 93]

(95) 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." [2018 HSFC: 94]

- (96) Assembly open flame devices and pyrotechnics general. Section 20.1.5.3, is amended by amending paragraph (1), 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;
    - (c) 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."

[2018 HSFC: 95]

- (97) **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. [2018 HSFC: 96]
  - (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."

[2018 HSFC: 96]

(98) Occupant load sign for assemblies. Section 20.1.5.10.4.1 is amended to read as follows:

"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."

(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; and
- (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."

[2018 HSFC: 97]

(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." [2018 HSFC: 98]

- (101)**Manufactured housing. Section 20.11.5** is deleted in its entirety. [2018 HSFC: 99]
- (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." [2018 HSFC: 100] (103)**Physical protection for all outside aboveground tanks**. **Section 42.3.3.7.2** is amended to read as follows:

"42.3.3.7.2 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." [2018 HSFC: 101]

(104) **Emergency electrical disconnect signs. Section 42.5.7** is amended by adding the following sentences at the end, to read 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 onefourth inch stroke." [2018 HSFC: 102]

(105) Fuel dispensing age limitation. Section 42.7.1.1 is added 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." [2018 HSFC: 103]

(106)**Fuel dispensing prohibition of foreign objects.** Section 42.7.1.2 is added 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." [2018 HSFC: 104]

(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." [2018 HSFC: 105]

### (108)Attended self-service fuel dispensing prohibition of foreign objects. Section 42.7.4.3.2 is added to read 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." [2018 HSFC: 106]

(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." [2018 HSFC: 107]

### (110) Flammable finish spray booth inspection, testing, and maintenance. Sections 43.1.7.1.4, 43.1.7.1.5, and 43.1.7.1.6 are added to read as follows:

"43.1.7.1.4. 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." [2018 HSFC: 108]

"43.1.7.1.5. Inspection Tag, Label, and Collar. Refer to the chapter on automatic fire sprinklers and other fire protection systems." [2018 HSFC: 108]

"43.1.7.1.6 Inspection Report. Refer to the chapter on automatic fire sprinklers and other fire protection systems for requirements." [2018 HSFC: 108]

(111)Commercial cooking extinguishing system acceptance test. Section **50.4.3.4** is added to read 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." [2018 HSFC: 109]

(112)Inoperable commercial cooking extinguishing or exhaust system. Section 50.5.1.6.1 is amended to read as follows:

**"50.5.1.6.1** 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." [2018 HSFC: 110]

### (113)Commercial cooking inspection, testing, and maintenance reference table. Section 50.5.2.2.1 is added to read as follows:

**"50.5.2.2.1** 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." [2018 HSFC: 111]

(114) Commercial cooking extinguishing system inspection, testing, and maintenance reports. Sections 50.5.2.8.2 and 50.5.2.8.3 are added to read as follows:

**"50.5.2.8.2.** 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." [2018 HSFC: 112]

**\*50.5.2.8.3.** 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." [2018 HSFC: 112]

### (115)Commercial cooking extinguishing system inspection, testing, and maintenance tag. Section 50.5.3.3.3 is added to read as follows:

**"50.5.3.3.3 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."

[2018 HSFC: 113]

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

Section 60.1.6.4 is added to read as follows:

"60.1.6.4 The HMMP shall be made available on site." [2018 HSFC: 114]

- (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." [2018 HSFC: 115]

### (118) **Fireworks removal. Section 65.1.3** is added 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." [2018 HSFC: 116]

(119) **Fireworks regulation. Section 65.1.4** is added 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." [2018 HSFC: 117]

- (120)**Fireworks permits. Section 65.9.2.2** is deleted in its entirety. [2018 HSFC: 118]
- (121)**Consumer fireworks retail sales.** Section 65.10 is added to read as follows:

**"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." [2018 HSFC: 119]

(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." [2018 HSFC: 120]

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(123)**Unpermitted flammable and combustible liquid tank prohibition. Section 66.1.5.1** is added 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." [2018 HSFC: 121]

(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."
- [2018 HSFC: 122]

(125)**Unpermitted liquefied petroleum gases and natural gases tank** prohibition. Section 69.1.2.1 is added 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." [2018 HSFC: 123]

(126)**LPG-enclosures. Sections 69.3.5.1.4 through 69.3.5.1.6** are added to read as follows:

**"69.3.5.1.4** Containers shall not be within enclosures that would cause the buildup of flammable gasses in the event of a leak."

"69.3.5.1.5 Enclosures shall not be within three feet of the tank."

"69.3.5.1.6 Enclosures shall not impede access to fire suppression activities."

(127) **Section 69.3.8.1.2.1** is added to read:

**"69.3.8.1.2.1 Vehicular Protection.** When Bollards or Guard posts are installed, they shall meet the requirements of Section 60.5.1.9.2 of this code."

(128)**LPG-cooking inside of vehicles. Sections 69.3.12.8.5** and **69.3.12.8.6** are added to read as follows:

**"69.3.12.8.5 LPG-cooking inside of vehicles.** Portable LPG cylinders greater than 2.7 lb. capacity shall not be used or stored in an area that will obstruct or impede the egress in the case of an emergency. Not more than 12 LPG cylinders of 2.7 lb capacity or less shall be kept, used, or stored in any vehicle. LPG cylinders of 5 gallon capacity or greater shall not be used within any vehicle. All LPG appliance and equipment shall be listed for that use."

**"69.3.12.8.6** Portable fire extinguishers shall be provided as required in NFPA 10."

(129) Section 69.3.15.3.13.1 is amended to read as follows:

**"69.3.15.3.13.1 Vehicle Fuel Dispenser and Dispensing Systems General Installation Provisions.** Concrete filled guard posts constructed of steel not less than four inches in diameter, with the following characteristics:

(1) Spaced not more than three feet between posts on center.

- (2) Set not less than three feet deep in concrete footing of not less than fifteeninches diameter.
- (3) Set with the top of the posts not less than three feet above ground.
- (4) Located not less than three feet from the protected installation."

(130) Section 69.4.2.2.14.1 is added to read as follows:

**"69.4.2.2.14.1 Fuel Supplier Responsibility.** No fuel supplier shall fill or cause to be filled, any unpermitted fuel storage tank that should otherwise be permitted.""

**SECTION 2.** The Hawai'i County Code 1983 (2016 Edition, as amended) is amended by moving article 2 (Fireworks Code) from chapter 26 to chapter 17, and redesignating all section numbers by replacing all references to "chapter 26" with "chapter 17." Section numbers would be amended as follows:

Sections 26-2-1 through 26-2-3 would become 17-2-1 through 17-2-3; Sections 26-2-21 through 26-2-23 would become 17-2-21 through 17-2-23; Sections 26-2-31 through 26-3-37 would become 17-2-31 through 17-2-37; Sections 26-2-41 through 26-2-47 would become 17-2-41 through 17-2-47; Sections 26-2-51 through 26-2-53 would become 17-2-51 through 17-2-53; and Section 26-2-61 would become 17-2-61.

**SECTION 3.** The Hawai'i County Code 1983 (2016 Edition, as amended) is amended by moving article 3 (Fireworks Code) from chapter 26 to chapter 17, and redesignating all section numbers by replacing all references to "chapter 26" with "chapter 17." Section numbers would be amended as follows: sections 26-3-1 through 26-3-7 would become 17-3-1 through 17-3-7.

**SECTION 4.** Chapter 26, of the Hawai'i County Code 1983 (2016 Edition, as amended) is repealed.

**SECTION 5.** Severability. If any provision of this ordinance, or the application thereof to any person or circumstance, is held invalid, the invalidity does not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are severable.

**SECTION 6.** Upon passage of this ordinance, the County Clerk may rearrange, number, and renumber sections and parts of sections, and change reference numbers within the County Code to agree with renumbered articles, divisions, sections, and parts of sections.

**SECTION 7.** This ordinance shall take effect upon approval.

INTRODUCED BY:

COUNCIL MEMBER, COUNTY OF HAWAI'I

Hilo , Hawai'i

Date of Introduction:	December 21, 2022
Date of 1st Reading:	December 21, 2022
Date of 2nd Reading:	January 5, 2023
Effective Date:	January 13, 2023

REFERENCE Comm. 1029.9

### OFFICE OF THE COUNTY CLERK County of Hawai'i <u>Hilo</u>, Hawai'i

### COUNTY CLERK COUNTY OF HAWAN

2023 JAN 17 AN 11:07

			(Draft 3)				
Introduced By:	Ashley L. Kierkiewicz(B/R)		ROLL CALL VOTE				
Date Introduced:	December 21, 2022			AYES	NOES	ABS	EX
First Reading:	December 21, 2022	-	Evans	Х			
Published:	December 30, 2022		Galimba	Х			
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REMARKS:	·		Kagiwada	Х			
			Kāneali'i-Kleinfelder	Х			
			Kierkiewicz	X			
			Kimball	х			
			Lee Loy	X			
			Villegas	Х			
Second Reading:	January 5, 2023			9	0	0	0
To Mayor:	January 10, 2023	•	L		ļ		
Returned:	January 17, 2023		ROLL CALL VOTE				
Effective:	January 13, 2023			AYES	NOES	ABS	EX
Published:	February 3, 2023		Evans	x			
			Galimba	X			
REMARKS:	<u> </u>		Inaba	X			
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			Kagiwada	X			
			Kāneali'i-Kleinfelder	X			
			Kierkiewicz				· · · · ·
			Kimball	X			
			Lee Loy	X			
			Villegas	Х			ļ

I DO HEREBY CERTIFY that the foregoing BILL was adopted by the County Council published as indicated above.

13M Approved/Disapproved this\_ day Januan 2023 of\_ Ő

MAYOR, COUNTY OF HAWAI'I

NCIL CHAIRPERSON

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CLERK COUNTY

221 (Draft 3) Bill No.: C-1029.9/PWMTC-26 Reference: 23 8 Ord No .: