

State Fire Council

HAWAII STATE FIRE CODE

Effective Date: January 19, 2021

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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).

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.

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.

4. Adoption of the 2018 NFPA 1, Fire Code. The NFPA 1, Fire Code, 2018 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.

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.

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.

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.

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.

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.

10. 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 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.

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

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

22. Electrical code. Section 3.3.54.2 is amended to read as follows: 3.3.54.2 Electrical Code. The electrical code is the electrical code adopted by the jurisdiction.

23. 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.

24. Plumbing code. Section 3.3.54.4 is amended to read as follows: 3.3.54.4 Plumbing Code. The plumbing code is the plumbing code adopted by the jurisdiction.

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.

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.

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.

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.

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.

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.

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

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.

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.

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.

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.

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

35. 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.

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

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.

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.

39. Roof access for one- and two-family dwellings and townhouses. Section 11.12.2.2 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.

40. 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 (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**

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.

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.

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.

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.

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.

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.

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, 13.2.3.3.3.1, 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.

13.2.3.3.3.1 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.

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 7/18/2019 may be used as a reference for applicable codes and standards in effect when the building was 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.

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

Building Permit Date	Codes	NFPA References
All Buildings up to March 15, 1988	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	1. NFPA 13
March 16, 1988 to July 20, 1992	1985 Uniform Fire Code Appendix III-A and referenced NFPA standards	<p align="center">Water-Based Systems</p> <ol style="list-style-type: none"> 1. NFPA 25 - Water-Based Fire Protection Systems - Not Applicable 2. NFPA 13A - Recommended Practice for the Care and Maintenance of Sprinkler System - 1978 Edition. Referenced by 1985 UFC Standard, Appendix B. 3. NFPA 15 - Water Spray Fixed Systems for Fire Protection- 1979 Edition. As referenced by 1985 UFC Standard, #79-2
		<p align="center">Other Systems</p> <ol style="list-style-type: none"> 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 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	<p data-bbox="1036 388 1333 415">Water-Based Systems</p> <ol data-bbox="951 422 1409 905" style="list-style-type: none"> 1. 1988 Uniform Fire Code - Appendix III-C (Testing Fire-Extinguishing Systems, Standpipes and Combination Systems). 2. NFPA 13A – Recommended Practice for the Care and Maintenance of Sprinkler Systems - 1978 Edition. As referenced by 1985 UFC Standards, Appendix B. 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. <p data-bbox="1084 911 1284 938">Other Systems</p> <ol data-bbox="951 945 1409 1621" style="list-style-type: none"> 1. NFPA 11 - Foam Extinguishing Systems - 1988 UFC Standards (Volume II) which references NFPA 11, 1978 Edition with amendments. 2. NFPA 11A - Medium and High-Expansion Foam Systems - 1988 Edition. 3. NFPA 12 - Carbon dioxide Extinguishing Systems - 1985 Edition. 4. NFPA 12A - Halon 1301 fire Extinguishing Systems - 1987 Edition. 5. NFPA 17 - Dry Chemical Extinguishing Systems - 1985 Edition. 6. NFPA 17A - Wet Chemical Extinguishing Systems - 1986 Edition. 7. NFPA 96 - Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment - 1987 Edition.

Building Permit Date	Codes	NFPA References
October 10, 2002 to January 1, 2010	1997 Uniform Fire Code Appendix III-C and referenced NFPA standards	<p style="text-align: center;">Water-Based Systems</p> <ol style="list-style-type: none"> 1. NFPA 25 - Water-Based Fire 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
		<p style="text-align: center;">Other Systems</p> <ol style="list-style-type: none"> 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
		<p style="text-align: center;">Fire Alarm Systems</p> <ol style="list-style-type: none"> 1. NFPA 72 - Installation, Maintenance, and Use of Fire-Protection Signaling Systems - 1997 UFC Standard 10-2 which references NFPA 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	<p style="text-align: center;">Water-Based Systems</p> <ol style="list-style-type: none"> 1. NFPA 15 – Standard for Water Spray Fixed Systems for Fire Protection, 2001 Edition 2. NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2002 Edition.
		<p style="text-align: center;">Other Systems</p> <ol style="list-style-type: none"> 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 1301 Fire Extinguishing Systems, 2004 Edition 4. NFPA 17 – Standard for Dry Chemical Extinguishing Systems, 2002 Edition 5. NFPA 17A - Standard for Wet Chemical Extinguishing Systems, 2002 Edition 6. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2004 Edition 7. NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems, 2004 Edition
		<p style="text-align: center;">Fire Alarm Systems</p> <ol style="list-style-type: none"> 1. NFPA 72 – National Fire Alarm Code, 2002 Edition

Building Permit Date	Codes	NFPA References
July 2014 to Present	Hawaii State Fire Code (NFPA 1, 2012 edition) and referenced NFPA standards	<p data-bbox="1040 386 1338 413">Water-Based Systems</p> <ol data-bbox="959 415 1419 615" style="list-style-type: none"> <li data-bbox="959 415 1419 499">1. NFPA 15 – Standard for Water Spray Fixed Systems for Fire Protection, 2012 Edition <li data-bbox="959 501 1419 615">2. NFPA 25, Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2011 Edition. <p data-bbox="1084 621 1294 648">Other Systems</p> <ol data-bbox="959 651 1419 1283" style="list-style-type: none"> <li data-bbox="959 651 1419 732">1. NFPA 11 – Standard for Low-, Medium-, and High-Expansion Foam - 2010 Edition <li data-bbox="959 735 1419 816">2. NFPA 12 – Standard on Carbon Dioxide Extinguishing Systems, 2011 Edition <li data-bbox="959 819 1419 900">3. NFPA 12A – Standard on Halon 1301 Fire Extinguishing Systems, 2009 Edition <li data-bbox="959 903 1419 984">4. NFPA 17 – Standard for Dry Chemical Extinguishing Systems, 2009 Edition <li data-bbox="959 987 1419 1068">5. NFPA 17A - Standard for Wet Chemical Extinguishing Systems, 2009 Edition <li data-bbox="959 1071 1419 1192">6. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations, 2011 Edition <li data-bbox="959 1194 1419 1283">7. NFPA 2001 - Standard on Clean Agent Fire Extinguishing Systems, 2012 Edition <p data-bbox="1052 1289 1321 1316">Fire Alarm Systems</p> <ol data-bbox="959 1318 1419 1369" style="list-style-type: none"> <li data-bbox="959 1318 1419 1369">1. NFPA 72 – National Fire Alarm Code, 2010 Edition

49. Fire protection systems existing assembly occupancies. Section 13.3.2.8 is deleted in its entirety.

50. Fire protection systems existing educational occupancies. Section 13.3.2.10 is deleted in its entirety.

51. Fire protection systems existing health care occupancies. Section 13.3.2.12 is deleted in its entirety.

52. Fire protection systems existing detention and correctional facilities. Section 13.3.2.14 is deleted in its entirety.

53. Fire protection systems existing hotels and dormitories. Section 13.3.2.16 is deleted in its entirety.

54. Fire protection systems existing residential board and care facilities. Section 13.3.2.22 is deleted in its entirety.

55. Fire protection systems existing mercantile occupancies. Section 13.3.2.24 is deleted in its entirety.

56. Fire protection systems high-rise buildings. Section 13.3.2.26.2 is deleted in its entirety.

57. 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.

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.

58. Stationary fire pump inspection, testing, and maintenance. Section 13.4.8 is amended to add sections 13.4.8.1 and 13.4.8.2 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.

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

59. 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.

60. 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.

61. 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.

62. 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.

63. 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.

64. 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.

65. 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.

66. 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.

67. Existing mercantile occupancies. Section 13.7.2.24 is deleted in its entirety.

68. Existing business occupancies. Section 13.7.2.26 is deleted in its entirety.

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

70. 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.

71. 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.

72. 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.

73. 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.

74. Other fire protection systems compliance. Section 13.8 is amended to read as follows: Section 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.

75. Other fire protection systems inspection, testing, and maintenance label. Section 13.8 is amended to add as follows: Section 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.

13.8.2 Hydrostatic Testing. Every twelve years from the date of manufacture, stored pressure extinguishing agent cylinders shall be hydrostatically tested.

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.

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.

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

13.8.6 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.

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.

76. 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.

77. 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 cafeteriums do not need to comply with this provision. [Eff _____] (Auth: HRS §132-3) (Imp: HRS §132-3)

78. 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.

79. 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.

80. 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.

81. 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.

82. 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.

83. 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 ft²;
- (4) Carports having an area not exceeding 1000 ft²;
- (5) Agricultural buildings having an area not exceeding 1000 ft²; and
- (6) Sheds and other detached buildings having an area not exceeding 1000 ft².

84. 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.

85. 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.

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.

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.

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.

89. 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.

90. 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.

91. 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.

92. 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.

93. 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.

94. 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.

95. 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;

- (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.

96. 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.

97. 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.

98. 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.

99. Manufactured housing. Section 20.11.5 is deleted in its entirety.

100. 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.

101. 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.

102. Emergency electrical disconnect signs. Section 42.5.7 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.

103. 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.

104. 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.

105. 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.

106. 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.

107. 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.

108. Flammable finish spray booth inspection, testing, and maintenance. Section 43.1.7 is amended by adding 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.

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

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

109. 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.

110. 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.

111. Commercial cooking inspection, testing, and maintenance reference table. Section 50.5.2.2 is amended by adding 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.

112. Commercial cooking extinguishing system inspection, testing, and maintenance reports. Section 50.5.2 is amended by adding Sections 50.5.2.8.2 and 50.5.2.8.3 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.

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.

113. Commercial cooking extinguishing system inspection, testing, and maintenance tag. 50.5.3.3 is amended by adding Section 50.5.3.3.3 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.

114. Hazardous materials management plan (HMMP) on-site. Section 60.1.6 is amended by adding Section 60.1.6.4 to read as follows: The HMMP shall be made available on site.

115. 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.

116. 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.

117. 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.

118. Fireworks permits. Section 65.9.2.2 is deleted in its entirety.

119. 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.

120. 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.

121. 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.

122. 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.

123. 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.