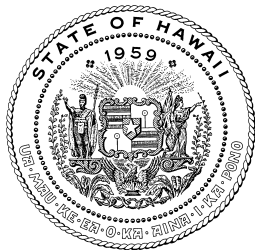


Small Business Regulatory Review Board Meeting

November 16, 2023

10:00 a.m.



SMALL BUSINESS REGULATORY REVIEW BOARD

Department of Business, Economic Development & Tourism (DBEDT)
No. 1 Capitol District Building, 250 S. Hotel Street, Fifth Floor, Honolulu, HI 96813
Mailing Address: P.O. Box 2359, Honolulu, HI 96804
Email: dbedt.sbrb.info@hawaii.gov
Website: sbrb.hawaii.gov

Tel: 808 798-0737

AGENDA

Thursday, November 16, 2023 ★ 10:00 a.m.

**Leiopapa A Kamehameha Building – State Office Tower
235 S. Beretania Street, Conference Room 405
Honolulu, HI 96813**

As authorized under Act 220, Session Laws of Hawaii 2021 and Chapter 92-3.7
Hawaii Revised Statutes (HRS), the public can participate in the meeting either:

A. By attending the in-person meeting at:

**Leiopapa A Kamehameha Building – State Office Tower 235 S. Beretania Street,
Conference Room 405, Honolulu, HI 96813; or**

B. Via Video-audio livestream or via Telephone - to join the Video-audio livestream meeting, go to:

<https://us06web.zoom.us/j/88945374966?pwd=cDhqWEEzZGZHYmJLM05tMHU5Mm5HQ09>

C. To Join via Telephone: Dial 1-669-900-6833 with Meeting ID 883 5814 0200 Passcode 066739

When the Chairperson asks for public testimony during the meeting, you may indicate that you want to provide oral testimony by using the raise hand function or, if calling in by telephone, entering * and 9 on your phone keypad. When recognized by the Chairperson, you will be unmuted. If calling in by phone, you can unmute and mute yourself by pressing * and 6 on your keypad.

Members of the public may also submit written testimony via e-mail to:

DBEDT.sbrb.info@hawaii.gov or mailed to SBRRB, No. 1 Capitol District Building, 250 S. Hotel Street, Room 506A, Honolulu, HI 96813, or P.O. Box 2359, Honolulu, HI 96804. The Board requests that written testimony be received by Wednesday, November 15, 2023 so it may be distributed to Board members prior to the meeting. Testimony received after that time will be distributed to the Board members at the meeting.

Copies of the Board Packet will be available on-line for review at: [Agendas & Minutes – Small Business Regulatory Review Board \(hawaii.gov\)](#). An electronic draft of the minutes for this meeting will also be made available at the same location when completed.

The Board may go into Executive Session under
Section 92-5 (a)(4), HRS to Consult with the Board's Attorney on Questions and Issues
Concerning the Board's Powers, Duties, Immunities, Privileges and Liabilities.

I. Call to Order

II. Approval of October 19, 2023 Meeting Minutes

Josh Green, M.D.
Governor

Sylvia Luke
Lt. Governor

James K. Tokioka
DBEDT Director

Dane K. Wicker
*DBEDT Deputy
Director*

Members

Mary Albitz
*Chairperson
Maui*

Robert Cundiff
*Vice Chairperson
O'ahu*

Jonathan Shick
*2nd Vice Chairperson
O'ahu*

Dr. Nancy
*Atmospera-Walch
O'ahu*

William Lydgate
Kaua'i

James (Kimo) Lee
Hawai'i

Garth Yamanaka
Hawai'i

Sanford Morioka
O'ahu

Tessa Gomes
O'ahu

**Mark Ritchie for
Director, DBEDT
Voting Ex Officio**

III. Old Business

- A. Discussion and Action on the Small Business Statement After Public Hearing and Proposed New Amendments to Hawaii Administrative Rules (HAR) Title 19 Chapter 25, **Rules and Regulations Governing Shore Water Events**, promulgated by Department of Parks and Recreation – City and County of Honolulu – *Discussion Leader – Jonathan Shick*

IV. New Business

- A. Discussion and Action on Proposed New HAR Title 12 Subtitle 8, Part 10 **Boiler and Pressure Vessel**, promulgated by Department of Labor and Industrial Relations, as follows – *Discussion Leader – Mary Albitz*
1. Chapter 220 **General, Administrative and Legal Provisions**;
 2. Chapter 222.1 **Power Boilers**;
 3. Chapter 223.1 **Heating Boilers – Steam Heating Boilers, Hot Water Heating Boilers, Hot Water Supply Boilers, and Potable Water Heaters**;
 - and
 4. Chapter 224.1 **Pressure Vessels**

V. Administrative Matters

- A. Update on the Board's Upcoming Advocacy Activities and Programs in accordance with the Board's Powers under Section 201M-5, Hawaii Revised Statutes (HRS)
1. Discussion with Becker Communications' Representative about creating a YouTube Video for the Board's outreach purposes
 2. Discussion and Action on the Board's Draft *2023 Annual Report Summary* for Submission to the Hawaii State Legislature, under Section 201M-5(f), HRS
 3. Presentations to Industry Associations
 4. Staff's Small Business Outreach

VI. Next Meeting: Thursday, December 7, 2023 at 10:00 a.m., held via Zoom and at Leiopapa A Kamehameha Building – State Office Tower, Conference Room 405, Honolulu, HI 96813

VII. Adjournment

If you need an auxiliary aid/service or other accommodation due to a disability, contact Jet'aime Ariola at 808 798-0737 and jetaime.k.ariola@hawaii.gov as soon as possible, preferably at least three (3) working days prior to the meeting. Requests made as early as possible have a greater likelihood of being fulfilled.

Upon request, this notice is available in alternate/accessible formats.

II. Approval of October 19, 2023 Meeting Minutes

Small Business Regulatory Review Board

MEETING MINUTES - **DRAFT** October 19, 2023

ZOOM RECORDING

- I. **CALL TO ORDER:** Chair Albitz called the meeting to order at 10:03 a.m., with a quorum present.

MEMBERS PRESENT:

- Mary Albitz, Chair
- Jonathan Shick, 2nd Vice Chair
- Dr. Nancy Atmospera-Walch
- James (Kimo) Lee
- Sanford Morioka
- Tessa Gomes
- Mark Ritchie

ABSENT MEMBERS:

- Robert Cundiff, Vice Chair
- Garth Yamanaka
- William Lydgate

STAFF: DBEDT

Dori Palcovich
Jet'aime Ariola

Office of the Attorney General

John Cole

II. **APPROVAL OF September 21, 2023 MINUTES**

Mr. Lee motioned to accept the September 21, 2023 meeting minutes, as presented. Second Vice Chair Shick seconded the motion and the Board members unanimously agreed.

III. **OLD BUSINESS**

- A. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments to HAR Title 16 Chapter 39, Securities, promulgated by Department of Commerce and Consumer Affairs (DCCA)

Discussion Leader Ms. Gomes stated that the subject rules are post-public hearing and appear to have little impact on small businesses. Mr. Keola Fong, Securities Enforcement Attorney at DCCA explained that the amendments require an investment advisor representative who is registered in Hawaii to receive 12 credits of continuing education each year to maintain his/her registration. The changes will align Hawaii to be consistent with national requirements. In addition, non-substantive changes, such as formatting, are also being made to the rules.

At this Board's pre-public hearing meeting, thirteen other states had adopted these rule requirements; it is now up to sixteen with Hawaii being the seventeenth state to adopt these requirements.

Only positive feedback was received from the stakeholders during the rulemaking process, and at the public hearing, although no one showed up, one letter of support was received from the Financial Planning Association. As no issues were raised, no changes were made to the rules. Second Vice Chair Shick stated that given that the new fees are less than \$100 per year, the cost is reasonable.

Mr. Ritchie motioned to move the proposed amendments to the Governor for adoption. Mr. Morioka seconded the motion, and the Board members unanimously agreed.

B. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments to HAR Title 13 Chapter 31, Molokini Shoal Marine Life Conservation District, Maui, promulgated by Department of Land and Natural Resources (DLNR)

Discussion leader and Second Vice Chair Shick stated that the following three rules are post public hearing, and that there appears to be no major issues with them. Mr. Kealii Sagum, Legal Research Specialist at DLNR's Division of Aquatic Resources (DAR), provided a short presentation on the three proposals.

Changes to Chapter 31 clarify that special activity permits will be allowed for a maximum duration of one year in length with allowable purposes to conform with special activity permit authority. Other changes include clarifying that DLNR may issue a marine life conservation district use permit for commercial activity within the Molokini Shoal marine life conservation district.

Changes also include updating the permit terms and conditions, which represent a new expiration/renewal date of December 31 every two years, updating the fee schedule from a flat rate to a tiered fee schedule, removing the requirement to demonstrate active commercial vessel operation for permit renewal and non-substantive changes.

Testimonies provided at the public hearing supported the enhanced enforcement and the proposed protections. Testimonies also supported the overall goal of the day-use mooring program; however, any of the proposed suggestions for this program were beyond the scope of the current rulemaking package.

Mr. Ritchie motioned to move the proposed amendments to the Governor for adoption. Second Vice Chair Shick seconded the motion, and the Board members unanimously agreed.

C. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments to HAR Title 13 Chapter 230, General Provisions, promulgated by DLNR

Mr. Kealii Sagum, Legal Research Specialist at DLNR's DAR, explained that the proposed amendments for Chapter 230 include adding and amending specific definitions for clarity which came from the direction of the Attorney General.

Second Vice Chair Shick motioned to move the proposed amendments to the Governor for adoption. Mr. Morioka seconded the motion, and the Board members unanimously agreed.

D. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments to HAR Title 13 Chapter 257 promulgated by DLNR

Mr. Kealii Sagum, Legal Research Specialist at DLNR's DAR, explained that amendments for Chapter 257 include housekeeping measures throughout the entire chapter for clarity and consistency with other chapters and making minor grammatical and stylistic changes. Another change will remove the time limit exception for when there are no boats waiting to use the day-use mooring buoy.

Additional changes involve day-use mooring buoy installation, locations, rafting prohibitions, and formatting changes for liability, safety, and enforcement. Also updated are the reference maps, boundary descriptions, the addition of commercial use restrictions, and a provision for providing exceptions for commercial users who are paying the ocean stewardship user fee.

The public hearing was hybrid via Zoom and in-person at the DAR Maui Office site; it was also live-streamed on YouTube for those viewers interested in only watching the hearing and not providing testimony. Six testimonies in support were received at the hearing.

Mr. Morioka motioned to move the proposed amendments to the Governor for adoption. Mr. Ritchie seconded the motion, and the Board members unanimously agreed.

IV. NEW BUSINESS

A. Discussion and Action on Proposed Amendments to HAR Title 17 Chapter 799, Preschool Open Doors Program, promulgated by Department of Human Services (DHS)

Mr. Scott Nakasone, Assistant Division Administrator at DHS, explained that the proposed rules will effectuate the expansion of the Preschool Open Doors (POD) Program. The changes include the addition of two new sections, Section 17-799-12.1 Accreditation requirements and Section 13.1 Method of computing family unit's co-payment.

The changes in these two sections will amend the purpose of the subchapter to reflect the potential number of years a child could receive POD childcare payments from up to one year to up to two years. Changes will also add, delete, and amend existing definitions, add three-year olds to the program and establish application priority ranking to this group.

Other changes will establish 300% of the federal poverty guidelines as program eligibility income limits and updates annually on January 1, increases the monthly childcare subsidy payments to \$1,200 maximum for unaccredited care and \$1,500 maximum care, and establishes family co-payment of childcare as 0 – 7% of the family's childcare cost.

Mr. Nakasone noted that the positive impacts to small business are that it will increase the family eligibility limit and annual adjustment which will result in more families becoming eligible for POD. The lowering of family co-payments will result in having to pay less out-of-pocket for childcare, and an increase to the monthly childcare subsidy amount will result in a greater amount of childcare to families. Several negative impacts to small business were discussed including all preschools that accept enrollment of a child eligible for POD must be

accredited within seven years. Existing preschools must start the accreditation process by July 1, 2029 and be accredited by July 1, 2034.

Second Vice Chair Shick motioned to move the proposed amendments to public hearing. Mr. Ritchie seconded the motion, and the Board members unanimously agreed.

B. Discussion and Action on Proposed Amendments to HAR Title 15 Chapter 217 Mauka Area Rules, promulgated by Department of Business, Economic Development and Tourism (DBEDT)

Mr. Craig Nakamoto, Executive Director, and Mr. Ryan Tam, Director of Planning at DBEDT's Hawaii Community Development Corporation (HCDA), discussed the updates and proposed amended rule changes to the Kakaako Mauka Area Rules; this includes HCDA's community development districts, the statewide districts and projects, and transit-oriented development infrastructure and other projects.

The Mauka rules amendment objectives, which have been worked on for the past several years, are intended to reflect the needs of the community, reduce government red tape, promote livable, walkable communities, incentivize zoning to promote the development of community benefits, and increase reserve housing.

The changes will also clarify various definitions, update floor area definitions to include overhangs, canopies with more than 50%, address conflicts between window transparency requirements and energy code, add strategies to activate building frontage walls, and allow for preservation of significant properties that are no longer present. While the main change is streamlining the permitting process, the second main change has to do with parking reform as 25% to 30% of the parking stalls in Kakaako are under-utilized.

Regarding Second Vice Chair Shick's inquiry into the imposition of fees, Mr. Tam responded that there is a \$50 increase in the base-line fee. In response to Chair Albitz's question, HCDA has not received any negative feedback at the public meetings from small businesses largely due to the extensive community outreach; this includes the neighborhood board meetings and the Kakaako Association meetings.

Overall, HCDA is expecting to achieve community benefits through the rule changes by allowing for larger projects in exchange for public benefit.

Second Vice Chair Shick motioned to move the proposed amendments to public hearing. Mr. Ritchie seconded the motion, and the Board members unanimously agreed.

V. ADMINISTRATIVE MATTERS

A. Update on the Board's Upcoming Advocacy Activities and Programs in accordance with the Board's Powers under Section 201M-5, Hawaii Revised Statutes (HRS)

1. Discussion with Becker Communications' Representative about creating a YouTube Video for the Board's Outreach Purposes

Due to Becker Communications needing to leave the meeting to attend another DBEDT gathering, this line item is deferred until the next board meeting.

During the meeting, the following ideas and suggestions were discussed by the members for the creation of the Board's YouTube Video:

- Filming one of the board meetings without sound but showing testifiers and board members at a board meeting. Thus, video would view the meeting with a "voiceover" explaining what the Board is and what it does, perhaps with Hawaiian music playing in the background.
- Addressing some of the bigger issues that this Board has encountered over the years and the resulting outcome and/or the impact of those issues, potentially with pictures of before and after.
- Including in the video some of the small businesses and industries that this Board represents.
- Publishing a series of short, 4 or 5 videos, with the first one being an introduction to the Board and the second one highlighting the businesses the Board represents, etc.

2. Presentations to Industry Associations

DBEDT staff attended Oahu Wedding Association's annual meeting this week, of which, board member Ms. Gomes is the president. Second Vice Chair Shick will be attending the upcoming Hawaii Chamber of Commerce's After Business Hours event and will plan to distribute the Board's brochures.

3. Staff's Small Business Outreach

The Board's brochure is being mailed out weekly to appropriate small businesses listed in the weekly *Pacific Business News*.

VI. NEXT MEETING - Thursday, November 16, 2023 at 10:00 a.m., in conference room 405 at Leiopapa A Kamehameha Building – State Office Tower – 235 S. Beretania Street, Honolulu, HI 96813.

VII. ADJOURNMENT – Second Vice Chair Shick motioned to adjourn the meeting and Mr. Ritchie seconded the motion; the meeting adjourned at 11:36 a.m.

III. OLD BUSINESS

- A. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments to HAR Title 19 Chapter 25, **Rules and Regulations Governing Shore Water Events**, promulgated by Department of Parks and Recreation – City and County of Honolulu

SMALL BUSINESS STATEMENT
"AFTER" PUBLIC HEARING TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD
(Hawaii Revised Statutes (HRS), §201M-3)

Department or Agency: Department of Parks and Recreation (DPR)
Administrative Rule Title and Chapter: Title 19, Chapter 25
Chapter Name: Rules and Regulations Governing Shore Water Events
Contact Person/Title: Bryce Okamoto, Permits Officer
Phone Number: (808) 768-3439
E-mail Address: bryce.okamoto@honolulu.gov Date: 11-06-2023

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7?

☐ Yes ☒ No

(If "Yes," please provide webpage address and when and where rules may be viewed in person. Please keep the proposed rules on this webpage until after the SBRRB meeting.)

I. Rule Description: ☒ New ☒ Repeal ☐ Amendment ☐ Compilation

II. Will the proposed rule(s) affect small business?

☒ Yes ☐ No (If "No," no need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit corporation, limited liability company, partnership, limited partnership, sole proprietorship, or other legal entity that: (1) Is domiciled and authorized to do business in Hawaii; (2) Is independently owned and operated; and (3) Employs fewer than one hundred full-time or part-time employees in Hawaii." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance?

☐ Yes ☒ No

(If "Yes" no need to submit this form. E.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives. HRS §201M-2(d))

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a))

☐ Yes ☒ No

(If "Yes" no need to submit this form.)

V. Please explain how the agency involved small business in the development of the proposed rules.

See Attachment A.

a. Were there any recommendations incorporated into the proposed rules? If yes, explain. If not, why not?

See Attachment A.

VI. If the proposed rule(s) affect small business, and are not exempt as noted above, please provide the following information:

1. A description of how opinions or comments from affected small businesses were solicited.

See Attachment B.

2. A summary of the public's and small businesses' comments.

See Attachment B.

3. A summary of the agency's response to those comments.

See Attachment B.

4. The number of persons who:

(i) Attended the public hearing: 32

(ii) Testified at the hearing: 15

(iii) Submitted written comments: 8

5. Was a request made at the hearing to change the proposed rule in a way that affected small business?

☐ Yes ☒ No

(i) If "Yes," was the change adopted? ☐ Yes ☐ No

(ii) If No, please explain the reason the change was not adopted and the problems or negative result of the change.

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594 / Email: DBEDT.sbrrb.info@hawaii.gov

This statement may be found on the SBRRB Website at:
<http://dbedt.hawaii.gov/sbrrb-impact-statements- pre-and-post-public-hearing>

Department of Parks and Recreation
Post-Public Hearing Small Business Impact Statement

V. Please explain how the agency involved small business in the development of the proposed rules.

The DPR formed the Shore Water Advisory Group (SWAG) in July 2021 to conduct a public process to evaluate proposed administrative rule changes. The SWAG members were appointed by Mayor Blangiardi and two out of the three members are small business owners. The SWAG met six times from July 2021 until May 2022 and focused on the survey results, fees, cooling off period, gender equity, and event calendars. Meetings were run in accordance with the Sunshine Law, with formal public notice supplemented with social media announcements, public testimony, and minutes posted on the DPR Website. Surf promoters holding DPR permits were sent an email notice of when the SWAG meetings were held. The SWAG conducted a survey making a special effort to consult promoters, surfers, and community members. The survey ran from December 16, 2021 – February 16, 2022, during the north shore surf season, in an effort to reach surfers and community members during this peak event period. Two hundred and eighty persons provided survey responses.

a. Were there any recommendations incorporated into the proposed rules? If yes, explain. If not, why not?

To address promoters who lost their event date to a competitor, the DPR is proposing an after-event action report be submitted by all applicants who run a shore water event on the North and South Shores. The after-event action report will ensure that all applicants complied and followed the terms and conditions of the permit.

Attachment B

Department of Parks and Recreation
Public Hearing for Rules and Regulations on Shore Water Events
Friday, October 20, 2023 from 2:00 pm - 4:00 pm

| <u>Testimony Type</u> | <u>Testifier Name</u> | <u>Testimony/Comments Summary</u> | <u>Recommendation</u> |
|--|---|---|--|
| <u>In-Person</u> <u>/ZOOM</u> <u>Testimony</u> | Mahina Chillingworth/Hui O Hee Nalu | Scoring for North Shore and South Shore different with the ranking system separate due to the shores being different. Would also like to clarify ages for diversity purposes as it is too vague. | Application process will give more clarity to diversity of age. Applications will be reviewed to help further clarify future triennial applications. |
| | Rich Stevenson/Hui O Hee Nalu | Seeking clarification on the after-event report and consequences if do want to run event with different age group/gender but they do not participate due to dangerous conditions (wave height/other issues). Thinks some of the rules are too vague and need to be defined more. | \$19-25-8 Promoters should be able to put in as much detail as possible as to why event(s) did not run as proposed in after-event action report. Report will be taken into consideration. No other recommendations. |
| | David Stant/Hui O Hee Nalu | Pipeline should be separate from the rest of the beach parks with own rules due to the danger of the surf. Due to this, feels that South Shore and North Shore is different and should not be in the same shore water rules. Seeks clarification of the age portion of the diversity rules as it is too vague and does not explain the age ranges. Does not understand the underrepresented group portion of the rule and feels that the new rules do not allow them to run their event properly. | No changes recommended as too many rules on different beaches will make it more difficult to understand. Application process will give more clarity to diversity of age. Applications will be reviewed to help further clarify future triennial applications. \$19-25-13 does explain underrepresented groups. No change recommended for underrepresented ranking. |
| | Philip Kitamura | Rule marginalizes small event organizers like himself (does body surfing events). They should not compete with the board surfing event organizers since point panic is only allowed for hand boards or body surfing. Exclude point panic out of the rule since it is already regulated by the state. Have an alternative way to have gender equity including subsidized or discounted entry for events. | \$19-25-13 Rule does give higher scoring for underrepresented group (body surfing). No changes recommended. |
| | Wendell Aoki/Hawaii Amateur Surfing Association | High school surfing should be exempt from the calendar. Problem with surf calendar is that the US Championship in April with qualifications starting earlier. Not fair to the kids if they cannot qualify. Days also need to be extended as 2 days is not enough for events as the event could have lots of kids. Example is the 300 kids for the US Championship Qualifier. Want 3 or 4 days depending on the waves. | From the example, organized youth for the purposes of school are not subject to the surf calendar (May - September). For other purposes that would benefit the youth (i.e. US Championship Surf Qualification), \$19-25-12 does allow director discretion so long as it is consistent with the rule and in public interest. |
| | Conrad Morgan | Unfair and bias to body surfing. Kakaako Waterfront Park and Point Panic should be excluded from rule. Is not fair to the body surfers and will pit us against the board surfers. | \$19-25-13 Rule does give higher scoring for underrepresented group (body surfing). No changes recommended. |
| | Ron Iwami/Friends of Kewalo | Do not compare North Shore to South Shore as professionals make a living on the North Shore where South Shore is more for amateurs and not as dangerous. Rules should not be a blanket and each shore does not compare to another. Would instead like to see a similar memorandum of understanding where it Kewalo is managed. Point panic should have own rules that is community based. | No changes recommended as too many rules on different beaches will make it more difficult to understand. Rule already limits amount of events at Kewalo Basin and Kakaako Waterfront Park. |
| | Jason Sakai | Every surf area is different. Kewalo Basin used to have 18 events but is not down to 8 events and would like the contests to be spread out. Need to maintain and ensure that not too many contest in area. Major parking issues at Kewalo should be taking into consideration. Do not compare North Shore to South Shore as professionals make a living on the North Shore where South Shore is more for amateurs and not as dangerous. | No changes recommended as too many rules on different beaches will make it more difficult to understand. Rule already limits amount of events at Kewalo Basin and Kakaako Waterfront Park. |
| | Robin Erb/World Surfing League | 4 day competition is not fair as run multiple day contest including a professional/amateur combined event. South shore events should be 6 days while North Shore is 4 days for competition as have different divisions with different age groups. The way we run the event is less stress on the park with the park being returned to recreational users quicker as it is 1 event and not 2. Equity as in the rules is an issue as WSL awards equal prize money. For WSL event, participants has been consistent with nearly 100 men and 22 women for entrants and WSL can provide data if necessary. Equitable opportunity is not properly defined as the most points would go to exclusively to underrepresented groups and would create unfairness. Points should be awarded fairly for all categories of diversity. | \$19-25-12 4 days are given so recreational surfers have a chance to surf. Rule does allow director discretion so long as it is consistent with the rule and in public interest. |

Attachment B

Department of Parks and Recreation
Public Hearing for Rules and Regulations on Shore Water Events
Friday, October 20, 2023 from 2:00 pm - 4:00 pm

| <u>Testimony Type</u> | <u>Testifier Name</u> | <u>Testimony/Comments Summary</u> | <u>Recommendation</u> |
|----------------------------------|----------------------------------|--|---|
| <u>In-Person /ZOOM Testimony</u> | Alan Lennard | Process should be more thought out and go back to the neighborhood boards for review. Would like different definitions for big wave surf and big wave body boarding and body surfing. This would need to include longer holding period so can get the proper wave height for the event. Need to define each category of diversity so know how points will be awarded. Point panic should be excluded from the shore water rules as it already is regulated by State of Hawaii and it is isolated. Change wording from consecutive to nonconsecutive for holding period as sometimes it is difficult to run a 4 day event as it depends on the waves. This could be a workaround if another event has a waiting period and can be worked around other events. | Shore water rules were proposed and held 4 separate hearings. It was also proposed to City Council in August 2023 and allowed for more comments. Holding period would not be appropriate as those would conflict with other events. No other changes recommended. |
| | Chris Gardner/North Shore Series | North Shore swim has been hosting amateur swim races and the concern is that our event is being pulled into professional surfing events. Only run event for 1 day and do not want surf rules to affect the swim series. Do not want to make it so have toilet requirements that have more people at the event. | Event still has impact on park. Do take other shore water events into account. No changes recommended. |
| | Mapuana Tector/Nanakuli Board | Surprised that City and County of Honolulu has the authority to regulate surf contests. This sounds a lot like businesses being run but City and County should not be making money off these events. How is the city giving back to the community and should support the community instead of getting money. City and County should not be micromanage the waters. | Rules are meant to help manage the beach parks. No changes recommended. |
| | Bianca Isaki | North, South, and West shores are different. Increase in commercial activity in the areas and there are too many events already. 6 events at Ala Moana is too much. Kids should have the beach available and not be taken by contests. | Rules are to limit the number events at both North and South Shore. Other commercial activities (i.e. surf/scuba lessons) are not addressed in these rules. |
| | Stefan Ranki | Does rough water swim series and feels that the rules and regulations regarding surfing should be separate from swim races. Rules and regulations have impact on non surf events and should be thought about. | Event still has impact on park. Do take other shore water events into account. No changes recommended. |
| | Tim Gerry/Queen Surf Club | Disagree with the proposal rules as there are too many event days. Possibility of 31 days of events but want something similar to North Shore with a 16 day rule with only 2 days for contests. Would like a 15 day cooling off period with restriction on Dukes Fest and other events where total number of days is 23 instead of 31. Beach is being abused and excludes local people from enjoying the beach. Swimmers should not be included, testimony is primarily for surf contests. | The number to limit events was a balance between the surf contest promoters and the public. Cooling off period was also included to help balance the park use and the events. No changes recommended. |
| <u>Written Testimony</u> | Robin Erb/WSL | Support the commitment to diversity, equity, and inclusion, but the new rules are inconsistent with instances of preferential treatment that defeats fairness and equity. Eddie Aikau and Duke's Oceanfest are given preferential treatment with new rules with no explanation to why. We recognize the cultural value of both events but it is not objectively measured against other longstanding cultural, community, and competitive significant events. 2023 marked the 46th annual surf into summer competition that has run longer than both the Duke's Oceanfest and Eddie Aikau Invitational yet receives no special consideration. Also oppose the 4 days of competition limit for south shore as we run multiple events for the surf into summer event that includes both professional and amateur along with different divisions of boards and ages. This event returns the park earlier than a normal event since it is run together instead of being a separate event. Would like 6 competition days to run this event and to exclude King Kamehameha Day as the surf into the summer event is run during this time. Even with the Kamehameha Parade, participants and others were able to plan accordingly to not interrupt the event. WSL does not feel that the rules are equitable or fair as the ranking system gives preferential treatment to underrepresented groups. We do agree with having an after-event action report as we have submitted these voluntarily in the past. | Rule was to help conform to City Council Resolution for gender diversity. The 2 events were identified with both cultural and historical significance. \$19-25-12 4 days are given so recreational surfers have a chance to surf. Rule does allow director discretion so long as it is consistent with the rule and in public interest. |
| | Darin Isobe | Been surfing and diving at Kewalo Basin since the 1980's and feel that 8 event is too much at Kewalo. It cuts off ocean access for recreation and also monopolizes the parking lot. Would like to see the amount of surf contests be reduced from 8 events to 4 events. | Rule already limits amount of events at Kewalo Basin and Kakaako Waterfront Park. No changes recommended. |

Attachment B

Department of Parks and Recreation
Public Hearing for Rules and Regulations on Shore Water Events
Friday, October 20, 2023 from 2:00 pm - 4:00 pm

| <u>Testimony Type</u> | <u>Testifier Name</u> | <u>Testimony/Comments Summary</u> | <u>Recommendation</u> |
|--------------------------|------------------------------|--|---|
| <u>Written Testimony</u> | Gil Riviere | North Shore should still have the same amount of competition days for the 2025-2027 triennial calendar as it seems that the new calendar allows for more competition days. Big wave and another event should not run on the same day. This would have big impact on the area but most events will not run with waves being that big. Extension of 30 minutes should not be arbitrarily and that the 30 minutes given should count towards the total overall amount of 8 hours per day. Also, director should appoint someone to monitor and consider the extension as needed. Proposed South Shore rules should not have long waiting periods as it inconvenience to recreational surfers where few good days of surf can be had. South Shore should not have 2 events allowed during the same time as it limits the amount of beaches people can surf at. Ranking system should include number of surf contestants, the more surfers the more points that the application should get as it would be more efficient way to use the beach resources. Reconsider big wave exemption on holidays as it could impact the community. | Due to calendar change, amount of events for half a surf calendar will still be the same amount. 30 minutes is to give more time for wave riding for the contest and does not impact the overall use of the park since contest is already running. The number to limit events was a balance between the surf contest promoters and the public. Cooling off period was also included to help balance the park use and the events. No changes recommended. |
| | Channey Tang-Ho | Support Friends of Kewalo and would like to lower the event total amount 8 to 4. Parks should be for the public and the people for recreation use. | Rule already limits amount of events at Kewalo Basin and Kakaako Waterfront Park. No changes recommended. |
| | Council Member Andria Tupola | A number of terms defined in definition section do not appear again in the rule. Some examples include: canoe surfing, criteria rating sheet, hydrofoil event, IRC, kitesurfing, kiteboarding, skimboarding, South Shore application supplement, standup paddle surfing, stand up paddleboarding, tow-in surfing, tow-in surfing, and windboard. Consider following language: a membership ratio of not less than 50 percent of underrepresented genders of surfers, as such term is used in §19-25-13(g)(2) is required. References to any specific events in these rules should be removed. Specifically, providing the subject benefits to only two events may be challenged as an impermissible "special law." A law is a special (and not a general) law if it operates upon and affects only a fraction of entities or a portion of the property encompassed by a classification, granting privileges to some and not others. Instead of specifically referencing these two events, consider creating a class or classes of events that would receive the subject benefits and include the Duke's OceanFest and/or the Eddie. Big Wave Events and Legacy Events are examples of names for possible classes. Please see preceding comments to the definition of "Duke's OceanFest Watersports Festival". Safety of event participants is not substantively addressed in the draft rules. Please include it, if safety is not addressed elsewhere, such as in the State of Hawaii, Department of Land and Natural Resources, Division of Boating and Ocean Recreation Marine Events permit requirements. For instance, all of the north shore surf events should require at least one jet ski/rescue craft staffed by a driver and swimmer team to be deployed in the event area during the event. Diacritical usage throughout the rules should be consistent in the document. For the most part, diacriticals do not appear to be used. The maximum number of competition days included in subsections § 19-25-11(g)(1)-(4) appear to be arbitrary. For instance, § 19-25-11(g)(4) provides for up to four competition days at Haleiwa, which would be insufficient to accommodate the up to eight competition days included in the 2024 North Shore Calendar. Also, § 19-25-11(g)(1) provides for up to 14 days of competition at Waimea, but the 2024 North Shore Calendar includes only one day of competition at Waimea during that period. Please revise § 19-25-11(g)(1)-(4), so that it does not prohibit contests from running in the Jan. - May 2025 period that were permitted to run in 2024. Dividing the applications into two separate categories appears to be unnecessary. The terms specific to big wave events (extended waiting period, etc.) should be prioritized over professional events; | Membership ratio will be taken into consideration. The 2 events were identified to be both cultural and historical in significance. Safety is priority and will be taken into consideration. Due to calendar change, amount of events for half a surf calendar will still be the same amount. Too many pools of applications for different parks would make it difficult for ranking purposes. Ranking system is to be as fair and be in line with City Council Resolution 20-12. No other changes recommended. |

Attachment B

Department of Parks and Recreation
Public Hearing for Rules and Regulations on Shore Water Events
Friday, October 20, 2023 from 2:00 pm - 4:00 pm

| <u>Testimony Type</u> | <u>Testifier Name</u> | <u>Testimony/Comments Summary</u> | <u>Recommendation</u> |
|--------------------------|------------------------------|---|-----------------------|
| <u>Written Testimony</u> | Council Member Andria Tupola | <p>are already specified. The key details are the beach park and dates proposed. The categories should be by beach park. Proposed change to read: "Each application within the group will be evaluated against the other applications in the same group for conditions allowable at the beach park." Applications should be sorted by the beach park instead of by the type of wave event. There would be four pools of applications for the north shore. Please see previous comment. This distinction appears to be unnecessary. Also, please see our comment on page 6 regarding the removal of references to any specific events or entities in the rules. The mitigation of community impacts should be a requirement for all events, as opposed to only a category for the evaluation of a permit application. Further, this requirement should be moved to Section §19-25-10 Regulations governing shore water events. Please consider revisions to this section to address situations in which diversity is unreasonable and/or undesirable. For instance, an applicant for a windsurf contest at Waimea Bay should not receive any points for diversity of primary event because windsurfing is not compatible with that wave. Also, an applicant for a keiki contest at Ehukai (Pipeline) should not receive any points for diversity of age range of event participants because that wave is not suitable for keiki. The ranking of applications needs to focus on the particular location and wave. For example, Queens and Ehukai are completely different types of waves with different safety considerations. Amateur events should be supported. Furthermore: 1) amateur events should not be ranked against professional events and and 2) there should be at least one amateur event at Haleiwa, Sunset, and Ehukai. Promoting gender equity is crucial and deserves support. To ensure consistency with other criteria, the rules relating to the points allocated for gender diversity should be revised from twelve to three in the ranking system. Here's a possible solution: Three points: Events exclusively dedicated to an underrepresented gender(s). Two points: Events with at least fifty percent or more of an</p> <p>underrepresented gender(s) slots until the day before the event. One point: Events with less than fifty percent of an underrepresented gender(s) slots until the day before the event. Zero points: Events that do not differentiate between genders. This approach allows flexibility by measuring the percentage of underrepresented gender surfer spots on the day before the event. It enables events to fill athlete vacancies, maximizing their contest potential while promoting gender equality. Promoting gender equity is crucial and deserves support. To ensure consistency with other criteria, the rules relating to the points allocated for gender diversity should be revised from twelve to three in the ranking system. Here's a possible solution: Three points: Events exclusively dedicated to an underrepresented gender(s). Two points: Events with at least fifty percent or more of an underrepresented gender(s) slots until the day before the event. One point: Events with less than fifty percent of an underrepresented gender(s) slots until the day before the event. Zero points: Events that do not differentiate between genders. This approach allows flexibility by measuring the percentage of underrepresented gender surfer spots on the day before the event. It enables events to fill athlete vacancies, maximizing their contest potential while promoting gender equality. There is a necessity for an after-event action report in these rules. This will help to determine whether what was committed to happen by the applicant actually did happen in regards to competition participants and any promised community benefits. Can the after-event action reports be required to include public feedback? The penalty for the following should be more severe than a deduction of five points. Instead, disqualification from applying for a permit for the following year should be considered. See Draft Rules § 19-25-13(i)(1) ("Five points will automatically be deducted when an applicant fails to submit an after-event action report for a previous event within 60 days after completion of the event, fails to submit a report, or submits a report which indicates that the event conducted was not consistent with the information provided in the application."). Many of the occurrences listed in § 19-25-15 are also listed in § 19-25-5(k), but not all in the same order. Cross-referencing § 19-25-5(k) would suffice.</p> | |

Attachment B

Department of Parks and Recreation
Public Hearing for Rules and Regulations on Shore Water Events
Friday, October 20, 2023 from 2:00 pm - 4:00 pm

| <u>Testimony Type</u> | <u>Testifier Name</u> | <u>Testimony/Comments Summary</u> | <u>Recommendation</u> |
|--------------------------|------------------------------|--|---|
| <u>Written Testimony</u> | Alan Lennard et, al. | Petition due to the draft rules being bias against bodysurfing and bodyboarding events. The undersigned is asking Department of Parks and Recreation to consider the following: 1) Ask that DPR allow more time for the affected neighborhood boards a chance to review the proposed draft rules and have discussion and comments. 2) include in §19-25-3 Definitions: Big Wave Bodyboarding is minimum wave face heights of thirty feet and Big Wave Bodysurfing is minimum wave face heights of twenty feet - and include in §19-25-11 Regulations governing surf events held on the north shore to allow bodysurfing and bodyboarding events to have simultaneous permits at Waimea bay with extended holding periods specifically allotting the smaller size requirements as specified in definitions. 3) provide a form of "criteria rating sheet" and "event conflict ranking ballot" to be used in the scheduling and conflict resolution process to help city personnel and applications thoroughly understand conflict resolution process. 4) Remove Point Panic from the rule. 5) To allow completion of an event during a waiting period assigned to a permittee, including a waiting period during which a different permittee has been granted competition days for a big wave event or a weekend event, amend rule to state that "waiting period" means the consecutive or non-consecutive days within the permit period from which the permittee selects competition days, but does not include setup and breakdown days. 6) Asking to remove the penalty point reduction for not providing after-action reports within 30 days and instead amend section 19-25- 8(m), section 19-25-11(w) and section 19-25-12(q) of the draft Rules to allow permittees 90 or more days to submit heat-sheets and after-action reports to the C&C DPR. 7) asking for wording in 19-25-13(l) to put in "Within 30 days of publication of the initial schedule of events, applicants shall notify the department of any disputes or conflicts arising from the initial schedule. Upon receiving any such notice, the department shall set a schedule allowing a minimum of 30 days for receiving statements from any parties to the dispute or conflict and making a decision about the issues in dispute". | Shore water rules were proposed and held 4 separate hearings. It was also proposed to City Council in August 2023 and allowed for more comments. Big wave body boarding and bodysurfing will be taken into consideration. §19-25-13 gives the process for scoring. Holding period would not be appropriate as those would conflict with other events. No other changes recommended. |
| | Waikiki Swim Club | Events should be seperated between swim races and surfing competitions. The new rules are geared toward bigger and multi-day events for surfing competitions around the island. Amateur swim races held on North and South Shores are smaller half day events that do not impact the local community the same way as the surf contests since the surf contests draw larger crowds. We would like to address how §19-25-8 section (d) and (e) are enforced and how many restrooms are adequate? It is a bit too much to ask our volunteers to be responsible in cleaning the public restrooms at the parks where all beach goers are using it. Our participants and spectators are not the only ones using the resources and generally do not hang out at the beach the rest of the day. We strive to restore the park in the same condition it was when we arrived and try to remove all trash in the area after the event. We ask that you reconsider the rules for smaller, single day swim races. | Event still has impact on park. Do take other shore water events into account. No changes recommended. |
| | Friends of Kewalos/Ron Iwami | Change draft rules from no more than 4 competition days per event to no more than 2 days per event. Change the draft rules to include more parks to mix from Sandy Beach to White Plains. This will enable the organizers to hold contests at more sites on the south shore to spread them out and not tax popular convenient sites such as Kewalos and Queens. | Rule already limits amount of events at Kewalo Basin and Kakaako Waterfront Park. No changes recommended. |

Small Business Regulatory Review Board

MEETING MINUTES

July 20, 2023

ZOOM RECORDING

- I. **CALL TO ORDER:** Chair Albitz called the meeting to order at 10:00 a.m., with a quorum present.

MEMBERS PRESENT:

- Mary Albitz, Chair
- Robert Cundiff, Vice Chair
- Jonathan Shick, 2nd Vice Chair
- Garth Yamanaka
- James (Kimo) Lee
- Sanford Morioka
- Mark Ritchie

ABSENT MEMBERS:

- Dr. Nancy Atmospera-Walsh
- William Lydgate
- Tessa Gomes

STAFF: DBEDT

Dori Palcovich
Jet'aime Ariola

Office of the Attorney General

Alison Kato

II. **APPROVAL OF JUNE 15, 2023 MINUTES**

Second Vice Chair Shick motioned to accept the June 15, 2023 meeting minutes, as presented. Mr. Ritchie seconded the motion and the Board unanimously agreed.

III. **OLD BUSINESS**

- A. Discussion and Action on the Small Business Statement After Public Hearing and Proposed Amendments to HAR Title 11 Chapter 55, Water Pollution Control, as follows, promulgated by Department of Health (DOH)
- a. Appendix C – Discharges of Storm Water Associated with Construction Activities
 - b. Appendix J – Occasional or unintentional Discharges from Recycled Water Systems
 - c. Appendix L – Discharges of Circulation Water from Decorative Ponds or Tanks

Mr. Darryl Lum, Engineering Supervisor at DOH's Clean Water Branch, explained that the rule changes are for the National Pollutant Discharge Elimination System (NPDES) permits. These permits are required because the Clean Water Branch's mission is to protect the public's health for everyone who uses state waters and to protect and restore the state waters

for marine life and wildlife. The rule package includes the re-adoption of the three subject appendices - C, J, and L.

The public hearing was held on June 23, 2023 with seven people attending virtually. Prior to this, over 1,000 emails were sent announcing the day of the public hearing with the public hearing notices posted on the website and in the local newspapers.

Mr. Lum stated that the proposed rule changes would not adversely impact small businesses. Of the seven virtual attendees at the hearing, no one provided testimony; however, two sets of comments were received by the Department of Design and Construction at the City and County of Honolulu and the State Department of Transportation (SDOT); no comments were received by the general public. Mr. Lum summarized SDOT's 15 comments/suggestions relating to the subject Appendices noting that DOH agreed to amend 3 of these comments/suggestions.

Mr. Ritchie motioned to move the proposed rules to the Governor for adoption. Vice Chair Cundiff seconded the motion, and the Board members unanimously agreed.

IV. NEW BUSINESS

A. Discussion and Action on Proposed New HAR Title 19 Chapter 25, Rules and Regulations Governing Shore Water Events, promulgated by Department of Parks and Recreation – City and County of Honolulu

Upon introduction from discussion leader and Second Vice Chair Shick, Ms. Laura Thielen, Director at the City and County's Department of Parks and Recreation (DPR), explained that the reason for the proposed rules is due to the County of Honolulu's City Council passing a resolution that updates the shore water event rules for gender equity in North Shore surfing events and contests.

Simultaneously, DPR began receiving requests to limit the number of surf contests held on five beaches along the Waikiki and urban Honolulu South Shore during the summer surf season. The number of surf contests has grown to close out the breaks in these areas nearly every weekend; however, DPR does not have jurisdiction over the ocean, it only has jurisdiction over the parks. As a result, the proposed rules govern the use of the land when various events occur with general equity surfing as the one exception because there is a limited amount of water space.

Under the existing rules, most of the requirements are staying the same. However, the major changes that affect small businesses include: 1) requiring any person wanting a shore water event on the South Shore must now apply the year prior to the event; 2) changing the existing North Shore calendar so it is in-line with the surf season, and 3) establishing an after-event report for all shore water events on the North and South Shores.

Director Thielen noted that in order to improve on gender equity, DPR must increase the weight on the rankings; she then explained the existing weight system versus the proposed weight system, which is not mandatory as promoters can submit for certain events. A minor rule change involves the events calendar. Due to requests by the community to limit the

number of surf contests held on the South Shore, in addition to the number of complaints DPR received regarding the traffic when surf events are held on the North Shore, the rules establish a South Shore annual calendar while maintaining the North Shore Calendar. Director Thielen also noted that DPR formed the Shore Water Advisory Group (SWAG) in July 2021 to conduct a public process to evaluate the proposed rule changes. SWAG agreed that the South Shore was one area where there will likely be limitations on events. Thus, two events were proposed where there will be recreational surfing every other weekend.

Testifier Ms. Sabrina Brennan, who represents Surf Equity and is a co-founder of Equity in Women Surfing, and who also submitted written testimony, requested that the proposed rules be amended along with the event permit requirements to specifically prohibit gender discrimination and applying it to all professional surf competitions. She added that the point system currently in the rules is insufficient, inappropriate and not in-line with state law as it relates to civil rights.

Testifier Mr. Alan Lennard suggested the rules specifically define both internal and external diversity. Ms. Betty Depolito testified that she has been working on the “equity” issue for 20 to 30 years. However, the current draft rules do not address this issue very well; the point system is not working, as it stands, and it needs to be changed. Also, she believes that the draft rules are favoring a few people because of the grandfathering provision which is unfair and likely illegal. She would like to have the rules re-addressed before they go out to public hearing. Testifier, Ms. Carol Philips commented that women mostly make up the small businesses/entrepreneurs that compete.

Mr. Ritchie reminded the Board and attendees that while the members are interested in human and civil rights, its purview is to review small business impact of the administrative rules. For example, are there female promoters owning small businesses that are being disadvantaged or impacted. Ms. Brennan interjected that many of the subject surf organizers are small businesses.

Mr. Yamanaka commented that specific definitions seem to be lacking in the proposed rule amendments. Testifier Ms. Depolito, who thanked DPR for the hard work that has been made promulgating these rules, replied that the process needs to be reflected in the rules to change “equity” by having an equal amount of competition with men and women competing.

Executive Director Thielen explained that under the existing rules, there cannot be two big wave events because there can only be one with no overlapping. Because of the concerns over this provision, the two big wave competitions will be allowed along with overlapping, holding periods, and other equitable/diversity requirements not originally allowed. During the discussion, it was agreed that wording in section 19-25-13(k)(4) be amended to include “or.”

Testifier Ms. Carol Philips confirmed that most of the women that compete are small business owners/sole proprietors. Limiting the opportunities being offered affects their businesses and the ability to earn a living economically and causes a financial disadvantage to their businesses. Thus, gender equity is very important to these rules.

Director Thielen replied that the promulgation of the rules has been going on for about two years with much outreach and discussion of the proposal with community input. She recognizes that the proposed rules will not make 100% of the stakeholders happy, but she believes DPR has found the right balance and an improvement from the existing rules and also provides better clarity.

In regard to the small businesses operating in every event except surf quotas, there is zero impact as indicated by Director Thielen. For events outside of the North or South Shores, there is also zero impact. However, there is minor impact for the small businesses operating surf meets on the North Shore. For example: 1) it changes the calendar from the calendar year to the surf calendar, which is likely to be a positive impact; and 2) it improves the clarity as to how the applications are ranked. Additionally, a neutral change affecting small businesses is that now DPR is requiring an “after” event report; another change is that every applicant/application will be ranked.

Second Vice Chair Shick motioned to move the proposed rules to public hearing with the caveat that prudent outreach is performed with the impacted stakeholders. Mr. Yamanaka seconded the motion, and the Board members unanimously agreed.

B. Discussion and Action on Proposed Amendments to HAR Title 12 Chapter 46, Civil Rights Commission, promulgated by Department of Labor and Industrial (DLIR) Relations Civil Rights Commission

Ms. Robin Wurtzel, Chief Council at DLIR’s attached enforcement agency, Civil Rights Commission, explained that the Commission receives complaints primarily for alleged discrimination, public accommodations, and employment practices. Most of the Commission’s rules affect small business as it relates to employment issues.

A majority of the proposed changes to the rules are non-substantive in nature with the exception of two problematic definitions, employment and harassment. In regard to employment, which applies to this Board, the small businesses employing one or more persons must comply with non-discrimination statutes and rules in regard to the proposed changes of the definition of employment, which is defined by case law (*Santiago*).

The proposed definition is also in contrast to the definition of “independent contractor” and is consistent with similar rules enforced by DLIR such as in the Unemployment rules. Ms. Wurtzel believes this proposal is easier for small businesses to understand.

Vice Chair Cundiff commented that he would be interested in getting clarification from the Chamber of Commerce, due to its interaction and support of small businesses, for its reasoning to suggest a longer definition to “employment.” He is also interested in understanding what ways the Commission’s proposed definition would impact small business. Ms. Wurtzel responded that previously the Chamber of Commerce met in-person with the Commission and addressed every proposed amendment. She will keep in mind the Chamber’s concerns with the employment definition throughout rule review process.

DEPARTMENT OF PARKS AND RECREATION

Repeal of Chapter 19-4
City and County of Honolulu Administrative Rules
and

Adoption of Chapter 19-25
City and County of Honolulu Administrative Rules

xxx xx, 2023

SUMMARY

1. Chapter 19-4, City and County of Honolulu Administrative Rules, entitled "Shore Water Events," is repealed.
2. Chapter 19-25, City and County of Honolulu Administrative Rules, entitled "Rules and Regulations Governing Shore Water Events", is adopted.

CITY AND COUNTY OF HONOLULU
ADMINISTRATIVE RULES

TITLE 19

DEPARTMENT OF PARKS AND RECREATION

CHAPTER 4

SHORE WATER EVENTS

REPEALED

§§19-4-1 to 19-4-15 Repealed. [R]

CITY AND COUNTY OF HONOLULU ADMINISTRATIVE RULES

TITLE 19

DEPARTMENT OF PARKS AND RECREATION

CHAPTER 25

RULES AND REGULATIONS GOVERNING
SHORE WATER EVENTS

Subchapter 1 General Provisions

- §19-25-1 Purpose
- §19-25-2 Application
- §19-25-3 Definitions

Subchapter 2 Specific Provisions

- §19-25-4 Permit required
- §19-25-5 Permit application
- §19-25-6 Permit application deadline for surf events held on the north shore
- §19-25-7 Permit application deadline for surfing events held on the south shore
- §19-25-8 Permit conditions
- §19-25-9 Revocation of permit
- §19-25-10 Regulations governing shore water events
- §19-25-11 Regulations governing surf events held on the north shore
- §19-25-12 Regulations governing surfing events held on the south shore
- §19-25-13 System for ranking applications for north shore and south shore calendars
- §19-25-14 Indemnification
- §19-25-15 Denial or revocation of a permit
- §19-25-16 Violation
- §19-25-17 Severability

SUBCHAPTER 1

GENERAL PROVISIONS

§19-25-1 Purpose. The purpose of this chapter is to make public parks readily accessible to the public; to ensure maximum permissible use of park areas and facilities by appropriate distribution of users; to ensure proper, orderly and equitable use of park areas and facilities through user controls; to ensure protection and preservation of areas and facilities by not overtaxing facilities; and to promote the health, safety, and welfare of the users of park areas and facilities. [Eff]
(Auth: RCH §4-104, ROH §10-1.3) (Imp: ROH §10-1.3)

§19-25-2 Application. These rules and regulations shall apply to the use of City parks and beach properties under the control of the department of parks and recreation, City and County of Honolulu, to provide access to conduct shore water events. [Eff] (Auth: RCH §6-1403, ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-3 Definitions. As used in this chapter, the following words and terms shall have the following meaning unless the context clearly indicates otherwise:

"2025-2027 triennial north shore calendar" means the schedule of surf events to be held on the north shore from January 1, 2025 through May 31, 2027.

"ADA" means the Americans with Disabilities Act of 1990, 42 U.S.C. Section 12101 et. seq., as amended.

"Advisory committee" means a committee, appointed by the Mayor, comprised of persons who represent the Hawaii surfing industry, to assist the department in resolving scheduling conflicts by providing comments to the department concerning the various applicants and information concerning surf contests. At least two

persons and no more than six total persons will establish the Advisory Committee. A membership ratio of fifty percent men and fifty percent women is required.

"After-event action report" means a department form completed by a permittee following a shore water event to document the results for events that go through the ranking system described in §19-25-13 which will include findings, deficiencies, and opportunities for improvement.

"Amateur shore water event" means a shore water event open to participants who engage in a shore water event only as a pastime and not as a profession.

"Annual south shore calendar" means the schedule of surfing events to be held on the south shore over a one year period.

"Application for use of parks facilities" or "permit application" means a department form to request a permit.

"Applicant" means the person submitting a permit application or a person acting as an authorized agent for the applicant listed on the application.

"Big wave event" means a one-day surf event requiring participants to paddle into waves of minimum wave face heights of forty feet or higher without the use of thrill craft or tow-in assistance.

"Bodyboard" means a board consisting of a rectangular piece of foam shaped to a hydrodynamic form used for wave riding. The bodyboard is ridden usually in a prone position.

"Bodysurfing" means a water sport involving wave riding without the assistance of a floatation device.

"Bodyboarding" means a water sport involving wave riding with the assistance of a floatation device.

"Canoe surfing" means a water sport involving wave riding with the assistance of a canoe.

"City" means the city and county of Honolulu.

"Competition day" means any portion of the day consisting of maximum of eight hours used to conduct a surf event.

"Cooling off period" means the ten-day period preceding and following a surf event when no other

surf event will be permitted at the same park.

"Criteria rating sheet" means the rating form used in resolving the north shore and south shore calendar conflicts.

"Department" means the department of parks and recreation, city and county of Honolulu.

"Director" means the director of the department of parks and recreation, or duly authorized representative.

"Duke's OceanFest Watersports Festival" means the annual event held for no more than 14-days in August at venues in Waikiki, including Kuhio Beach Park and Kapiolani Park Beach, also known as Queen's Beach to celebrate the life Duke Paoa Kahanamoku. The festival may include a variety of watersports that represent Duke Kahanamoku's legacy.

"Eddie Aikau Big Wave Invitational" or "The Eddie" means the one-day big wave event at Waimea Bay Beach Park that honors Eddie Aikau, who was a champion athlete, waterman, and a family man who exemplified hawaiian culture.

"Event" means the permitted period, including setup days, waiting period days, competition days and breakdown days.

"Fundraiser" means a special event for the purpose of raising funds, including the exchange of monies on park property, that is sponsored by community organizations, associations, groups or individuals, including nonprofit fundraising activities, and is accessory and subordinate to the primary recreational permitted use.

"Hydrofoil" means the sport of wave riding a surfboard which has a hydrofoil attached to the board instead of a fin.

"HRS" means the Hawaii Revised Statutes, as amended.

"IRC" means the Internal Revenue Code, Title 26, United States Code, as amended.

"Kapiolani Park Beach" also known as "Queen's Beach" means the park area makai of Kalakaua Avenue between the groin at the end of Kapahulu Avenue and the Natatorium.

"Kitesurfing" or "kiteboarding" means a water sport using a power kite to pull the rider through the water on a surfboard and which may not involve wave riding.

"Marine event permit" means a document issued by the state division of boating and ocean recreation of the department of land and natural resources which authorizes use of a particular area of the shore water of the state for a specific time period.

"Nonprofit organization" means an association, corporation or other entity, organized and operated exclusively for religious, charitable, scientific, literary, cultural, educational, recreational, or other nonprofit purposes, and which qualifies for exemption from the general excise tax provisions of Chapter 237, Hawaii Revised Statutes, as amended, and under Section 501 of the Internal Revenue Code of 1954, as amended.

"North shore" means the shore water area that extends from Kaena Point to and inclusive of Kawela Bay under the jurisdiction of the department.

"North shore application supplement" means the packet of instructions and application materials made available to all applicants applying for permits for surf events to be calendared on the north shore calendar.

"North shore calendar" means the schedule of surf events to be held on the north shore from September 1st to May 31st

"Paddleboarding" means a surface water sport in which the participant is propelled by a swimming motion using their arms while lying or kneeling on a paddleboard or surfboard in the ocean.

"Parks permit" or "permit" means a non-transferrable department document granting a permittee permission for a specific event to use recreational and other areas and under the control, maintenance, management and operation of the department.

"Parks permit office" means the office in the department responsible for processing and final approval of permit applications and issuing of park permits.

"Person" means an individual, partnership, corporation, government, or government subdivision or agency, business trust, estate, association or any other legal entity.

"Power kite" means a type of dual-line kite capable of generating significant pulling power generally used in conjunction with a vehicle or board.

"Pro-Am shore water event" means a shore water surf event that may include divisions for amateurs, professional participates or a combination thereof.

"Professional shore water event" means a shore water event limited to participants who engage in the shore water event as a means of livelihood.

"Public park" means any park, park roadway, playground, athletic field, beach, beach right-of-way, tennis court, golf course, swimming pool, or other recreation area or facility under the control, maintenance and management of the department of parks and recreation. "Public park" does not include a public thoroughfare defined as a "mall" under Section 29-1.1 unless the public thoroughfare has been (1) accepted, dedicated, or named by the council expressly as a "Public park" or "park"; (2) placed under the control, maintenance, and management of and classified expressly as a "Public park" or "park" by the department of parks and recreation; or (3) constructed or situated within a larger specific recreation area or facility listed in the preceding sentence.

"Queen's Beach" means the area makai of Kalakaua Avenue between the groin at the end of Kapahulu Avenue and the Natatorium.

"ROH" means the revised ordinances of Honolulu 1990, as amended.

"Shore water" means any shore or water between the three nautical mile limit and the mean tide mark on the shores of the islands of the State.

"Shore water event" means any organized water sport event including, but not limited to sail race, jet ski race, paddle board race, surf event, swim race, canoe race, or similar activity held in the shore water.

"Skimboarding" or "skimming" means a water sport involving riding a board on wet sand or shallow water and which does not involve wave riding.

"South shore" means the shore water area that extends from west end of Kakaako Waterfront Park to Makapuu Point.

"South shore application supplement" means the packet of instructions and application materials made available to all applicants applying for permits for surf events to be calendared on the south shore calendar.

"South shore calendar" means the schedule of surfing events to be held on the south shore from May 1st to September 30th, unless allowed under §19-25-7(b). The south shore beach parks included on the calendar are Kuhio Beach Park, Queen's Beach, Kewalo Basin Park and Ala Moana Regional Park.

"Standup paddle surfing" or "stand up paddleboarding" means a wave riding water sport involving the use of a standup paddle to propel the rider across the surface of the water while standing on a surfboard, windsurf board, or paddleboard.

"State" means the State of Hawaii.

"State division of boating and ocean recreation" means the state division of boating and ocean recreation, department of land and natural resources, State of Hawaii.

"Submit" or "submitted" means a completed and signed park permit application containing an original wet signature that has been delivered either by hand Monday through Friday, except holidays, between the hours of 8:00 a.m. and 4:00 p.m. or by Fedex or UPS or similar carrier service to the department of parks and recreation permits section office located at the Frank F. Fasi Municipal Building, 1st Floor, 650 South King Street, Honolulu, HI 96813. Applications will be date stamped by the department upon date of receipt of the application and the wet signature.

"Surfboard" means any type of board which is used for the sport of surfing.

"Surf event" means a water sport contest, competition, exhibition or organized event involving

any form of wave riding.

"Surfing" means a water sport involving wave riding with the assistance of a surfboard.

"Surfing event" means a water sport contest, competition, exhibition or organized event involving surfing.

"Tow-in surfing" means a water sport utilizing a surfboard equipped with foot straps for wave riding with the assistance of a thrillcraft that is equipped with a rescue sled, bow tow-line and a tow-in-rope.

"Triennial north shore calendar" means the schedule of surf events to be held on the north shore over a three-year period beginning September 1st of the first year and ending on May 31st of the third year. For example, the Triennial north shore calendar for 2027-2030 shall run from September 1, 2027 through May 31, 2030, with events only permitted during the months of September 1st through May 31st.

"Waiting period" means the consecutive days within the permit period from which the permittee selects competition days, but does not include setup and breakdown days.

"Windboard" means a modified surfboard having a single sail mounted on a mast that pivots on a ball joint which is sailed by one person standing up.

"Windsurfing" means a water sport using a windboard and which does not involve wave riding.

[Eff] (Auth: RCH §6-1403, ROH §1-9.1)
(Imp: ROH §10-1.3)

SUBCHAPTER 2

SPECIFIC PROVISIONS

§19-25-4 Permit required. No person shall use a park to hold a shore water event or use a park in conjunction with a shore water event held in State shore waters without first obtaining a park use permit from the department. [Eff] (Auth: RCH §6-1403, ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-5 Permit Application. (a) An applicant requesting a permit to conduct a shore water event shall submit an application to the department at least sixty days prior to the date of the shore water event but no earlier than one year prior to the date of the shore water event.

(b) All permit applications shall set forth the name of the applicant, nature of proposed shore water event, requested park, requested dates and time of the shore water event, requested number of competition days, requested contest dates, number of competitors, event format, number of days to setup and remove equipment and facilities, an estimate of the numbers of participants and spectators, a statement of equipment or facilities to be used, including site plan, proposed fees including entry fees, applicable federal, state identification numbers and any other information as may be requested by the department. Applicants for surf events requesting to be calendared on the north or south shore calendars will be required to provide additional detailed information that shall be used to rank applicants' proposed events to determine permit eligibility and awards, as described in §19-25-13.

(c) An applicant requesting a permit to conduct a surf event on the north shore shall submit an application by the deadlines set forth in §19-25-6.

(d) No permit to conduct a surf event on the north shore shall be issued for the period from June 1st through August 31st.

(e) An applicant requesting a permit to conduct a single surf event or multiple surf events to be scheduled on the triennial north shore calendar, including the 2025-2027 triennial north shore calendars shall submit separate applications and separate application supplements for each event requested for each north shore season. For example, an applicant desiring a single event only during January 1 through May 31, 2025, shall submit one application and application supplement. An applicant

requesting permits to conduct one surf event in multiple years of the Triennial calendar, one event in January 1 through May 31, 2025 and one surf event in September 1, 2025 through May 31, 2026 shall submit two permit applications and two application supplements specifying the requested park, dates and time.

(f) An applicant requesting a permit to conduct a surfing event on the south shore shall submit an application by the deadlines set forth in §19-25-7.

(g) No permit to conduct a surfing event on the south shore shall be issued for the period from October 1st through April 30th, unless allowed under §19-25-12(b).

(h) An applicant requesting a permit to conduct a single surfing event or multiple surfing events to be scheduled on an annual south shore calendar, shall submit separate applications and separate application supplements for each south shore season. For example, an applicant desiring a permit for a single surfing event only during 2024, shall submit one application and application supplement. An applicant requesting permits to conduct multiple surfing events in 2024 shall submit a permit application and application supplement specifying the requested park, dates and time, for each surfing event.

(i) The department may reject any application that contains false information, that is incomplete or is not received by the department by the close of business on the filing deadline.

(j) The department may require an applicant to provide additional information that may be considered in resolving conflicts in the selection process.

(k) The department may issue a permit, without unreasonable delay and provided that an application is submitted with reasonable timeliness and applicant has met all permit application requirements, unless;

- (1) The requested park has been reserved for city or department sponsored activity;
- (2) A prior application for a permit for the same time and place has been made that has been or will be granted;

- (3) Issuance of a permit will result in a violation of city, state or federal rules, regulations or ordinances;
 - (4) It reasonably appears that based upon the information provided that the shore water event will present a clear and present danger to the public health or safety;
 - (5) The shore water event is of such nature or duration that it cannot reasonably be accommodated in the particular location applied for, considering factors such as probable damage to the park's resources or facilities, interference with program activities, or impairment of the operation of the public use facilities or services of city concessionaires or contractors;
 - (6) Applicant fails to pay required fees or deposits, or if a payment made by check is returned unpaid;
 - (7) The application is subject to the ranking process described in §19-25-13;
 - (8) A state of emergency is declared by the State or City authorities;
 - (9) Natural or civil disturbances occur or threaten to occur, including but not limited to, tsunamis, floods, earthquakes, storms, riots, demonstrations, and employee strikes;
 - (10) Permittee violates or has previously violated permit conditions or provisions of this chapter within a year of a permit application.
 - (11) Applicant knowingly gives false, fictitious or fraudulent statements or representations made on the permit application.
 - (12) The park is closed or will be closed because of damage, or because of scheduled or ongoing construction, repair or maintenance activities.
- (1) If a permit is denied, the applicant shall be informed in writing, with the reasons for the denial set forth. [Eff _____] (Auth: RCH §6-1403, ROH §1-9.10) (Imp: ROH §10-1.3)

§19-25-6 Permit application deadline for surf events held on the north shore. (a) Surf events scheduled on the 2025-2027 triennial north shore surf calendar shall be scheduled for the period from January 1, 2025 through May 31, 2027. Starting from September 1, 2027-2030, permits to conduct surf events on the north shore shall be issued on a triennial three-year cycle running from September 1st of the first year and ending on May 31st of the last year. For example, for the 2027-2030 triennial north shore surf calendar, the first cycle will be from September 1, 2027 through May 31, 2028, the second cycle will be from September 1, 2028 through May 31, 2029, and the third cycle will be from September 1, 2029 through May 31, 2030.

(b) Applications for permits to conduct surf events on the north shore shall be submitted to the department on or before the last business day in the month of September of the year preceding the start of triennial north shore calendars except for the 2025-2027 triennial north shore surf. For example, an applicant desiring permits to conduct surf events during the 2027-2030 triennial north shore calendar must submit applications no later than the last business day in September, 2026. Applicants desiring permits to conduct surf events during the 2030-2033 triennial north shore calendar must submit applications no later than the last business day in September, 2029.

(c) For the 2025-2027 triennial north shore surf calendar years, starting on January 1, 2025 and ending on May 31, 2027, applications are due on the last business day in January 2024.

(d) The director may, in the director's discretion, extend the application deadline, if the extension is consistent with the purposes of these rules and in the public interest. [Eff
] (Auth: RCH §6-1403, ROH §1-9.10) (Imp: ROH §10-1.3)

§19-25-7 Permit application deadline for surfing events held on the south shore. (a) Starting in 2026, permits to conduct surfing events on the south shore shall be issued on a one-year cycle.

(b) An application for a permit to conduct a surfing event on the south shore shall be submitted to the department on or before the last business day in the month of May of the year preceding the start of annual south shore calendar. For example, an applicant desiring a permit to conduct a surfing event during 2026 must submit an application no later than the last business day in May, 2025. An applicant desiring a permit to conduct a surfing event during 2027, must submit an application no later than the last business day in May, 2026.

(c) The director may, in the director's discretion, extend the application deadline, if the extension is consistent with the purposes of these rules and in the public interest. [Eff]
(Auth: RCH §6-1403, ROH §1-9.10) (Imp: ROH §10-1.3)

§19-25-8 Permit conditions. (a) A park permit is permission for the applicant to use the park land to stage and conduct the permitted event. Applicants are required to obtain a separate marine event permit issued by the state division of boating and ocean recreation, in order to utilize the ocean and shore area abutting the park under the jurisdiction of the department of land and natural resources. A city permit authorizing an applicant to conduct a shore water event in a park or to use a park in conjunction with a shore water event held in State shore waters does not authorize the applicant to utilize the ocean and shore area under jurisdiction of the department of land and natural resources.

(b) Permittee shall present to the department, no later than three weeks before the event starts, a certificate of comprehensive general liability insurance in which the combined limit of liability for bodily injury and property damage is two million dollars per occurrence. Such policy or policies shall

be placed with a company with an A.M. Best rating of A, Class 7, or better. The insurance certificate shall name the city and county of Honolulu, its directors, officers and employees, the State, its officers and employees, as additional insured, and a copy of the certificate of insurance shall be filed with the parks permit section. Said coverage to commence from the first day that equipment is set up on the park for the event to the last day of the event or the last day the equipment is removed from the park, whichever is the later. All policies and coverages required by this section are subject to the approval by the city risk manager as to content and form. If at any time in the judgment of the city risk manager said policies and/or coverages are not sufficient for any cause or reason, the city risk manager may require the permittee to replace said policies and/or coverages within five days with other policies and/or coverages acceptable to the city risk manager in accordance with this section. If said permittee fails to replace said policies within said period, the permit issued or to be issued shall be, by such failure, automatically suspended until such time said requirement is complied with, and the director or director's designated representative is hereby authorized to halt the activities of the permittee and enforce such suspension after receiving written notice from the city risk manager that said policies and/or coverage have not been replaced with good and sufficient policies and/or coverage.

(c) Permittee shall pay to the department prior to issuance of a permit for an amateur shore water event a \$500 deposit for clean-up and restoration of damages and a deposit of \$2,500 for professional shore water event and pro-am shore water event. An additional \$500 deposit shall be required of any permittee who obtains approval from the department to drive or park vehicles on the grass at the park site. Any damage to utilities, including sprinklers, water and electrical lines, facilities and grounds shall be repaired by a licensed contractor, retained by the permittee, immediately and to the satisfaction of the

department. Should clean-up and repair be deemed unsatisfactory by the department, the department shall clean-up and repair any damage to the park caused by the event or the permittee and use the deposit as full or partial payment for the clean-up and repair costs incurred by the department. If clean-up or restoration of damages is not satisfactory as determined by the director, or if clean-up and repair costs exceed the amount of the deposit, permittee shall be responsible for any costs incurred by the department exceeding the deposit.

(d) Permittee shall be required to provide portable toilets at locations or where existing restrooms are not operational or determined inadequate by the department to cover the estimated number of participants and spectators of the shore water event. Where public restrooms are not available, permittee shall be required to provide a minimum of one portable toilet for every 500 spectators. Where public restrooms are available, permittee shall provide a minimum of one portable toilet for every 1,000 spectators if it is determined by the department that the public restrooms are inadequate for the estimated number of participants and spectators. Permittee shall provide at least one ADA accessible portable toilet, with a minimum ratio of one ADA accessible portable toilet for every inaccessible portable toilet, at its own expense. The department has the authority to require more portable toilets or ADA accessible portable toilets than the minimum or the number of toilets the applicant listed on its application.

(e) Permittee shall service the portable toilets and public restrooms before the start of the shore water event and shall maintain the portable toilets and public restrooms in a clean and sanitary condition throughout the event, including pumping portable toilets to remove accumulated waste when the toilets are close to capacity. Portable toilets shall be serviced and remain open on each competition day. The portable toilets can be locked and remain locked until the start of the competition day. Permittee shall

insure that the portable toilets are accessible to the service contractor and that access to the portable toilets is not blocked by park users, vehicles or equipment. Permittee, at its own expense, shall provide supplemental custodial services as determined necessary by the department for park facilities and comfort stations to ensure garbage is collected and disposed of as to prevent littering of park beaches and the ocean.

(f) Permittee shall provide special duty police officers as determined necessary by the department for traffic, parking, security and crowd control in consultation with the Honolulu police department.

(g) Permittee shall be responsible to provide security using a bona fide security company or special duty police officers for all materials, supplies, equipment, and personal property stored on park property during the event. Permittee assumes full responsibility for the risk of property damage or loss which may arise from, or is in any way connected with the storage of permittee's property on the park property or the shore water event.

(h) Permittee shall be responsible for monitoring and controlling noise levels generated by the event, loudspeaker system and other equipment in order to comply with HRS Chapter 342F and ROH Section 10-1.2(b)(8), as amended. Violation of this provision shall automatically null and void the permit.

(i) Permittee shall not transfer, assign, or sell any or all rights granted by the permit or grant the use of any or all of the permit period to a third party or relinquish possession or use of the whole or any parts of the park granted to permittee under the permit. Any transfer, assignment, sale, grant or relinquishment of the permit shall automatically null and void the permit.

(j) Commercial announcements over the public address systems shall be limited to recognition of sponsors.

(k) Announcements over the public address systems and music shall not be in excess of 80 dBA sound pressure level, as established by ROH section

10-1.2(b) (8), as amended.

(l) The permit may contain such conditions as are reasonably consistent with the protection and use of the park for the purposes for which the park is managed. It may also contain reasonable limitations on equipment to be used and the time and area within which the event is allowed, and may require the permittee to provide additional portable toilet facilities, restroom maintenance, pumping of portable toilets as well as park restroom toilets, parking attendants, trash collection, and police security.

(m) Permittee shall comply with all applicable laws, rules, and regulations of the federal, state, and county governments. Issuance of a permit is not a grant of any other approvals that may be required of the permittee for the permitted activity, nor does a permit exempt the permittee or the permitted activity from any applicable laws, rules, ordinances, and regulations of any federal, state, or county government.

(n) The director may, in the director's discretion, waive any provision of this chapter, if the waiver is consistent with the purposes of this chapter and in the public interest. [Eff
] (Auth: ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-9 Revocation of permit. (a) A permit may be revoked under any of the conditions listed in Section 19-25-5(k) that constitute grounds for the denial of a permit. Such revocation shall be in writing, with the reasons for revocation clearly set forth, except under emergency circumstances, when an immediate verbal revocation or suspension of the permit may be made, to be followed by written confirmation within seventy-two hours.

(b) A permit may be revoked in the event the department determines that the permitted park is unavailable due to public safety concerns resulting from severe shore water erosion.

(c) Violation of the terms and conditions of a permit issued in accordance with these rules and

regulations shall result in revocation of the permit and permittee shall be ineligible to apply for any shore water permit for a minimum of one calendar year following revocation and other penalties provided in ROH sections 10-1.3(c) and 10-1.6, as amended. [Eff] (Auth: RCH §6-1403, ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-10 Regulations governing shore water events. (a) Posting of any signage, banners, posters, brochures, or advertising shall be subject to prior approval of the director.

(b) Permittee, at its own expense, shall pick up, bag and remove from the park at the end of each day all rubbish, or the permittee shall provide an on-site dumpster for the purpose of daily rubbish collection. The filled dumpster(s) shall be emptied daily as needed, and removed no later than 12:00 noon of the first working day after the end of the shore water event.

(c) Equipment, including spectator bleachers, judges' stand, or platforms may be allowed subject to the prior approval of the department and provided that permittee provides twenty-four hour security for the equipment.

(d) All materials, supplies, equipment and personal property shall be removed from the park no later than three days after the end of the shore water event or three days after the final competition day, whichever is sooner.

(e) Permittee may not enter into any agreement with any for-profit organization except as otherwise provided herein to be on the park property during the shore water event.

(f) Subject to prior department approval, permittee may arrange for a commercial food caterer or lunch wagon to provide prepaid food to the shore water event participants. Authorization is to be noted on the park use permit.

(g) Food and refreshments shall be served to only event participants and not to other park users or event spectators. There shall be no exchanging of

monies on park property.

- (1) Liability insurance coverage, including products liability, is to be provided by the commercial food caterer or lunch wagon in the following minimum amounts: two million dollars per occurrence for bodily injury and property damage.
- (2) The certificate of insurance shall name the city and county of Honolulu and the State of Hawaii and their officers and employees as additional insured.
- (h) Fundraising shore water events, for the purpose of raising funds, including the exchange of monies on park property that are sponsored by community organizations, associations, groups or individuals, including nonprofit fundraising activities, are allowed if it is accessory and subordinate to the primary recreational, permitted use. Authorization is to be noted on the park use permit.
 - (1) If authorized by law, commercial food caterers, lunch wagons, and commercial vendors are allowed to operate only by prior arrangement with the non-profit organization conducting the fundraiser.
 - (2) The non-profit organization shall obtain authorization from the parks permit office to operate a temporary concession.
 - (3) Liability insurance coverage, including products liability shall be provided by both the non-profit organization and the commercial food caterer or lunch wagon in the following amounts: two million dollars per occurrence for bodily injury and property damage. The certificate of insurance shall name the city and county of Honolulu and the State of Hawaii and their officers and employees as additional insured.
 - (4) In a park, where a food concession is operated under contract with the city, the non-profit organization shall obtain written

permission from the food concessionaire to sell food and refreshments in that park. The written permission shall be presented to the parks permit office prior to obtaining a temporary concessions permit.

- (5) The permittee shall provide a copy of a State department of health temporary food concession permit for each caterer and/or a lunch wagon State health certificate to the parks permit office.

- (i) Temporary structures over 2,100 square feet in size require a permit from the Honolulu fire department. Applicant is responsible to obtain all applicable permits. Applicant shall obtain the requisite agency and department approvals. No park permit shall be issued until the department receives a copy of the temporary building permit and Honolulu fire department permit. [Eff] (Auth: RCH §6-1403, ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-11 Regulations governing surf events held on the north shore. (a) Permits to use a park for a surf event on the north shore are limited by date, number of events, time of events and to specific beaches, to ensure recreational surfers have opportunity to surf these limited surf breaks during the prime surf season.

(b) Use of a park for a surf event to be held on the north shore is permitted only during the period from September 1st through May 31st. No permit will be issued for use of a park on the north shore for a surf event from June 1st through August 31st.

(c) All surf events held on the north shore must be scheduled on the triennial north shore calendar or on the 2025-2027 triennial north shore surf calendar before a park use permit may be issued.

(d) A surf event shall be permitted only at Haleiwa Ali'i Beach Park, Waimea Bay Beach Park, Ehukai Beach Park, Sunset Beach Park and other north shore parks as approved by the director.

(e) The department shall establish a triennial

north shore calendar for surf events no later than on the last business day of January of the same year when the triennial north shore calendar is being established. For example, for the 2027-2030 triennial north shore calendar, the calendar will be established by January 29, 2027. For the 2025-2027 triennial north shore surf calendar, the department shall establish the 2025-2027 triennial north shore surf calendar by the last business day on May 31, 2024.

(f) The total number of competition days for surf events permitted on the north shore during each north shore calendar period shall not exceed sixty-four, provided that no more than sixteen competition days may be scheduled at each beach park. For the 2025-2027 triennial north shore surf calendar, the total number of competition days for surf events scheduled during the period from January through May 2025 shall not exceed thirty-two, provided that no more than twelve competition days may be scheduled at each beach park. For the remainder of the 2025-2027 triennial north shore, the total number of competition days for surf events shall not exceed sixty-four, provided that no more than sixteen competition days may be scheduled at each beach park

(g) At each park there shall be a ten-day cooling off period, with the exception of a big wave event.

(h) Except for a big wave event or as authorized by the director, no surf event shall be permitted a waiting period of more than fifteen days.

(i) Scheduling of overlapping waiting periods is prohibited. However, the director may approve up to one big wave event, in addition to the Eddie, one or both may have a waiting period of up to a maximum of ninety days which may overlap the waiting periods of other surf events. In the event a second big wave event is approved, the two big wave events may have waiting periods that have consecutive days without a cooling off period in-between. On leap years, the waiting period may be up to a maximum of ninety-one days.

(j) The Eddie shall be given priority as a big

wave event, provided the applicant meets the community impact mitigation criteria and submits a complete application. The director may authorize no more than one additional big wave event, for the purpose of meeting the diversity criteria and supporting the growth of big wave surfers previously not included in such events due to their gender.

(k) Two big wave events shall not be held on two consecutive weekends. They may be held on two consecutive days.

(l) No surf event shall be permitted more than four competition days, however, the director may, in the director's discretion and if consistent with the purposes of this chapter and in the public's interest, permit a surf event five competition days if the maximum number of competition days scheduled at the requested park has not been awarded.

(m) Scheduling of two or more surf events on the same day is prohibited. However, the director may approve a big wave event to occur on the same day as another permitted surf event.

(n) No surf event shall start before 8:00 a.m. All surf events shall be completed before 4:30 p.m.

(o) A competition day shall consist of eight hours of competition. The director may, in the director's discretion, grant an extension of up to a maximum of thirty minutes to a competition day if the extension facilitates completion of a heat. Any extension granted shall be added to the total competition hours for the event. No extension will be granted if the cumulative total competition hours for the event is increased.

(p) The maximum period of time a surf event shall be permitted is as follows:

- (1) A surf event awarded one day may include a portion of two calendar days not to exceed a cumulative total of eight hours to complete the event.
- (2) A surf event awarded two days may use a maximum of three calendar days not to exceed a cumulative total of sixteen hours to complete the event.

- (3) A surf event awarded three days may use a maximum of five calendar days not to exceed a cumulative total of twenty-four hours to complete the event.
- (4) A surf event awarded four days may use a maximum of six calendar days not to exceed a cumulative total of thirty-two hours to complete the event.
- (q) Except for a big wave event, a surf event shall not be held on any of the following dates:
 - (1) Labor Day - The first Monday in September.
 - (2) General Election Day - In even-numbered years, the first Tuesday after the first Monday in November.
 - (3) Veterans' Day - The eleventh day in November.
 - (4) Thanksgiving Day - The fourth Thursday in November.
 - (5) Christmas Day - The twenty-fifth day in December.
 - (6) New Year's Day - The first day in January.
 - (7) Dr. Martin Luther King, Jr. Day - The third Monday in January.
 - (8) Presidents' Day - The third Monday in February.
 - (9) Prince Jonah Kuhio Kalaniana'ole Day - The twenty-sixth day in March.
 - (10) Good Friday - The Friday preceding Easter Sunday.
 - (11) Memorial Day - The last Monday in May.
- (r) Dates listed in §19-25-11(q) on which surf events are not permitted shall not be counted as part of the waiting period.
- (s) Expression sessions and exhibitions shall not be considered in the ranking process, but each day an expression session or exhibition is held shall count as a competition day.
- (t) Permittees of a north shore event are subject to having no more than two waiting period days cancelled due to a big wave event.
- (u) The permittee of the big wave event must notify the department of the date selected to conduct

the permitted big wave event. The department shall contact the permittee awarded the permit for a surf event during the same period, if any, and notify the permittee that the big wave event will be conducted during the permittee's event period. The department director may allow both the big wave event and the surf event to run on the same day.

(v) After completion of the shore water event, each permittee shall submit an after-event action report to the department, no later than one month after the event, which will be evaluated and published on the department's website. Failure to submit an after-event action report will affect future applications by the permittee when the applications are being reviewed and ranked, which is detailed in §19-25-13(h).

(w) The director may, in the director's discretion, waive any provision of this chapter, if the waiver is consistent with the purposes of this chapter and in the public interest. [Eff
] (Auth: RCH §6-1403, ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-12 Regulations governing surfing events held on the south shore. (a) Use of a park for a surfing event to be held on the south shore is permitted only during the period from May 1st through September 30th. No permit will be issued for use of a park on the south shore for a surfing event from October 1st through April 30th, unless allowed under §19-25-12(b).

(b) Permits may be obtained only for organized youth sports for students ages pre-school through high school, and educational events that are for students ages pre-school through high school and conducted or offered by educational institutions recognized by the State of Hawaii department of education from October 1st through April 30th.

(c) All surfing events held on the south shore must be scheduled on the annual south shore calendar before a park use permit is issued.

(d) A south shore surfing event shall be

permitted only at Kuhio Beach Park, Queen's Beach Park, Kewalo Basin Park and Ala Moana Regional Park and other south shore parks as approved by the director.

(e) The department shall establish an annual south shore calendar for surfing events no later than on the last business day of September of the year preceding the start of the annual south shore calendar being established.

(f) At each park there shall be a ten-day cooling off period between surfing events.

(g) No surfing event shall be permitted a waiting period of more than fifteen days.

(h) No more than two surfing events can have overlapping waiting periods at two separate parks listed in §19-25-12(c).

(i) No surfing event shall be permitted more than four competition days, except for the Duke's oceanfest watersport festival.

(j) A maximum of two surfing events can run at the same time as long as it is not at the same park listed in §19-25-12(c).

(k) The maximum period of time a surf event shall be permitted is as follows:

(1) A surf event awarded one day may include a portion of two calendar days not to exceed a cumulative total of eight hours to complete the event.

(2) A surf event awarded two days may use a maximum of three calendar days not to exceed a cumulative total of sixteen hours to complete the event.

(3) A surf event awarded three days may use a maximum of five calendar days not to exceed a cumulative total of twenty-four hours to complete the event.

(4) A surf event awarded four days may use a maximum of six calendar days not to exceed a cumulative total of thirty-two hours to complete the event.

(1) For scheduling on the south shore calendar, scheduling of the Duke's oceanfest watersport festival

shall be given priority over other applicants requesting permits to conduct surfing events on the south shore, provided the applicants meet the community impact mitigation criteria and file a complete application.

(m) No surfing event shall start before 8:00 a.m. All surfing events shall be completed before 4:30 p.m.

(n) A surfing event shall not be held on any of the following dates:

- (1) Memorial Day - The last Monday in May.
- (2) King Kamehameha Day - The eleventh day in June.
- (3) Fourth of July - The fourth day in July
- (4) Admission Day - The third Friday in August
- (5) Labor Day - The first Monday in September.

(o) Dates listed in §19-25-12(1) on which surfing events are not permitted shall not be counted as part of the waiting period.

(p) Expression sessions and exhibitions shall not be considered in the ranking process, but each day an expression session or exhibition is held shall count as a competition day.

(q) After the surfing event, an after-event action report must be submitted to the department by the permittee, no later than one month after the event, which will be evaluated and published on the department's website. Failure to submit an after-event action report will affect future applications by the permittee when the applications are being reviewed and ranked, which is detailed in §19-24-13(h).

(r) The director may, in the director's discretion, waive any provision of this chapter, if the waiver is consistent with the purposes of this chapter and in the public interest. [Eff
] (Auth: RCH §6-1403, ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-13 System for ranking applications for north shore and south shore calendars. (a) The Mayor may appoint an advisory committee to assist the department in resolving scheduling conflicts by

providing comments concerning the various applicants and information concerning surf contests. A person may not serve on the committee if the person is applying for a park permit to conduct a surf event in a public park. Should any member of the committee have a conflict of interest, the member shall recuse themselves from the process. If an advisory committee is established, the department shall provide the advisory committee with copies of the submitted applications. The advisory committee may provide comments concerning the ranking process as applied to the various applicants.

(b) The submitted applications shall be evaluated by a panel of three department employees who are designated by the director.

(c) The department shall apply the ranking system set forth in this section when it receives a permit application requesting a date(s) at the designated beach parks.

(d) Applications shall be ranked based on mitigating impacts to the community and the diversity of proposed event utilizing four criteria of diversity: diversity of event type; diversity of age range of event participants; diversity of professional, amateur and pro-am events; and, diversity of gender of participants. Applications shall include details on how the planned events incorporate these criteria in order to be eligible to receive points for this portion of the ranking.

(1) Diversity of primary event. The city desires to provide a surf calendar that includes a spectrum of types of surf events. Surf calendars are historically dominated by surfing events. Additional points shall be awarded to applications for events that include bodyboarding, bodysurfing or stand up paddle surfing exclusively or in addition to surfing, in order to promote a diversity in the type of event on this limited calendar.

(2) Diversity of age range of event

participants. The city desires to provide opportunities to young, emerging surfers and kupuna. Surf calendars are historically dominated by surf events for adults in their prime athletic years. Additional points shall be awarded to applications for events that include an array of age ranges for participants or are open exclusively to minor youth and/or adults over the age of 60, in order to promote a diversity of age of athletes competing in events on this limited calendar.

- (3) Diversity of professional and amateur events. The city desires to provide opportunities for amateur athletes. Surf calendars are historically dominated by professional surf events. Additional points shall be awarded to applications for events that include amateur surfers or are open exclusively for amateur surfers, in order to promote a diversity of category of athletes competing in events on this limited calendar.

- (4) Diversity of gender. The city desires to provide equal opportunities to surfers of all genders. Surf calendars are historically dominated by events for male surfers, or by events with nominal inclusion of female athletes. Additional points shall be awarded to applications for events that provide female athletes equitable opportunity, in order to promote a diversity of genders competing in events on this limited calendar. Non-binary and transgender athletes should be categorized as their self-identified gender for purposes of these administrative rules.

- (e) For the ranking system, each panel member shall complete a ranking criteria rating sheet for

each application using the following methodology:

- (1) Each application shall be scored on eight criteria divided into two categories.
- (2) The criteria and associated categories shall be as follows:

(A) Mitigating impacts to the community - Plans submitted as part of application will be evaluated on whether and how the plans address compliance with the following permit requirements:

- (i) Traffic and parking
- (ii) Crowd control
- (iii) Local resident and government services access
- (iv) Cleaning park restrooms and grounds, such as litter removal

Each of the above criteria shall be assigned a score:

- (i) Three points indicates the response exceeded the requirements.
- (ii) Two points indicates the response met the requirements.
- (iii) One point indicates the response partially met the requirements.
- (iv) Zero points indicates the response did not meet the requirements.

The scores for this category shall be equally weighted so that the total score for this category comprises 50 percent of the final score.

(B) Diversity of event - Plans submitted as part of the application will be evaluated on whether and how the plans incorporate the diversity objectives of the regulations governing surf events on the north and south shore calendars for the following criteria:

- (i) Diversity in the primary event, which may include the following, but not limited to:

- (a) Surfing
- (b) Standup paddle surfing
- (c) Bodyboarding
- (d) Bodysurfing
- (ii) Age range(s) of participants
- (iii) Whether event is professional, amateur, or pro-am
- (iv) Gender(s) of participants.

For the evaluation of event diversity, each of the four criteria shall be eligible to receive up to three points.

- (i) Three points shall be awarded for an event that is exclusively devoted to an underrepresented group.
- (ii) Two points shall be awarded to an event that provides equitable opportunity to an underrepresented group.
Equitable opportunity shall mean an event that provides two out of the three of the following: equal numbers of contestants, equal numbers of heats, or equal prize money designated for both the historically represented and underrepresented group.
- (iii) One point shall be awarded to an event that provides some, but less than equitable, opportunity to an underrepresented group.
- (iv) Zero points shall be awarded to an event that does not provide designated opportunity to an underrepresented group.

Points shall be ranked for each of the four criteria and then added to obtain a final score for the diversity category. Applications can obtain a maximum of 12 points. For example, an

application proposing an amateur event for youth under age 18 with an equal number of female and male competitors with an equal number of heats would receive 8 points for diversity - age (3), amateur (3) and gender (2). The scores for this category shall be equally weighted so that the total score for this category comprises 50 percent of the final score.

(f) Applicants will be divided into two groups for surf events on the north shore. Each applicant within the group will be evaluated against each other. One group will be the applicants for a big wave event and the other group will be for all other surf events.

(g) Applicants will be divided into two groups for surfing events on the south shore. Each applicant within the group will be evaluated against each other. One group will be the applicants for the Duke's oceanfest watersports festival and the other group will be for all other surfing events.

(h) The following points will automatically be deducted from an applicant's score when the applicant submits an application for the next north shore or south shore calendar year if the applicant does not comply with the after-event action report filing requirements:

- (1) Five points will automatically be deducted when an applicant fails to submit an after-event action report for a previous event within 60 days after completion of the event, fails to submit a report, or submits a report which indicates that the event conducted was not consistent with the information provided in the application. For example, if a north shore triennial calendar applicant failed to submit an after-event action report in year 2 of the current triennial north shore calendar, five points will automatically be deducted when the applicant submits an application for year one in the following triennial north

shore calendar.

- (2) Four points will automatically be deducted when an applicant submits an application for the next north shore or south shore calendar year if the applicant submitted its after-event report for a previous event 30-60 days after completion of the event.

- (i) After each application has been scored, the department shall prepare a draft triennial north shore calendar or draft 2025-2027 triennial north shore calendar or draft annual south shore calendar. The dates and park site requested by the application receiving the highest total score shall be scheduled first on the draft calendar. The dates and park site requested by the applicant receiving the second highest score shall be scheduled on the draft calendar and so on until all requests have been calendared or the maximum number of events permitted at each park site has been calendared.

- (j) An application which requests a date and park site which has already been assigned on the draft calendar to another applicant shall be assigned the alternate dates and/or park sites on the draft calendar as requested in the application supplement. Applicants may request up to two alternate dates for each application.

- (k) The department may mediate resolution of the scheduling conflicts between applicants. If scheduling conflicts are resolved, each applicant whose requested dates have been changed shall submit an amended application. All amended applications for use of park facilities submitted as a result of the mediation will nullify the original permit application submitted by the applicant.

- (l) Late applications and incomplete applications submitted without required documentation shall not be considered in the ranking system.

- (m) At the conclusion of the ranking system the department shall notify all permit applicants in writing of their permit application status and the department shall post the final triennial north shore calendar, 2025-2027 triennial north shore calendar and

annual south shore calendar, as applicable on the internet website of the city.

(n) Once the calendar has been posted and all applicants notified, the triennial north shore calendar, 2025-2027 triennial north shore calendar and annual south shore calendar shall be considered final. Permits issued for events on the calendar may not be issued for a longer period than is scheduled on the calendar.

(o) In the event an application is withdrawn, denied, or revoked after the triennial north shore calendar, 2025-2027 triennial north shore calendar and annual south shore calendar are finalized, the resulting vacancy on the applicable calendar may be filled by another event's application for the same shore at the discretion of the department. [Eff] (Auth: RCH §6-1403 ROH §1-9.1) (Imp: ROH §10-1.3)

§19-25-14 Indemnification. Prior to issuance of a permit, an applicant who has been awarded a permit for a north shore or south shore professional or program shore water event shall submit to the department a signed indemnification agreement provided by the department acknowledging that permittee assumes all risks of personal injury or wrongful death and loss or damage to property by whomsoever owned, arising out of or in connection with permittee's use of the public facilities under such permit; and agrees to indemnify, hold harmless and defend the city and county of Honolulu against any claim, cause of action, liability, loss, damage, cost or expense for bodily injury, wrongful death, or property damage, arising or resulting from permittee, its agents, employees, contractors or invitees use of the public facilities under such permit, as well as any breach of regulations or ordinances, except where such injury, death or property damage is caused by the willful act or gross negligence of the city. [Eff] (Auth: RCH §6-1403, ROH §1-9.1 (Imp: ROH §10-1.3)

§19-25-15 Denial or revocation of a permit. (a)

An application for a permit may be denied or a permit revoked by the director or the authorized representative when:

- (1) If applicant knowingly gives false, fictitious or fraudulent statements of representations made on the permit application;
- (2) The park is closed or will be closed because of damage, or because of scheduled or ongoing construction, repair or maintenance activities;
- (3) The requested park has been reserved for city or department sponsored activity;
- (4) Issuance of a permit will result in a violation of City, State or Federal laws, rules or ordinances;
- (5) A state of emergency is declared by the director or other proper authorities;
- (6) Natural or civil disturbances including, but not limited to tsunamis, floods, earthquakes, storms, riots, demonstrations and employee strikes, which may be occurring or threatening to occur;
- (7) The park is inadequate to meet the needs of the anticipated activity;
- (8) A prior application for a permit for the same time and place has been made that has been or will be granted;
- (9) It reasonably appears that based upon the information provided that the anticipated activity presents a clear and present danger to the public health or safety;
- (10) Applicant fails to pay required fees or if payment made by check is returned unpaid;
- (11) Applicant has previously violated permit conditions or provisions of this chapter within a year of a permit application; or
- (12) The shore water event is of such nature or duration that it cannot reasonably be accommodated in the particular location applied for, considering factors such as

probable damage to the park's resources or facilities, interference with program activities, or impairment of the operation of the public use facilities or services of city concessionaires or contractors.

(b) If a permit is denied or revoked, the applicant shall be informed in writing of the reasons for denial or revocation, except under emergency circumstances, when an immediate verbal revocation or suspension of the permit may be made, to be followed by written confirmation within seventy-two hours.

(c) If a permit is revoked, the permittee shall be ineligible to apply for a shore water event for a minimum of one calendar year following revocation and be subject to other penalties as set forth in this chapter.

(d) Any person aggrieved by a decision of the director to revoke a permit shall be entitled to have the decision reviewed by the managing director; provided, that the request for review is submitted in writing to the managing director within five calendar days after notification of the decision made by the director. If the managing director finds that the director's action was based on an erroneous finding of a material fact or that the director had acted in an arbitrary or capricious manner or had manifestly abused the director's discretion, the managing director shall modify or reverse the decision of the director; otherwise, the managing director shall affirm the decision of the director. [Eff] (Auth: RCH §6-1403, ROH §1-9.1) (Imp: ROH §§10-1.2, 10-1.3)

§19-25-16 Violation. Any person violating any provision of these rules shall be subject to the penalties provided in ROH sections 10-1.3(c) and 10-1.6, as amended. [Eff] (Auth: RCH §4-105; ROH §1-9.1) (Imp: ROH §§10-1.2, 10-1.3)

§19-25-17 Severability. If any chapter,

section, subsection, sentence, clause, phrase, or portion of these rules is for any reason held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions thereof. [Eff _____] (Auth: RCH §4-105, RCH §1-9.1)

DRAFT

DEPARTMENT OF PARKS AND RECREATION

The repeal of chapter 19-4 and the adoption of chapter 19-25, City and County of Honolulu Administrative Rules, on the Summary Page dated _____ were adopted on _____, following a public hearing held on _____, after public notice was given in the Honolulu Star-Advertiser on _____.

This chapter shall take effect ten (10) days after filing with the Office of the City Clerk.

DEPARTMENT OF PARKS AND RECREATION
CITY AND COUNTY OF HONOLULU

Laura H. Thielen, Director

APPROVED AS TO
FORM AND LEGALITY:

Deputy Corporation Counsel

APPROVED this _____ day of
_____, 2023.

Rick Blangiardi, Mayor
City and County of Honolulu

CERTIFICATION

I, LAURA H. THIELEN, in my capacity as Director of the Department of Parks and Recreation, City and County of Honolulu, do hereby certify that the foregoing is a full, true and correct copy of Title 19, Chapter 25, City and County of Honolulu Administrative Rules, entitled " Rules and Regulations Governing Shore Water Events", which were adopted on _____, 2023 following a Public Hearing held on _____, 2023, after public notice was given on _____, 2023, in the Honolulu Star-Advertiser.

LAURA H. THIELEN
Director

Received this _____ day of _____, 2023.

City Clerk

IV. NEW BUSINESS

A. Discussion and Action on Proposed New HAR Chapter 12 Subtitle 8, Part 10 **Boiler and Pressure Vessel**, promulgated by Department of Labor and Industrial Relations, as follows:

1. Chapter 220 **General, Administrative and Legal Provisions**
2. Chapter 222.1 **Power Boilers**
3. Chapter 223.1 **Heating Boilers – Steam Boilers, Hot Water Heating Boilers, Hot Water Supply Boilers, and Potable Water Heaters**
4. Chapter 224.1 **Pressure Vessels**

**PRE-PUBLIC HEARING SMALL BUSINESS IMPACT STATEMENT
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD**
(Hawaii Revised Statutes §201M-2)

RECEIVED

By SBRRB at 8:00 am, Nov 01, 2023

Date: _____

Department or Agency: _____

Administrative Rule Title and Chapter: _____

Chapter Name: _____

Contact Person/Title: _____

E-mail: _____ Phone: _____

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7?

☐

Yes

☐

No

If "Yes," provide details: _____

I. Rule Description:

☐

New

☐

Repeal

☐

Amendment

☐

Compilation

II. Will the proposed rule(s) affect small business?

☐

Yes

☐

No

(If "No," no need to submit this form.)

* "Affect small business" is defined as "any potential or actual requirement imposed upon a small business . . . that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business." HRS §201M-1

* "Small business" is defined as a "for-profit corporation, limited liability company, partnership, limited partnership, sole proprietorship, or other legal entity that: (1) Is domiciled and authorized to do business in Hawaii; (2) Is independently owned and operated; and (3) Employs fewer than one hundred full-time or part-time employees in Hawaii." HRS §201M-1

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance?

☐

Yes

☐

No

(If "Yes" no need to submit this form. E.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives. HRS §201M-2(d))

IV. Is the proposed rule being adopted pursuant to emergency rulemaking? (HRS §201M-2(a))

☐

Yes

☐

No

(If "Yes" no need to submit this form.)

*

*

*

If the proposed rule affects small business and are not exempt as noted above, please provide a reasonable determination of the following:

1. Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected.

2. In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance.

If the proposed rule imposes a new or increased fee or fine:

- a. Amount of the current fee or fine and the last time it was increased.

 - b. Amount of the proposed fee or fine and the percentage increase.

 - c. Reason for the new or increased fee or fine.

 - d. Criteria or methodology used to determine the amount of the fee or fine (i.e., Consumer Price Index, Inflation rate, etc.).
-
-
-
-
-
-
-
-
-
-
3. The probable monetary costs and benefits to the agency or other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used.

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.
5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.
6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.
7. How the agency involved small business in the development of the proposed rules.
 - a. If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.
- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.
- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.
- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.
- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.

* * *

Small Business Regulatory Review Board / DBEDT
Phone: (808) 586-2594 / Email: DBEDT.sbrrb.info@hawaii.gov

This Statement may be found on the SBRRB Website at: <http://dbedt.hawaii.gov/sbrrb/resources/small-business-impact-statements>

**PRE-PUBLIC HEARING SMALL BUSINESS IMPACT STATEMENT
TO THE
SMALL BUSINESS REGULATORY REVIEW BOARD
(Hawaii Revised Statutes §201M-2)**

Department or Agency: Labor and Industrial Relations

Administrative Rule Title and Chapter: Title 12, Subtitle 8, Part 10 Boiler and Pressure Vessel.

Chapter Name: 12-220 General, Administrative and Legal Provisions; 12-222.1 Power Boilers, 12-223.1 Heating Boilers – Steam Heating Boilers, Hot Water Heating Boilers, Hot Water Supply Boilers, and Potable Water Heaters, and 12-224.1 Pressure Vessels.

Contact Person/Title: Bill Kunstman, Deputy Director
Email: william.g.kunstman@hawaii.gov **Phone:** 586-8845

A. To assist the SBRRB in complying with the meeting notice requirement in HRS §92-7, please attach a statement of the topic of the proposed rules or a general description of the subjects involved.

There are approximately 10,000 pressure retaining items (boilers, pressure vessels, and pressure systems) in Hawaii. These items are owned and operated throughout most of our industrial sectors, notably in utility power plants, refineries, industrial processing facilities, and accommodations. Many pressure retaining items are owned and operated by small businesses, including “mom & pop shops” such as laundry facilities, restaurants, auto service establishments, and buildings, among others.

The proposed changes represent a minor revision of the boiler and pressure vessel rules. A major overhaul was conducted in 2019 and some modifications and revisions were made in 2012, 2000 and 1996. This revision explicitly incorporates national consensus standards in the rules both in adoption by reference as well as by numerous references in the text. The two major codes adopted are the 2021 editions of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code for new construction and the National Board Inspection Code for post-construction.

The changes also provide more detailed instructions regarding the procedures endorsed and used by the Boiler Section as well as an increase in fees to reflect the increased costs associated with collective bargaining, fringe rate, and increases in the costs of goods and services as reflected in the Consumer Price Index (CPI).

The cumulative increase in collective bargaining costs from FY2012 to FY2023 for Bargaining Units 3 & 4 is 40.5%, the CPI has increased by 33%, and the fringe rate has increased from 41.54% to 64.25%. The CPI has increased 87% since July 1998.

B. Are the draft rules available for viewing in person and on the Lieutenant Governor's Website pursuant to HRS §92-7? (If Yes, please provide webpage address and when and where rules may be viewed in person).

Draft rules in Ramseyer format are available at:
<https://labor.hawaii.gov/hiosh/proposed-rules/>

The rules are also available at HIOSH: 830 Punchbowl Street #425.

I. Rule Description: New Repeal Amendment Compilation

Amendment and Compilation of 12-220 General, Administrative and Legal Provisions; 12-222.1 Power Boilers, 12-223.1 Heating Boilers – Steam Heating Boilers, Hot Water Heating Boilers, Hot Water Supply Boilers, and Potable Water Heaters, 12-224.1 Pressure Vessels,

II. Will the proposed rules affect small business? Yes No (If No, no need to submit this form.)

Yes.

III. Is the proposed rule being adopted to implement a statute or ordinance that does not require the agency to interpret or describe the requirements of the statute or ordinance? Yes No (If Yes, no need to submit this form.)

(e.g., a federally-mandated regulation that does not afford the agency the discretion to consider less restrictive alternatives.) HRS §201M-2(d)

No.

Is the proposed rule being adopted pursuant to emergency rulemaking?

(HRS §201M-2(a)) Yes No (If Yes, no need to submit this form.)

No

If the proposed rule affects small business and are not exempt as noted above, please provide a reasonable determination of the following:

1. Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected.

The Boiler Rules and codes adopted therein apply to any entity, including small businesses, which own or are responsible for pressure retaining items as described above. The proposed rules include increased fees for inspections and installations. The increased fees will affect building owners, tenants and all businesses responsible for pressure retaining items.

2. In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance.

If the proposed rule imposes a new or increased fee or fine:

a. Amount of the current fee or fine and the last time it was increased.

The current fees range from \$30 to \$2,000 and the proposed fees are

from \$35 to \$2,200. The higher fees only affect large businesses as defined by Chapter 201M, Hawaii Revised Statutes (HRS). Fees for the Boiler Section were last increased in 1996, 2012 and 2019.

In 2012, the Boiler & Elevator Branch's funding was changed to a special, now revolving, fund by Act 102, Session Laws of Hawaii, 2012. The statutory language increased and set the fees for elevators but did not change the fees for boilers. The law authorizes the Director to adopt rules pursuant to chapter 91 to amend the fees. The Legislature's intent was to provide the flexibility for the Director to change fees to ensure the self-sufficiency of the Boiler & Elevator Branch.

b. Amount of the proposed fee or fine and the percentage increase.

The proposed fees range from \$35 to \$2,200. Overall, the average increase is 16.5%. When fees paid for by large entities are subtracted, the average increase is 10%.

c. Reason for the new or increased fee or fine.

To ensure the self-sufficiency of the Boiler & Elevator Branch.

d. Criteria or methodology used to determine the amount of the fee or fine (i.e., Consumer Price Index, Inflation rate, etc.).

DLIR estimated the costs of maintaining the self-sufficiency of the Branch based on combining the salaries of the inspectors, the salaries of the non-revenue generating staff, and overhead costs including the collective bargaining increases, the rent charged by the Department of Accounting & General Services (DAGS), the fringe rate charged to revolving funds, and supplies and services.

The collective bargaining and fringe rate costs have increased substantially since Act 103 (SLH, 2012) created the special fund for the Branch. Revolving funds are required to pay the fringe costs of salaries. The fringe rate was 41.54% in Fiscal Year 2012-13, for Fiscal year 2023-24 the rate is 64.25%: an increase of 55%. Collective bargaining costs have increased 40.5% and the CPI has increased 33% in the same period.

3. The probable monetary costs and benefits to the agency or other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used.

DLIR already is experiencing higher costs as described above, especially for the increase in the fringe rate and cumulative collective bargaining increases. The Department estimates that the new fee structure will generate an additional \$150,000 per year.

A portion (\$5,000) of the revenue increase will pay for the maintenance of document and permitting modules for the software used for the Boiler Section. The addition of these modules will increase the efficiency of the Section, notably in permit processing times. The remaining \$145,000 will cover the increased costs of operating as explained in 2.d above.

The benefit to the agency is that the increased fees and efficiencies will help the Branch remain self-sustaining, recruit, and retain staff, which in turn enables timely service to the owners and businesses with boilers, pressure vessels and pressure systems (pressure retaining items).

4. The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or other mitigating techniques.

As noted above, the department limited the increases to small businesses when possible and primarily increased the fees for large entities.

5. The availability and practicability of less restrictive alternatives that could be implemented in lieu of the proposed rules.

There is no availability or practicability of less restrictive alternatives as the adoption of updated standards and codes is necessary for public safety.

6. Consideration of creative, innovative, or flexible methods of compliance for small businesses. The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules.

DLIR did not consider any other means as the fee increases are modest and in line of the Legislature's intent of the Boiler & Elevator Branch operating in a self-sufficient manner.

7. How the agency involved small business in the development of the proposed rules. (Draft)

The department held a meeting with the stakeholders from the pressure equipment industry, notably attended by small business owners, mechanical engineering design and construction firms, and representatives from Hawaiian Electric Company and Par Hawaii Refinery on Tuesday, August 29, 2023.

DLIR sent the proposed rules with the invitation to attend the meeting to explain the changes. There were 16 individuals attended the meeting in person and remotely; and there were no recommendations to incorporate any changes to the proposed rules.

- a. **If there were any recommendations made by small business, were the recommendations incorporated into the proposed rule? If yes, explain. If no, why not.**

8. Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

There are no provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards.

If yes, please provide information comparing the costs and benefits of the proposed rules to the costs and benefits of the comparable federal, state, or county law, including the following:

- a. Description of the public purposes to be served by the proposed rule.
- b. The text of the related federal, state, or county law, including information about the purposes and applicability of the law.
- c. A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes, application, and administration.
- d. A comparison of the monetary costs and benefits of the proposed rule with the costs and benefits of imposing or deferring to the related federal, state, or county law, as well as a description of the manner in which any additional fees from the proposed rule will be used.
- e. A comparison of the adverse effects on small business imposed by the proposed rule with the adverse effects of the related federal, state, or county law.

* * *

Small Business Regulatory Review Board / DBEDT

Phone: (808) 586-2594

Email: DBEDT.sbrrb.info@hawaii.gov

**This Statement may be found on the
SBRRB Website at:**

<http://dbedt.hawaii.gov/sbrrb/resources/small-business-impact-statements>

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

Amendments to and Compilation of Chapters 12-220,
12-222.1, 12-223.1, and 12-224.1.
Hawaii Administrative Rules

January 1, 2024

1. Chapter 12-220, Hawaii Administrative Rules,
entitled "General, Administrative, and Legal
Provisions", is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 12

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

SUBTITLE 8

HAWAII OCCUPATIONAL SAFETY AND HEALTH DIVISION

PART 10

PRESSURE RETAINING ITEMS

CHAPTER 220

GENERAL, ADMINISTRATIVE, AND LEGAL PROVISIONS

§12-220-1 Definitions

| | |
|--------------|--|
| §12-220-1.1 | Codes incorporated and adopted by reference |
| §12-220-2 | Minimum construction standards |
| §12-220-2.1 | Requirements for new installations |
| §12-220-3 | Repealed |
| §12-220-4 | Restrictions on nonstandard pressure retaining items |
| §12-220-5 | Installation of used pressure retaining items |
| §12-220-6 | Re-installed pressure retaining items |
| §12-220-7 | Working pressure for existing installations |
| §12-220-8 | Repealed |
| §12-220-8.1 | Repairs and alterations |
| §12-220-9 | Repealed |
| §12-220-9.1 | Design, construction, fabrication, installation, repair, or alteration of boiler external and non-boiler external piping |
| §12-220-10 | Pressure relief devices |
| §12-220-10.1 | Re-stamping or replacement of nameplate of pressure retaining items |
| §12-220-11 | Repealed |
| §12-220-11.1 | Quality control reviews and audits |
| §12-220-12 | Care of pressure retaining item spaces |
| §12-220-13 | Conditions not treated in this part |
| §12-220-14 | Complaints |
| §12-220-15 | Permits |
| §12-220-16 | Inspections and tests |
| §12-220-17 | Investigations |
| §12-220-18 | Inspectors |
| §12-220-19 | Owner-user inspection organization |
| §12-220-20 | Fees |
| §12-220-21 | Rights and enforcement |
| §12-220-22 | Violations and penalties |
| §12-220-23 | Review and appeal |
| §12-220-24 | Judicial review |
| §12-220-25 | Trade secrets |
| §12-220-26 | Evidence |
| §12-220-27 | Reporting of accidents |
| §12-220-28 | Suspending operation; condemned pressure retaining items |
| §12-220-29 | Repealed |

| | |
|--------------|--|
| §12-220-29.1 | Reinstallation of pressure retaining items |
| §12-220-30 | Renumbered |
| §12-220-30.1 | Application of state serial numbers |
| §12-220-31 | Renumbered |
| §12-220-31.1 | Notification of transfer and location |
| §12-220-32 | Renumbered |
| §12-220-32.1 | Records |
| §12-220-33 | Renumbered |
| §12-220-33.1 | Variances |
| §12-220-34 | Renumbered |

Historical Note: Chapter 220 of title 12 is based upon chapter 377 of the Hawaii Occupational Safety and Health Standards, Rules and Regulations. [Eff 7/11/74; am 6/7/76; am 12/30/76; am 8/22/77; am 8/11/78; am 8/23/79; R 7/12/82]

§12-220-1 Definitions. As used in this part:

"Accident" means any undesired boiler or pressure vessel event that results in personal injury or property damage. This does not include events of a routine nature due to the normal operation of a boiler or pressure vessel such as tube leaks, general leakage from the pressure boundary, corrosion, erosion, or other events that are typically associated with maintenance or repair.

"AIA" means:

- (1) The department of labor and industrial relations boiler and elevator inspection branch; ~~[or]~~
- (2) An insurance company which has been licensed or registered by the appropriate authority of the State of Hawaii to write boiler and pressure vessel insurance and provides inspection services of ~~[boilers and pressure vessels and pressure systems]~~ pressure retaining items in this State, and whose inspectors hold a valid commission issued by the National Board, and possess a valid State of Hawaii certificate of competency. The insurance company shall be accredited by the

National Board in accordance with NB-369,
Accreditation of Authorized Inspection
Agencies (AIA) Performing Inservice Inspection
Activities[-]; or

(3) An OUIO approved by the director.

"Alteration" means a change in the item described on the original manufacturer's data report that affects the pressure containing capability of the pressure retaining item. Nonphysical changes such as an increase in the maximum allowable working pressure (internal or external), increase in design temperature, or a reduction in minimum temperature of a pressure retaining item, shall be considered an alteration.

"ANSI" means the American National Standards Institute.

~~["Appeals board" means the department of labor and industrial relations, labor and industrial relations appeals board.]~~

"API" means the American Petroleum Institute.

"API-510" means the American Petroleum Institute Pressure Vessel Inspection Code: In-service Inspection, Rating, Repair, and Alteration.

"Appeals board" means the department of labor and industrial relations, labor and industrial relations appeals board.

"Application" means a written or electronic request for approval required by law to be obtained prior to the installation, operation, or repair or alteration of a pressure retaining item.

"Approved" means approved by the department.

"Appurtenance" means a device installed on and used in the normal operation of a boiler or pressure vessel.

"ASME" means the American Society of Mechanical Engineers.

"ASME B31.1" means the American Society of Mechanical Engineers Power Piping, as adopted and incorporated by reference in section 12-220-1.1.

"ASME BPVC" means the American Society of Mechanical Engineers Boiler and Pressure Vessel Code, as adopted and incorporated by reference in section 12-220-1.1.

"ASME CSD-1" means the American Society of Mechanical Engineers Controls and Safety Devices for Automatically Fired Boilers, as adopted and incorporated by reference in section 12-220-1.1.

"ASME PVHO 1" means the American Society of Mechanical Engineers, Safety Standards for Pressure Vessels for Human Occupancy, as adopted and incorporated by reference in section 12-220-1.1.

"ASME PVHO 2" means the American Society of Mechanical Engineers Safety Standard for Pressure Vessels for Human Occupancy: In-Service Guidelines, as adopted and incorporated by reference in section 12-220-1.1.

"Attorney general" means the attorney general of the State of Hawaii or any of the deputy attorneys general.

"Authorized inspection agency" means the same as AIA.

"Boiler" means a closed vessel in which water or other liquid is heated, steam or vapor is generated, steam or vapor is superheated, or any combination thereof, under pressure for use external to itself, by the direct application of energy from the combustion of fuels, electricity, or solar energy. The term boiler also shall include the apparatus used to generate heat and all controls and safety devices associated with the apparatus or the closed vessel.

"Boiler external piping" or "BEP" means all piping and components connected to a power boiler as defined in ASME B31.1 and ASME BPVC Section I Power Boilers.

"Certificate of competency" means a certificate issued to a person who has passed the examination prescribed by the director.

"Chief boiler inspector" means the appointed chief boiler and pressure vessel inspector in the jurisdiction charged with the enforcement of laws pertaining to the inspection of boilers and pressure vessels. The chief boiler inspector represents the jurisdiction as the voting member of the National Board and serves as an ASME Conference Committee member.

"Commission" means the commission issued by the National Board.

"Condemned boiler or pressure vessel" means a boiler or pressure vessel that has been inspected and declared unsafe or disqualified by legal requirements by an inspector and a stamping or marking designating its condemnation has been applied by the inspector.

"Contractor" means any person, firm, or corporation installing, repairing, or servicing and responsible for the safe operation of any pressure retaining item subject to chapter 397, HRS.

"Department" or "DLIR" means the department of labor and industrial relations, State of Hawaii.

"Director" means the director of the department of labor and industrial relations or the director's agent.

"Discrepancy" means the nonconformance of an item, unit, or part to a code, standard, or rule required by part 10 of this subtitle.

"Division" means the Hawaii occupational safety and health division, department of labor and industrial relations.

"Electric boiler" means a power boiler or heating boiler in which the source of heat is electricity.

"Existing installation" means any ~~[boiler or pressure vessel constructed,]~~ pressure retaining item installed, placed in operation, or contracted for before the effective date of these rules.

"Factor of safety" is the number by which a given permissible force, or load, value can be multiplied before the boiler or pressure vessel reaches its ultimate design strength value.

"Fired" means the application of heat from the combustion of gaseous, liquid, or solid fuels; or from electricity; which includes direct or indirect fired provided that:

- (1) "Direct" means the primary application of heat~~[-]~~; and
- (2) "Indirect" means other than the primary application of heat.

"Fuel" means any matter consumed to produce heat.

"Hawaii Revised Statutes" or "HRS" means laws enacted by the Hawaii State Legislature.

"Heat" means thermal energy in transition by radiation, conduction, convection, or any combination of these.

"Heat recovery steam generator" means a vessel or system of vessels comprising one or more heat exchanger surfaces used for the recovery of waste heat. It produces steam that can be used in a process (cogeneration) or used to drive a steam turbine (combined cycle).

"Heating boilers" means steam heating boilers, hot-water heating boilers, hot-water supply boilers, and potable water heaters.

"High-temperature water boiler" means a power boiler in which water is heated and operates at a pressure more than 160 psig or temperatures more than 250 degrees Fahrenheit, and has the ASME Code symbol stamp or ASME certification mark with the designator "S".

"Hot-water heating boiler" means a hot water boiler installed to operate at pressures not exceeding 160 psig or at a temperature not exceeding 250 degrees Fahrenheit, at or near the boiler outlet, and that has the ASME Code symbol stamp or ASME certification mark with the designator "H".

"Hot-water supply boiler" means a boiler that furnishes hot water to be used externally to itself at a pressure not exceeding 160 psig or at a temperature less than or equal to 250 degrees Fahrenheit at or near the boiler outlet, and that has the ASME Code symbol stamp or ASME certification mark with the designator "H".

"Hydrostatic test" means a liquid pressure test which is conducted using water as the test medium.

"Inspector" means a qualified boiler inspector, including the chief boiler inspector, deputy boiler inspector, special inspector, or owner-user inspector holding a valid certificate of competency issued by the department, who has satisfied the requirements established by the department and has a valid National Board commission:

- (1) "Chief boiler inspector" means the appointed chief boiler and pressure vessel inspector;
- (2) "Deputy boiler inspector" means any boiler inspector employed by the department;
- (3) "Special inspector" means any inspector who is [~~regularly~~] exclusively employed by an insurance company which has been licensed or

registered by the appropriate authority of the State of Hawaii to write boiler and pressure vessel insurance and provide inspection services of pressure retaining items in this State; and

- (4) "Owner-user inspector" means an inspector who is [~~regularly~~] exclusively employed as an inspector by an owner-user inspection organization.

"Jurisdiction" means the State of Hawaii.

"Lined potable water heater" means a water heater with a corrosion resistant lining used to supply potable hot water.

"May" means permissive.

"Miniature boiler" means a power boiler or high temperature water boiler which does not exceed any one of these limits:

- (1) Sixteen inches (16) inside diameter of shell;
- (2) Twenty (20) square feet heating surface (not applicable to electric boilers);
- (3) Five (5) cubic feet gross volume exclusive of casing and insulation; and
- (4) One hundred (100) psig maximum allowable working pressure.

"National Board" or "NB" means the National Board of Boiler and Pressure Vessel Inspectors.

"National Board Inspection Code" or "NBIC" means the National Board Inspection Code as adopted and incorporated by reference in section 12-220-1.1.

"NB-263, RCI-1" means the National Board Rules for Commissioned Inspectors.

"NB-264" means the National Board Criteria for Registration.

"NB-369" means the National Board Accreditation of Authorized Inspection Agencies (AIA) Performing Inservice Inspection Activities.

"NB-371" means the National Board Accreditation of Owner-User Inspection Organizations (OUIO).

"NB-381" means the National Board Quality Program for Inspection Organizations.

"NB-415" means the National Board Accreditation of "R" Repair Organizations.

"NBEP" means non-boiler external piping that refers to all piping and components connected downstream of the boiler external piping as defined in ASME B31.1.

"NBEP certificate" means a certificate issued by the department to a company that is qualified to design, fabricate, install, repair, or alter non-boiler external piping. A company that applies for a NBEP authorization without a valid ASME certificate of authorization with a "S", "A", or "PP" designator, or a valid NB "R" certificate of authorization, may be issued a certificate limited in scope of work to a MAWP of 150 psi or less, and a pipe size to three (3) inches in diameter or less. The provisions of ASME B31.1 shall apply, including the quality control requirements in Mandatory Appendix J.

"NBIC" means the National Boiler Inspection Code, as adopted and incorporated by reference in section 12-220-1.1.

"New boiler or pressure vessel installation" means all ~~[boilers or pressure vessels constructed,]~~ pressure retaining items installed, placed in operation, or contracted for after the effective date of these rules.

"NFPA" means the National Fire Protection Association.

"NFPA 31" means the National Fire Protection Association Standard for the Installation of Oil-Burning Equipment.

"NFPA 54, ANSI Z223.1" means the National Fire Protection Association National Fuel Gas Code.

"NFPA 58" means the National Fire Protection Association Liquefied Petroleum Gas Code.

"NFPA 70" means the National Fire Protection Association National Electrical Code, as adopted and incorporated by reference in section 12-220-1.1.

"NFPA 85" means the National Fire Protection Association Boiler and Combustion Systems Hazards Code, as adopted and incorporated by reference in section 12-220-1.1.

"Non-code water heater" means a closed vessel in which water is heated by the combustion of fuels or by electricity, or by any other source, and withdrawn for use external to the system and not exceeding the following: 160 psig, volume capacity of less than 120

gallons, or a heat input of 200,000 Btu per hour. It shall include all controls and devices necessary to prevent water temperature from exceeding 210 degrees Fahrenheit.

"Nonstandard or non-code" means a pressure retaining item that does not bear the ASME BPVC symbol or ASME certification mark with the appropriate designator and National Board stamping.

"NPS" means nominal pipe size.

"Operating permit" [~~or "certificate of inspection"~~] means a permit issued by the department authorizing the operation of a pressure retaining item.

"Order" means a command to perform a mandatory act issued by the department.

"Owner" means any person, firm, entity, or corporation with legal title to any pressure retaining item subject to chapter 397, HRS, who may or may not be the user.

"Owner-user inspection organization" or "OUIO" means an owner or user of pressure retaining items, whose organization and inspection procedures meet the requirements of NB-371, and is [~~acceptable to the jurisdiction.~~] approved by the department.

"Permit inspection" means an inspection, the report of which is used by the department as justification for issuing, withholding, or revoking the operating permit which includes internal and external inspections.

- (1) "Internal inspection" means as complete an examination as can reasonably be made to the internal and external surfaces of a boiler or pressure vessel while it is shut down, and manhole plates or handhole covers, or other inspection opening closures, are removed as required by the inspector~~[?]~~; and
- (2) "External inspection" means an inspection made when a boiler or pressure vessel is in operation, when the controls, safety devices, and pressure containing components are examined.

"Pool heater" means a boiler in which no steam is generated, from which hot water is circulated to a swimming pool, hot tub, or spa, and returned to the boiler, and operates at a pressure not exceeding 160

psig, or a temperature not exceeding 250 degrees Fahrenheit.

"Portable boiler" means a boiler that is primarily intended to be conveyable and can be readily moved from one location to another.

"Power boiler" means a boiler in which steam or other vapor is generated at a pressure in excess of fifteen (15) psig for use external to itself and includes fired units for vaporizing liquids other than water, but does not include fired process heaters and systems (see also high-temperature water boiler), and has the ASME Code symbol stamp or ASME certification mark with designators "S", "M", or "E".

"Pressure piping" means piping systems specified in ASME B31.1.

"Pressure retaining item" means boiler, pressure vessel, or pressure system.

"Pressure system" means a system composed of unfired pressure vessels and piping components for liquid or vapor distribution at a pressure of more than fifteen (15) psi or a temperature more than 250 degrees Fahrenheit, or both, that includes, but is not limited to, a bank of pressure vessels, including those of a size that does not require permits, and are connected with or without any intervening valves.

"Pressure vessel" means a closed vessel in which the pressure is obtained from an external source, or by the application of heat from either an indirect or direct source, other than those vessels defined as boilers in this section, which includes fired and unfired pressure vessels.

- (1) "Fired pressure vessel" means a closed vessel in which fluid is heated or steam is generated for use within itself by the direct or indirect application of heat[-]; and
- (2) "Unfired pressure vessel" means a closed vessel in which pressure is obtained from an external source.

"Psi" means pounds per square inch.

"Psig" means pounds per square inch gage.

"Reinstalled boiler or pressure vessel" means a boiler or pressure vessel removed from its original site

and reinstalled at the same location or at a new location.

"Relief valve" means an automatic pressure relieving device, used primarily for liquid service, actuated by the static pressure upstream of the valve that opens further with the increase in pressure over the opening pressure.

"Repair" means the work necessary to restore a boiler or pressure vessel to a safe and satisfactory operating condition, provided there is no deviation from the original design.

"Safety relief valve" means an automatic, pressure-actuated relieving device suitable for use either as a safety valve or relief valve depending on the application.

"Safety valve" means an automatic pressure relieving device, used for gas or vapor service, actuated by the static pressure upstream of the valve, and characterized by full-opening pop action.

"School" means an institution of learning, which includes preschools, elementary schools, intermediate or middle schools, high schools, technical schools, trade schools, and colleges and universities.

"Second-hand boiler or pressure vessel" or "used boiler or pressure vessel" means a boiler or pressure vessel that has changed both location and ownership since its primary use.

"Shall" means mandatory.

"Standard pressure retaining item" means a pressure retaining item which bears both the ASME Code symbol or ASME certification mark and National Board number.

"State special" means any non-code or nonstandard pressure retaining item, including water heaters and kettles, which contain steam, hot water, or air greater than fifteen (15) psi, and are located or installed on school property.

"Steam heating boiler" means a steam boiler for operation at pressures not exceeding fifteen (15) psig, and has the ASME Code symbol stamp or ASME certification mark with designator "H".

"Thermal fluid boiler" means a fluid heater intended for heating a fluid for circulation externally to itself for energy transfer.

"Unfired" means the application of pressure or heat that is obtained from an external source.

"User" means any person, firm, entity, or corporation legally in possession and responsible for the safe operation of any pressure retaining item subject to chapter 397, HRS.

"Vendor" means any person, firm, entity, or corporation that sells or distributes any pressure retaining item subject to chapter 397, HRS.

"Violation" means nonconformance of an item, unit, or part to codes, standards, or rules required by this subtitle.

"Welding documentation" means the welding procedure specifications, procedure qualification records, records of welder or welding operator performance qualification, welder's continuity log, and reports of welded repairs or alterations.

[Eff 12/6/82; am 12/19/83; am 12/8/86; am and comp 12/6/90; am 7/6/98; am 6/19/00; am 11/18/12; am and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-1.1 Codes incorporated and adopted by reference. The following codes are adopted by reference and made a part of this chapter and shall apply to all pressure retaining items in this part, unless otherwise modified by rules pertaining to pressure retaining items:

- (1) [~~ASME B31.1-2016,~~] ASME B31.1-2020, Power Piping Code, as published by the American Society of Mechanical Engineers;
- (2) [~~ASME BPVC-2017,~~] ASME BPVC-2021, Boiler and Pressure Vessel Code, as published by the American Society of Mechanical Engineers;
- (3) [~~ASME CSD-1-2012,~~] ASME CSD-1-2021, Controls and Safety Devices for Automatically Fired Boilers, as published by the American Society of Mechanical Engineers;
- (4) [~~ASME PVHO 1-2012,~~] ASME PVHO 1-2016, Safety Standard for Pressure Vessels for Human

- Occupancy, as published by the American Society of Mechanical Engineers;
- (5) [~~ASME PVHO 2-2012,~~] ASME PVHO 2-2016, Safety Standard for Pressure Vessels for Human Occupancy: In-Service Guidelines, as published by the American Society of Mechanical Engineers;
 - (6) NBIC [~~2017 edition,~~] 2021 Edition, National Board Inspection Code, as published by the National Board of Boiler and Pressure Vessel Inspectors;
 - (7) NFPA 70, National Electrical Code, [~~2002 edition,~~] 2017 Edition, as published by the National Fire Protection Association; and
 - (8) NFPA 85, National Fire Protection Association Boiler and Combustion Systems Hazards Code, [~~2015 edition,~~] 2019 Edition, as published by the National Fire Protection Association.
[Eff and comp 12/21/19; am and
comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

§12-220-2 Minimum construction standards. (a)

All new [~~boilers and pressure vessels,~~] pressure retaining items, unless otherwise exempt[~~ed~~] from this part and chapter 397, HRS, for operation in Hawaii, shall be designed, constructed, and marked in accordance with the ASME BPVC, including Code Cases, and registered with the National Board in accordance with NB-264. Pressure vessels for human occupancy must meet these requirements and comply with ASME PVHO 1 and 2. A copy of the manufacturer's data report shall be filed with the department.

(b) If a boiler or pressure vessel does not bear the ASME and National Board stamping, details written in the English language, and United States customary units of the proposed construction, material specifications, and calculations, approved by a [~~licensed or registered~~] professional engineer licensed or registered in the United States or Canada and experienced in boiler and pressure vessel design, shall be submitted to the

department by the owner or user for approval as a nonstandard, non-code or State special before construction and installation is started. [Eff 12/9/82; am, ren §12-220-2, and comp 12/6/90; am 7/6/98; am and comp 12/21/19; am and comp] (Auth: HRS (§397-4) (Imp: HRS §397-4)

§12-220-2.1 Requirements for new installations.

(a) New installations shall comply with the technical requirements contained in chapters 12-222.1 through 12-225.1 and require the submission of an application on a form prescribed by the department for an installation permit prior to the commencement of work. A complete application shall include:

- (1) Date of application, project name, and address;
- (2) Installers' name, address, and installers' type of license held along with the expiration date;
- (3) Contact person and phone number for both the owner and the installer;
- (4) National Board number for each pressure retaining item to be installed;
- (5) Copy of the ASME manufacturer's data report;
- (6) Floor plan layout with clearance dimensions; and
- (7) Piping and instrumentation diagram.

(b) Applications for new installations must be accompanied by the remittance of the appropriate installation fee for each pressure retaining item subject to this part as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~[September 1, 2019]~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter.

(c) No pressure retaining item shall be issued a permit to operate in the State unless it has been constructed in conformity with the ASME BPVC, registered with the National Board, and installed in conformity with this chapter except:

- (1) Those pressure retaining items exempt from chapter 397, HRS;
- (2) Those pressure retaining items outlined in section 12-220-2(b);
- (3) Pressure retaining items under federal inspection and control;
- (4) Unfired pressure vessels meeting the requirements of the United States Department of Transportation, and used for transporting liquids or gases under pressure;
- (5) Unfired pressure vessels with a nominal water-containing capacity of 120 gallons or less for containing liquid under pressure, including those containing air, the compression of which serves only as a cushion;
- (6) Hot-water supply boilers, hot-water heating boilers, and potable water heaters that are directly fired with oil, gas, or electricity, except that hot-water supply boilers shall be equipped with a proper size, type, and capacity safety relief valve as set forth in section IV of the ASME BPVC, when none of the following limitations are exceeded:
 - (A) A heat input of 200,000 Btu per hour;
 - (B) A water temperature of 210 degrees Fahrenheit;
 - (C) A nominal water-containing capacity of 120 gallons; and
 - (D) An operating pressure not exceeding 160 psi;
- (7) Unfired pressure vessels designed for a pressure not exceeding fifteen (15) psi [~~or~~] and five (5) cubic feet in volume;
- (8) Pressure vessels not exceeding:
 - (A) Five (5) cubic feet in volume and 250 psi design pressure;
 - (B) Three (3) cubic feet in volume and 350 psi design pressure; or
 - (C) One and one-half (1.5) cubic feet in volume and 600 psi design pressure[~~or~~];
 - ~~[(D) An inside diameter of six (6) inches with no limitation on pressure;]~~

- (9) Unfired pressure vessels containing water and filtering material for use in irrigation of land;
- (10) Unfired pressure vessels for the storage of cold water;
- (11) Fired or self-contained sterilizers, steam generators, jacketed kettles, or steam cookers when ~~[one]~~ neither of the following limitations is ~~[not]~~ exceeded:
 - (A) Heat input of three (3.0) KW; or
 - (B) A volume of one and one half (1.5) cubic feet;
- (12) Unfired pressure vessels and piping containing liquid petroleum gas and liquid natural gas (except that welded repairs and alterations shall be in accordance with section 12-220-8.1);
- (13) Refrigeration pressure vessels and its associated piping (except that welded repairs and alterations shall be in accordance with section 12-220-8.1);
- (14) Liquid carbon dioxide pressure vessels (except that welded repairs and alterations shall be in accordance with section 12-220-8.1);
- (15) A hot water heater constructed of continuous coils, which is used only to produce steam vapor to clean machinery, equipment, and buildings, if:
 - (A) The tubing or pipe size does not exceed three-fourths (3/4) of an inch in diameter and drums and headers are not attached;
 - (B) The nominal water-containing capacity does not exceed six (6) gallons;
 - (C) The water temperatures do not exceed 350 degrees Fahrenheit; and
 - (D) Steam is not generated within the coil; and
- (16) Pressure vessels containing water heated by steam or any other indirect means when none of the following limitations are exceeded:
 - (A) A heat input of 200,000 Btu per hour; and

(B) A water temperature of 210 degrees Fahrenheit provided such pressure vessels shall be equipped with an ASME-NB stamped safety relief valve.

(d) The marking done in accordance with the original code of construction and section 12-220-29.1 shall not be concealed by lagging or paint and shall be exposed unless a suitable record is kept of the location of the stamping so that it may be readily uncovered at any time. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

Historical note: §12-220-2.1 is based substantially upon §12-220-11. [Eff 12/6/82; am 12/8/86; am and ren §12-220-11, and comp 12/6/90; am 7/6/98; am 6/19/00; am 11/18/12; R 12/21/19]

§12-220-3 Repealed. [R 12/21/19]

§12-220-4 Restrictions on nonstandard pressure retaining items. The installation, operation, sale, or the offering for sale of nonstandard pressure retaining items in Hawaii is prohibited without the expressed written permission of the department (refer to section 12-220-32.1). [Eff 12/6/82; am 12/8/86; am, and ren §12-220-4, and comp 12/6/90; am 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-5 Installation of used pressure retaining items. Used or second-hand pressure retaining items, when installed in this jurisdiction, shall require the owner to provide in-service inspection reports for at least the last five years and copy of any report of repairs and alterations. These pressure retaining items

shall be equipped with fittings and appurtenances that comply with the requirements for new installations. [Eff 12/6/82; am, ren §12-220-5, and comp 12/6/90; am 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §§397-4, 397-6) (Imp: HRS §§397-4, 397-6)

§12-220-6 Re-installed pressure retaining items.

(a) If a pressure retaining item is removed from its original site and is to be re-installed at the same location, or at a new location, the contractor, user, or owner must apply to the department for a permit for installation before re-installing the pressure retaining item. The fittings and appurtenances must comply with the requirements for the installation of a new pressure retaining item.

(b) If a standard pressure retaining item is to be moved to another state for temporary use or repair, the owner of the pressure retaining item or his or her agent must apply to the department for approval to re-install the pressure retaining item within this State. [Eff 12/6/82; am, ren §12-220-6, and comp 12/6/90; am 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-7 Working pressure for existing installations. Subject to approval by the department, any inspector may decrease the working pressure on any existing installation if the condition of the pressure retaining item warrants. If the owner or user does not concur with the inspector's decision, the owner or user may appeal to the director pursuant to section 12-220-33.1. [Eff 12/6/82; am, ren §12-220-7, and comp 12/6/90; am 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-8 Repealed. [R 12/21/19]

§12-220-8.1 Repairs and alterations. (a) Repairs, routine repairs, and alterations to pressure retaining items shall be in accordance with the requirements of the NBIC, Part 3, and this part. Applications for authorization for routine repair, repair, or alteration shall be submitted in the prescribed form and must be accompanied by the remittance of the appropriate fee for each pressure retaining item subject to this part as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter, and inspection fee for each pressure retaining item subject to this part as per the schedule in Exhibit B, titled, "Internal & External Inspection Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made a part of this chapter and located at the end of this chapter. The applicant shall submit all the required documents and remittance fees to the department prior to commencement of work. A complete application shall include the name of the applicant, address, telephone number, NB "R" certificate of authorization number and expiration date, AIA of record, and name of the commissioned repair inspector.

(b) No pressure retaining item subject to this part shall be repaired or altered in the State unless:

- (1) For routine repairs, in addition to the requirements of subsection (a), a copy of the manufacturer's data report and all partial data reports shall be submitted along with a detailed description of the proposed routine repair, drawings or pictures, material specifications, and a copy of the traveler or routine repair procedure to be used;
- (2) For repairs, in addition to the requirements of subsection (a), a copy of the manufacturer's data report and all partial data reports shall be submitted along with a detailed description of the proposed repair, drawings or pictures, design calculations (if available), material specifications, and a copy of the traveler or repair procedure to be used; and

- (3) For alterations, in addition to the requirements of subsection (a), a copy of the manufacturer's data report and all partial data reports shall be submitted along with a detailed description of the proposed alteration, drawings or pictures, design calculations, material specifications, and a copy of the traveler or alteration procedure to be used, and when applicable, a new maximum allowable working pressure and temperature of the pressure retaining item.

(c) It shall be the responsibility of the holder of a National Board "R" certificate of authorization making the routine repair, repair, or alteration to have a valid inspection contract or agreement in force at all times with an AIA that employs qualified boiler inspectors in compliance with NB-263, RCI-1 Rules for Commissioned Inspectors, and this part.

(d) It shall be the responsibility of the holder of a NB "R" certificate of authorization making the routine repair, repair, or alteration to provide for inspection, documentation, and certification of the work. A fully executed National Board "R" form shall be submitted to the department within thirty (30) days following the completion of the routine repairs, repairs, or alterations. Drawings or pictures, design calculations, non-destructive examination records, and traveler and other pertinent documents shall be maintained by the NB "R" certificate holder for five (5) years. The inspection agency responsible for the in-service inspection of the boiler or pressure vessel shall have access to review the fully executed National Board "R" form and other pertinent documents.

(e) All NB "R" forms, except routine repair ones, shall be registered with the National Board. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

Historical note: §12-220-8.1 is based substantially upon §12-220-8. [Eff 12/6/82; am 12/8/86; am and ren §12-220-8 and comp 12/6/90; am 7/6/98; am 6/19/00; am 11/18/12; R 12/21/19]

§12-220-9 Repealed. [R 12/21/19]

§12-220-9.1 Design, construction, fabrication, installation, repair, or alteration of boiler external and non-boiler external piping. (a) Application for authorization for installation of boiler external piping shall be submitted to the department prior to the commencement of work. An application shall be submitted in the form prescribed by the director and must be accompanied by the remittance of the fee for each boiler external piping subject to this part as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter, and inspection fee for each pressure retaining item subject to this part as per the schedule in Exhibit B, titled, "Internal & External Inspection Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made a part of this chapter and located at the end of this chapter. A complete application shall include:

- (1) Date of application, project name, and address;
- (2) Manufacturer's and installer's name, address, and installer's type of license held along with the expiration date;
- (3) Contact person and phone number for the owner, manufacturer, and installer;
- (4) National Board number of the boiler where the piping is to be installed;
- (5) Copy of the ASME manufacturer's data report and partial data reports;
- (6) Floor plan layout with clearance dimensions; and
- (7) Piping and instrumentation diagram.

(b) Application for authorization for design, fabrication, installation, repair, or alteration of non-boiler external piping shall be submitted by a holder of a valid ASME certificate of authorization with "S", "A", or "PP" designator, a NB "R" authorization, or a NBEP

(b) Should any of these pressure relief devices be removed for repair during an outage of a boiler or pressure vessel, they must be re-installed and in proper working order before the object is placed in service.

(c) No person shall alter any safety or safety-relief valves or pressure relief devices in any manner to maintain a working pressure in excess of that stated on the pressure retaining item operating permit.

(d) Repair of safety valves shall be made only by an organization which holds a valid certificate of authorization for use of the National Board "VR" safety valve repair symbol stamp.

(e) Where a valve has been tested and adjusted to restore the set pressure shown on the unmodified original nameplate or stamping, or repair nameplate but not otherwise repaired, a "Test Only" nameplate shall be applied. [Eff 12/6/82; am 12/8/86; am, ren §12-220-10, and comp 12/6/90; am 7/6/98; am 6/19/00; am and comp 12/21/19; comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

§12-220-10.1 Re-stamping or replacement of nameplate of pressure retaining items. When the stamping on a pressure retaining item becomes indistinct or the nameplate is lost, illegible, or detached, but traceability to the original pressure retaining item is still possible, the inspector shall instruct the owner or user to have the stamped data replaced, following the requirements of the original code of construction, except as modified herein. An application to re-stamp or replace nameplates shall be made to the department using the National Board Replacement of Stamped Data Form (NB-136), and must be accompanied by proof of the original stamping and other such data, as is available, and the remittance of the appropriate fee for each pressure retaining item subject to this part as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter, and inspection fee for each

pressure retaining item subject to this part as per the schedule in Exhibit B, titled, "Internal & External Inspection Fees", dated [~~September 1, 2019,~~] October 1, 2023, which is made a part of this chapter and located at the end of this chapter. Additional fees may apply if the department is requested to witness the attachment of the replacement nameplate. When that traceability cannot be established, the department shall be contacted. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

Historical note: §12-220-10.1 is based substantially upon §12-220-3. [Eff 12/6/82; am and ren §12-220-3 and comp 12/6/90; R 12/21/19]

§12-220-11 Repealed. [R 12/21/19]

§12-220-11.1 Quality control reviews and audits. (a) At the request of a repair organization for boilers or pressure vessels, the department may conduct an inspection and review of the organization's quality control program and facilities. This inspection shall be for the purpose of renewal of authorization to use the National Board "R" symbol stamp. Such requests shall be submitted to the department at least six (6) months prior the expiration date. Initial quality control reviews shall be done by the National Board. If the chief boiler inspector or a deputy inspector is qualified as a National Board team leader to conduct an "R" stamp renewal, the department shall conduct all required reviews after the initial review for renewal of the National Board "R" stamp.

(b) At the request of the National Board, of the ASME, or of a boiler, pressure vessel or component parts manufacturer, the department may conduct an inspection of a manufacturer's quality control program and facilities. This inspection shall be for the purpose of renewal of authorization

to use the applicable non-nuclear ASME certification marks. Requests shall be submitted to the department at least six (6) months prior the expiration date of certification marks. Initial quality control reviews shall be conducted by the ASME or an ASME designee. If the chief boiler inspector or a deputy inspector is qualified as an ASME review team leader to conduct non-nuclear ASME joint reviews, the department shall conduct all required reviews after the initial review for renewal of the non-nuclear ASME certification marks.

(c) At the request of the National Board, of the ASME, of a repair organization, or of a boiler, pressure vessel or component parts manufacturer, the department may participate as an observer in the inspection of their quality control program and facilities. This inspection shall be for the new issuance of authorization to use the applicable National Board stamps or ASME certification marks.

(d) Quality control reviews and audits conducted by the department to meet the requirements of subsections (a), (b), and (c) shall be charged as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated October 1, 2023, which is made part of this chapter and located at the end of this chapter. An inspection fee for each pressure retaining item subject to this part shall be charged as per the schedule in Exhibit B, titled, "Internal & External Inspection Fees", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter. [Eff] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-12 Care of pressure retaining item spaces. (a) The pressure retaining item space shall be free from accumulation of rubbish and materials that may obstruct access to the pressure retaining item, or appurtenance. The clearances identical to those required for new installations under section 12-220-2.1 shall

always be maintained for all types of pressure retaining items.

(b) Users shall ensure that the following conditions always exist with regards to pressure retaining item spaces:

- (1) The storage of flammable materials or fuel-powered equipment is prohibited;
- (2) The roof over indoor installations is free from leaks and maintained in good condition;
- (3) Adequate floor drainage exists; and
- (4) All exit doors open outwards.
[Eff 12/19/84; ren and comp 12/6/90; am 11/18/12, am and comp 12/21/19;
comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

§12-220-13 Conditions not treated in this part.

For any conditions not treated in this part, the applicable provisions of the ASME BPVC, ASME B31.1, ASME CSD-1, ASME PVHO 1, ASME PVHO 2, and the NBIC, and other publications adopted herein shall apply. API-510 shall not take precedence over the safety standards of this part or any reference codes. However, variances may be granted in accordance with section 12-220-33.1. [Eff 12/6/82; am 12/8/86; am, ren §12-220-11, and comp 12/6/90; 7/6/98; 6/19/00; am 11/18/12; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-14 Complaints. (a) Complaints may be made to the department, and where reasonable grounds exist for the department to believe there may be a hazard, there shall be an inspection in response to the complaint.

(b) Names of all complainants and witnesses shall be held in confidence by the department, unless prior permission has been given by the complainant or witness to release his or her name, or unless it has been determined by the attorney general that disclosure is

necessary for enforcement and review of this chapter.
[Eff 7/6/98; am and comp 12/21/19; comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-15 Permits. (a) An installation permit shall be issued by the department based on the approval of drawings and specifications pertaining to the installation of pressure retaining items. An application shall be submitted in the prescribed form and must be accompanied by the remittance fee for each pressure retaining item subject to this part as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made part of this chapter, and located at the end of this chapter, and inspection fee for each boiler, pressure vessel, or pressure system subject to this part as per the schedule in Exhibit B, titled, "Internal & External Inspection Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made a part of this chapter and located at the end of this chapter.

The contractor shall be responsible for furnishing to the department all documentation required and referenced in the standards and codes adopted by the department for installation, construction, routine repair, repair, or alteration of any pressure retaining item, NBEP, and BEP.

(b) No person shall install, construct, reconstruct, or relocate any pressure retaining item without first obtaining an installation permit from the department.

- (1) The plans and specifications for installation of pressure retaining items together with pertinent details shall be submitted to the department prior to commencement of work. Plans shall be resubmitted for any project in which the installation has not commenced within three years of the plan approval date. Copies of engineering data, tests, manufacturer's data reports, laboratory

reports, and any other pertinent information deemed necessary by the department shall be submitted by the installer on any new equipment or appurtenance to be installed for the first time in the State of Hawaii; and

- (2) An installation permit as required under subsection (a) shall be issued only to a person who is licensed to engage in the business of installing or repairing pressure retaining items by the contractors license board of the department of commerce and consumer affairs, State of Hawaii. All installation permit applications shall be deemed approved if not acted upon by the department within thirty calendar days from the date of receipt of the completed application.

(c) Permits for repairs, routine repairs, or alterations shall be issued upon the approval of code routine repair, repair, or alteration application submitted by the holder of NB "R" certificate of authorization. An application shall be submitted in the prescribed form and must be accompanied by the remittance of the fee for each pressure retaining item subject to this part as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~September 1, 2019,~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter provided that:

- (1) NBEP repair or alteration permits shall be issued upon approval of NBEP repair or alteration application submitted by the holder of an NBEP or ASME "S", "A", "PP", or NB "R" certificate of authorization; and
- (2) The department shall issue an NBEP repair or alteration permit to a holder of an NBEP or ASME "S", "A", "PP", or NB "R" certificate of authorization in accordance with section 12-220-9.1.

(d) Permits to operate or certificates of inspection shall be issued based on the report of the

acceptance inspection and each permit renewal inspection.

(e) The department shall issue a permit to operate for any pressure retaining item required by these rules and inspected by an inspector and found to be safe and in compliance with this subtitle. The owner or user shall remit upon application an inspection fee for each pressure retaining item subject to this part as per the schedule in Exhibit B, titled, "Internal & External Inspection Fees", dated [~~September 1, 2019,~~] October 1, 2023, which is made a part of this chapter and located at the end of this chapter. It shall be unlawful for any person, firm, association, partnership, or corporation to operate a pressure retaining item regulated by this chapter unless a permit for the operation has been authorized by the department and the permit remains in effect provided that:

- (1) A permit to operate a pressure retaining item shall be issued to the owner or lessee only after an inspector has found that the device has met all requirements of this chapter;
- (2) A valid permit may be extended for cause by the department if so requested in writing by the owner or lessee to the chief boiler inspector. The absence of a special inspector to conduct a permit renewal inspection shall not be accepted as a valid reason for granting the permit extension;
- (3) The permit to operate shall indicate the type of equipment for which it is issued, the maximum allowable working pressure, and the National Board number. The permit to operate shall be posted in a conspicuous location nearby the unit;
- (4) The department may immediately revoke any permit to operate or certificate of inspection for any pressure retaining item, required to be inspected by this chapter, found to be in an unsafe condition, or is not properly guarded or is dangerously placed, or when a user, owner, or contractor fails to

- comply with department orders to correct specific defects or hazards and continues to use or operate the pressure retaining item;
- (5) The department shall reissue a permit to operate to any user, owner, or contractor who demonstrates good faith in attempting to abate all nonconforming conditions specified in department orders provided the pressure retaining item is safe to operate;
 - (6) A permit to operate or certificate of inspection shall be valid only at the location for which it was issued except for boilers or pressure vessels which are indicated on the permit as being portable;
 - (7) No pressure retaining item that is required to be inspected by chapter 397, HRS, or by any rule adopted pursuant to chapter 91, HRS, shall be operated except as necessary to install, repair, or test, unless a permit to operate or certificate of inspection has been authorized or issued by the department and remains valid; and
 - (8) The department may, upon the application of any owner or user or any other person affected thereby, grant a reasonable period as may be necessary, but not longer than ninety days, for compliance with any order to render the pressure retaining item safe. Any person affected by an order may for cause petition the department for an extension of time to render the pressure retaining item safe.
[Eff 12/6/82; am 12/8/86; am, ren
§12-220-15, and comp 12/6/90; am 7/6/98;
am 6/19/00; am 11/18/12; am and comp
12/21/19; am and comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-16 Inspections and tests. (a) The department shall inspect to insure compliance with chapter 397, HRS, any activity related to the

erection, construction, alteration, repair, or maintenance of facilities containing pressure retaining items. The department may authorize special inspectors ~~[in the employ of]~~ exclusively employed by insurance companies who shall inspect ~~[boilers and pressure vessels]~~ pressure retaining items insured by the insurance companies[-] and special inspectors exclusively employed by approved OUIOs who shall only inspect pressure retaining items owned and operated by the OUIO. All equipment required by this section to be inspected are exempt from the requirements of this chapter if under the jurisdiction of the United States government, or if serving only a private residence and not accessible to the public, except where the location could affect persons other than the owner and meet the requirements of section 12-220-2.1(c).

(b) All inspections and witnessing of tests for ~~[pressure retaining]~~ pressure retaining items as required pursuant to this part, shall be made in conformance with the procedures set forth in the ASME BPVC, the NBIC, and this part. Where notations of discrepancies, recommendations, or requirements are made, these notations shall refer to the applicable rule of the ASME BPVC, the NBIC, and this part.

(c) Power boilers shall receive a permit following an annual permit renewal internal inspection upon approval by the chief boiler inspector. An external inspection shall be performed approximately six months after each internal inspection.

(d) Miniature electric boilers shall receive a permit renewal inspection biennially. An internal inspection may be performed by the inspector pursuant to NBIC, Part 2 requirements, when necessary.

(e) Heating boilers shall receive permit renewal inspections as follows:

- (1) Steam or vapor boilers with a heating surface of twenty (20) or less square feet shall have an external inspection every two years. An internal inspection may be conducted pursuant to NBIC, Part 2 requirements, when necessary, and where the construction of the boiler permits;

- (2) Steam or vapor boilers, with a heating surface greater than twenty (20) square feet and less than or equal to one hundred (100) square feet, shall be externally inspected every two years and internally inspected at least every four years;
- (3) Steam or vapor boilers with any one of the following criteria: a manway, a Btu input greater than 400,000, or a heating surface greater than one hundred (100) square feet, shall receive a permit following an annual internal inspection upon approval by the chief boiler inspector. An external inspection shall be performed approximately six months after each internal inspection;
- (4) Hot-water heating ~~[and]~~ boilers, hot-water supply boilers, and potable water heaters shall have an external inspection every two years, and where construction of the unit permits, an internal inspection may be conducted in lieu of the external inspection pursuant to NBIC, Part 2 requirements, when necessary;
- (5) Pool heaters shall have an external inspection every two years; and
- (6) All non-code, nonstandard, or State special boilers and water heaters installed or operated in schools shall be externally inspected every two years and shall comply with the installation requirements of section 12-220-2.1. These objects are designated as state specials and shall be issued a permit to operate. An inspection and permit to operate fee will be assessed for the inspection of these objects.
- (f) All pressure vessels shall receive a permit renewal inspection every two years and as follows:
 - (1) Unfired jacketed steam kettles with a cooking capacity of forty (40) gallons or more, or steam chambers exceeding five (5) cubic feet in volume receiving steam from an external source, shall receive a permit inspection every two years;

- (2) All non-code, nonstandard, or state special pressure vessels installed or operated in schools shall be externally inspected every two years and shall comply with the installation requirements of section 12-220-2.1. These objects will be designated as state specials and be issued a permit to operate upon approval by the chief boiler inspector. An inspection and permit to operate fee will be assessed for the inspection of these objects;
 - (3) An internal inspection may be performed pursuant to NBIC, Part 2 requirements, when necessary; and
 - (4) Pressure vessels used for the treatment of wood shall be scrubbed clean for close visual inspection every ten years.
- (g) Boilers and pressure vessels that are under the supervision of an OUIO shall be inspected in accordance with the NBIC and this part. ~~[Pressure vessels may be inspected with a different permit inspection frequency but not to exceed every four years upon approval by the chief boiler inspector.]~~
- (h) Based upon documentation of actual service conditions by the owner or user of the operating equipment, the department may, at its discretion, permit variations in the inspection frequency requirement pursuant to section 12-220-33.1.
- (i) Power boilers having continuous internal water treatment under the general supervision of a qualified engineer or chemist, having a minimum of five years' experience in the treatment of boiler water, at least one year of which shall have been on the boiler or boilers in that person's supervision, where the water treatment is for the purpose of controlling and limiting serious corrosion and other deteriorating factors, may, upon approval of the director, be given permit inspections at intervals of not more than three years, in which case external inspections shall be performed at approximately six month intervals between the internal inspections.
- (1) The owner or user of a power boiler subject to this part shall keep an accurate record of the

samples of boiler water taken at regular intervals not greater than twenty-four (24) hours of operation. The owner or user shall also keep a record of the date and actual time that boilers were out of service and the reasons therefore. All records mentioned in this section are to be made available by the owner or user to the inspector for examination upon request;

- (2) When a biennial internal inspection is desired by a power boiler owner or user subject to this section, a written application for consideration shall be made to the department. The application shall contain the following information:
 - (A) Use of the boiler;
 - (B) Boiler technical data, name of manufacturer, and all identifying numbers;
 - (C) Name and pertinent qualifications of the qualified engineer or chemist in charge of water treatment;
 - (D) The laboratory facilities used for testing and analyzing boiler water;
 - (E) The boiler water analysis standards established and achieved over the preceding twelve (12) month period;
 - (F) Method and frequency of sampling water;
 - (G) Percentage of makeup water;
 - (H) Record of boiler outages occurring since the last internal inspection; and
 - (I) The biennial inspection report by a qualified boiler inspector relating to the acceptability of the boiler; and
- (3) Upon approval of the application by the department, the expiration date of the current annual operating permit shall be extended for a period of one year. Subsequent permits shall be issued to expire annually and may be extended for not more than one year provided the boiler reports submitted to the department, at periods as shall be required, indicate that the approved

standards and codes are being maintained and if all other conditions are being met.

(j) The following shall apply to the notification of unsafe pressure retaining items:

- (1) If [~~a special~~] an inspector, upon first inspection of a new risk, finds that a pressure retaining item, or any appurtenance thereof, is in a condition that [~~the insurance company would refuse insurance,~~] is unsafe, the company shall immediately notify the department; and
- (2) If, upon inspection, [~~a special~~] an inspector finds a pressure retaining item to be unsafe, the [~~special~~] inspector shall promptly notify the owner or user, stating what repairs or other corrective measures are required to bring the object into compliance with these rules. Unless the owner or user makes repairs or adopts other corrective measures promptly, the [~~special~~] inspector shall immediately notify the department. Unless timely corrections have been made, no further operation of the pressure retaining item shall be permitted. If an operating permit for the object is required and is in force, it shall be suspended by the [~~special~~] inspector if timely corrections have not been made. When re-inspection establishes that the necessary repairs have been made or corrective actions have been taken and that the pressure retaining item is safe to operate, the department shall issue an operating permit.

(k) When defective conditions are disclosed during the inspection, or there is evidence of a leak or crack, adequate access shall be provided to permit the inspector to satisfactorily determine the safety of the pressure retaining item.

(l) Permit inspections, as required in section 12-220-15, shall be carried out prior to the expiration date of the certificate at a time mutually agreeable to the inspector and owner or user. External inspections may be performed by the inspector

during reasonable hours and without prior notification. When, because of an external inspection or determination by other objective means, it is the inspector's opinion that continued operation of the pressure retaining item constitutes a danger to personnel or property, the inspector may request an internal inspection or an appropriate pressure test, or both, to evaluate conditions. In these instances, the owner or user shall prepare the pressure retaining item for inspections or tests as the inspector requires.

(m) The following requirements shall apply to the submission of inspection reports:

- (1) Inspectors shall submit to the department an inspection report on Form NB-5 of the NBIC, or similar forms approved by the department, for each pressure retaining item subject to chapter 397, HRS. Complete data shall be submitted for each nonstandard pressure retaining item;
- (2) Subsequent inspections by qualified inspectors of both standard and nonstandard pressure retaining items shall be reported on Forms NB-6 and NB-7 of the NBIC, or similar forms approved by the department;
- (3) Inspection reports following the requirements of paragraphs (1) and (2) shall be submitted within thirty (30) days from the date of the inspection; and
- (4) Owner-user inspection organizations shall file reports pursuant to section 12-220-19.

(n) Notification by insurance companies. All insurance companies shall notify the department within thirty (30) days on all pressure retaining items for which insurance is written, canceled, or not renewed.

(o) If during a routine inspection by ~~[a special]~~ an inspector, a pressure retaining item is found to have discrepancies, the length of time for temporary use of the item, and the correction of the discrepancies will be at the discretion of the ~~[special]~~ inspector, but no more than ninety (90) days. A follow up inspection shall be made by the ~~[special]~~ inspector in a timely manner and the department

notified. The nonconforming safety devices shall be immediately replaced or the operation of the pressure retaining item shall be suspended. Follow up inspections not performed by ~~[the]~~ special ~~[inspector]~~ inspectors within the time prescribed by the department may be conducted by the department. The authorized inspection agency shall be invoiced at ~~[\$125]~~ \$150 per hour with a minimum of two hours charged. [Eff 12/6/82; am 12/8/86; am, ren §12-220-16, and comp 12/6/90; am 7/6/98; am 6/19/00; am 11/18/12; am and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-17 Investigations. The department ~~[shall]~~ may investigate, in accordance with section 12-220-27, accidents involving pressure retaining items subject to this chapter and may issue orders and recommendations with respect to the elimination and control of the cause factors. [Eff 7/6/98; am and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §§397-4, 397-6)

§12-220-18 Inspectors. (a) The following shall apply to inspectors:

- (1) The director shall appoint a chief boiler inspector who has had at the time of appointment not less than ten years' experience in the construction, installation, inspection, operation, maintenance or repair of pressure retaining items as a mechanical engineer, steam operating engineer, boilermaker, or boiler inspector; ~~[and]~~
- (2) The chief boiler inspector shall enforce the requirements of this part, take action necessary for the enforcement of the laws of the State governing the use of pressure retaining items, and keep a complete record of the type, dimensions, maximum allowable

working pressure, age, condition, location, and date of last internal inspection of all pressure retaining items~~[-]~~;

- (3) Required inspections of pressure retaining items shall be performed by inspectors as defined in section 12-220-1;
- (4) An application to take the State of Hawaii certificate of competency examination shall be filed at least sixty (60) days in advance and on the form provided by the department and must be accompanied by the remittance of the fee as per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter;
- (5) The certificate of competency shall be issued after the inspector has appeared before the director or the director's authorized agent, such as the chief boiler inspector;
- (6) The certificate of competency, unless suspended, revoked, or canceled, shall expire one year from the date of issue or renewal;
- (7) An insurance company employing special inspectors shall notify the department in writing when the employment of a special inspector is terminated; and
- (8) Upon approval of an applicant's request, a State of Hawaii examination for certificates of competency to inspect pressure retaining items shall be administered by the department on the first Wednesday of March, June, September, and December of each year.
 - (A) Applications for a State of Hawaii examination for a certificate of competency shall be in writing upon a form provided by the department. If the applicant's credentials and work experience are in accordance with NB-263, RCI-1, and meet with the approval of the department, the applicant shall be given

a written examination dealing with the construction, installation, operation, maintenance, or repair of pressure retaining items, and the requirements of this part. If the applicant is successful in completing the test and meets all the requirements, a certificate of competency shall be issued by the department. An applicant who fails to pass the examination shall be permitted to take another written examination after the expiration of ninety days. The fee remitted with the application shall be good for six months during which a re-examination must be taken; and

- (B) Inspectors employed by the department shall pass the National Board examination and be issued a certificate of competency from the department during the probationary employment period. A commission from the National Board shall then be obtained by the department to enable the employee to become a qualified boiler inspector.

(b) Commissions to inspect shall be always carried by inspectors while engaged in the performance of inspectional duties. Certificates of competency are non-transferable.

(c) The certificate of competency and commissions issued to an inspector may be suspended by the director or chief boiler inspector for cause and may be revoked after due investigation and recommendation by the department upon ten days' notice to the inspector and to the inspector's employer. Cause for suspension or revocation shall include, but not be limited to, incompetency, untrustworthiness, wilful falsification of any matter or statement contained in the inspector's application, or in the report of any inspections, or any other sufficient reason in the discretion of the director. Prior to revocation, the holder of the certificate of competency or commission shall be entitled to a hearing before the director or

the director's authorized agent. A person whose certificate of competency has been suspended or revoked, except for untrustworthiness, shall be entitled to apply to the department for reinstatement, or in the case of revocation, for a new examination and certificate of competency ninety days (90) after the revocation.

(d) No person shall be authorized to act for the State as an inspector who is directly interested in the manufacture, sale, repair, or alteration of any equipment or any appurtenance used on any equipment which is inspected pursuant to chapter 397, HRS. [Eff 7/6/98; am 11/18/12; am and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §§397-4, 397-6)

§12-220-19 Owner-user inspection organization.

(a) Any person[, ~~firm, partnership, or corporation~~] or owner operating pressure retaining items in Hawaii may seek approval and registration as an OUIO by submitting an application with the department[~~-~~] prior to seeking accreditation with the National Board.

(b) The application and registration shall show the name of the OUIO and its principal address in Hawaii as well as the name and address of the person charged with the implementation of the requirements of the established inspection program. Changes in the organization's inspection program, including its organizational chart and supervisory personnel, shall be reported to the department within thirty days after any change.

(c) The applicant shall set forth in writing the program, procedures, and organizational chart in a manner prescribed by the department and shall meet the requirements of NB-381. The complete application shall be submitted to the department for approval prior to implementation.

(d) Each OUIO shall:

- (1) Conduct inspections of pressure retaining items not exempt from chapter 397, HRS,

utilizing only qualified boiler inspectors, pursuant to section 12-220-18 and as defined in section 12-220-1;

- (2) Execute and deliver to the department the inspection reports on pressure retaining items inspected that shall include appropriate requirements or recommendations based on the inspection. Reports shall be submitted as soon as possible but no later than thirty calendar days after the completion of the inspection;
 - (3) Promptly notify the department of any pressure retaining item that does not meet the requirements for safety;
 - (4) Maintain inspection records that shall include:
 - (A) A list of each boiler, pressure vessel, or pressure systems subject to chapter 397, HRS, complete with National Board number, serial number, and descriptions necessary for identification;
 - (B) A true record or copy of the latest report of each inspection that shall be signed by the inspector who made the inspection; and
 - (C) The approximate date of the next inspection pursuant to NBIC and the jurisdiction;
 - (5) Employ inspectors who meet the requirements of NB-263, who hold a valid National Board Inservice Commission (IS), and an "R" endorsement if the scope of inspections include repair or alteration inspections, and meets the requirements of section 12-220-18; and
 - (6) Select and designate a technical supervisor meeting the requirements of paragraph (5), and who shall have passed the examination developed and administered by the National Board, and received an "O" endorsement from the National Board.
- (e) Inspection records shall be readily available for annual review and audit by the

department during business hours. [Eff 12/6/82; am 12/8/86; am, ren §12-220-19, and comp 12/6/90; am 7/6/98; am 6/29/00; am and comp 12/21/19; am and comp] (Auth: HRS §§397-4, 397-5, 397-6) (Imp: HRS §§397-4, 397-5, 397-6)

§12-220-20 Fees. (a) The following shall apply to fees:

- (1) The department shall charge and collect from the owner, user, lessee, contractor, or insurance company a fee, including a permit processing fee, and an inspection report fee, per the schedule in Exhibit B, titled, "Internal & External Inspection Fees", dated ~~[September 1, 2019,]~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter, for each inspection made by an inspector during regular working hours. The department shall charge and collect a fee for each duplicate permit to operate;
- (2) For all other inspections and services, the fee shall be ~~[\$125]~~ \$150 per hour but not less than ~~[\$250]~~ \$300 per occurrence during regular working hours and ~~[\$175]~~ \$225 per hour but not less than ~~[\$350]~~ \$450 per occurrence when performed outside regular working hours;
- (3) Scheduled inspections delayed or canceled ~~[and too late to prevent the arrival of the inspector on the premises,]~~ by the requester shall be charged in accordance with the scheduled fee for the type of inspection. If the notice of cancellation or delay of a scheduled inspection is given forty-eight (48) hours beforehand, excluding weekends and state holidays, then no fee will be charged;
- (4) A delayed inspection includes situations where the pressure retaining item is not ready for the inspection or the requester is not ready to conduct the tests within one hour of the scheduled date and time;

- ~~[(4)]~~ (5) The charge for a rescheduled inspection or a call back inspection to allow a pressure retaining item to operate shall be at the scheduled fee for the type of inspection plus the expenses incurred, including, but not limited to, the inspector's time, mileage, and travel expenses;
- ~~[(5)]~~ (6) When an unscheduled inspection request is made for the benefit of an owner, user, contractor, or vendor, the sum of expenses incurred, including the hourly fee if applicable, shall be charged in addition to the inspection fee;
- ~~[(6)]~~ (7) Whenever the beneficiary of an inspection fails to pay the fees required under this section within sixty days (60) after notification, the pressure retaining item shall be tagged out of service and permit revoked. In addition to the fees required, the department shall charge the beneficiary a penalty equal to fifty per cent of the fee. For this section, the date of invoice shall be considered the date of notification. Upon payment of fees, the operating permit shall be reinstated and issued; and
- ~~[(7)]~~ (8) Departmental reports of inspections for which expenses must be added to the basic fee shall be accompanied by an itemized account of the inspections made and the expenses incurred.
- (b) Departmental installation, repair, routine repair, and alteration permit fees.
- (1) The department shall, before issuance of a permit to install, repair, routine repair, alter, construct, or relocate, charge and collect a fee for each object per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated ~~[September 1, 2019]~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter;

- (2) For each instance requiring an installation permit fee, the department shall provide:
 - (A) A plan review, an inspection and witnessing of the acceptance test, and one additional follow up inspection at the convenience of the department. The department shall charge for additional inspections for final acceptance and at the expense of the requesting party. Additional inspections may be at the convenience of the requesting party if all the expenses incurred are paid and fifteen days' (15) notice is given to the department;
 - (B) The processing and issuance of the temporary permit to operate; and
 - (C) The processing and issuance of the final permit; and
- (3) Failure to obtain a permit prior to commencement of work on the installation, routine repair, or alteration of a pressure retaining item will double the permit fee in addition to penalties.
- (c) The department shall charge for boiler inspector examination and license fees, per the schedule in Exhibit A, titled, "Installation, Repair or Alteration Permit Fees, and Licensure, Examination, and Registration Fees", dated [~~September 1, 2019,~~ October 1, 2023, which is made part of this chapter and located at the end of this chapter.
- (d) The department shall charge for audits of inspections conducted by OIOUs and insurance agencies. [Eff 7/6/98; am 11/18/12; am and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-5)

§12-220-21 Rights and enforcement. (a)
Rights.

- (1) Authorized representatives of the director may enter without delay during regular

working hours and at other reasonable times, any place, establishment, or premises where pressure retaining items are located that are subject to chapter 397, HRS;

- (2) The department may question any employer, owner, operator, agent, or employee in investigation, enforcement, and inspection activities covered by this chapter; and
 - (3) Any employee of the State acting within the scope of the employee's office, employment, or authority under chapter 397, HRS, shall not be liable for or made a party to any civil action arising out of administration and enforcement of chapter 397, HRS.
- (b) Enforcement.
- (1) Whenever an authorized representative of the director is denied the right of entry to a place to inspect any pressure retaining item subject to inspection by this chapter, the department may apply to the circuit court where the place exists for a search warrant providing on its face that the wilful interference with its lawful execution may be punished as a contempt of court;
 - (2) Whenever the department finds that the construction of, or the operation of any pressure retaining item subject to inspection by this chapter is not safe, or that any practice, means, method, operation, or process employed or used is unsafe; or is not in conformance with the standards and codes adopted pursuant to chapter 91, HRS, the department shall issue an order to render the construction or operation safe in conformance with chapter 397, HRS. The department shall deliver the order to the contractor, owner, or user in writing and may be delivered by mail, electronic mail, or in person. The department may in the order

direct that, in a manner and within a time specified, additions, repairs, improvements, or changes and safety devices and safeguards be furnished, provided, and used as are reasonably required to ensure compliance with the purposes and provisions of chapter 397, HRS. The owner, user, or contractor shall obey and observe all orders issued by the department or be subject to civil penalties pursuant to section 12-220-22;

- (3) Whenever, in the opinion of the department, the condition of, or the operation of a pressure retaining item subject to inspection by chapter 397, HRS, or any practice, means, method, operation, or process employed is unsafe, or is not properly guarded, or is dangerously placed, use of the pressure retaining item may be prohibited by the department. An order to that effect shall be posted prominently on the equipment, or near the place or condition referred to in the order. The order shall be removed when a determination has been made by an authorized representative of the department that the pressure retaining item is safe and the required safeguard or safety devices are provided;
- (4) Pursuant to section 397-4(d)(4), HRS, the department may apply for a restraining order from a circuit court to effect enforcement;
- (5) Pursuant to section 397-4(d)(5), HRS, the director, or an authorized representative, shall have the same powers possessed by the court respecting administering of oaths, compelling attendance of witnesses, producing documentary evidence, and examining witnesses or causing them to be examined, and may take depositions and certify to official acts;

this section, giving due respect to the gravity of the violation, the good faith of the owner, user, consultant, contractor, or vendor, and the history of previous violations.

(b) Violations.

- (1) Any owner, user, consultant, contractor, vendor, or person who violates chapter 397, HRS, or any safety standards, rules, and codes adopted pursuant to chapter 91, HRS; or who violates or fails to comply with any order made pursuant to chapter 397, HRS, or who defaces, displaces, destroys, damages, or removes without the authority of the department any safety device, safeguard, notice, order, or warning required by chapter 397, HRS, standards, or codes, shall be assessed a civil penalty of not more than \$10,000 for each violation; and
- (2) Each day a violation continues shall constitute a separate violation except during an abatement period.

(c) Discrepancies and penalties.

- (1) Any conditions found in nonconformance with applicable standards, rules, or codes, adopted pursuant to chapter 91, HRS, shall be regarded as discrepancies and the department shall notify the owner, user, consultant, contractor, vendor, or person by letter, or written order to correct that shall be mailed, or sent by electronic service. All discrepancies shall be satisfactorily resolved as soon as possible. When, in the opinion of the department, a discrepancy constitutes a potentially serious or imminent hazard, it may prohibit the use of the equipment until the condition is abated. Failure to abate unsafe conditions, or failure to correct discrepancies within the time prescribed, shall be a violation subject to the civil penalties prescribed in this section; and
- (2) Assessing penalties.
 - (A) Consideration shall be given to the gravity of the violation. For a

violation that could not or probably would not result in serious harm to life or property, the penalty may be reduced by forty per cent;

- (B) Consideration shall be given to the good faith of the owner, user, consultant, contractor, or vendor. For immediate correction or for attempts to make corrections or abate hazards that have been thwarted by conditions beyond the control of the owner, user, consultant, contractor, or vendor, the penalty may be reduced by forty per cent; and
- (C) Consideration shall be given for the history of previous violations. For few or no previous violations by the owner, user, consultant, contractor, or vendor, the penalty may be reduced by twenty per cent.

(d) Anyone who knowingly makes a false statement on any document required by chapter 397, HRS, shall upon conviction, be punished by a fine of no more than \$10,000 or by imprisonment for not more than six months, or by both. Any evidence suggesting that a false statement may have been made shall be immediately referred to the director, who shall consult with the attorney general for purposes of initiating appropriate action. [Eff 7/6/98; am 11/18/12; am and comp 12/21/19; comp] (Auth: HRS §397-4)
(Imp: HRS §397-8)

§12-220-23 Review and appeal. (a) Any order of the director shall be final and conclusive against the owner, user, vendor, consultant, contractor, or person unless a written notice of contest of the order is filed with the director specifying what is being contested within twenty (20) days after receipt of the order.

(b) The owner, user, vendor, consultant, or contractor may petition the director for modification of the abatement requirements in an

order, provided the petition is filed no later than the close of the next business day following the date on which abatement is required. Under exceptional circumstances and for good cause shown, the petition may be filed later. The director shall issue an order either affirming or modifying the abatement requirement.

(c) The director shall advise the appeals board upon receipt of notice of contest.

(d) The appeals board shall afford an opportunity for hearing on any notice of contest pursuant to section 397-9, HRS. [Eff 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-9)

§12-220-24 Judicial review. Judicial review of a decision and order of the appeals board may be obtained in the manner provided for in chapter 91, HRS, by instituting proceedings in the circuit court of the circuit in which the pressure retaining item is located. [Eff 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-10)

§12-220-25 Trade secrets. Information obtained by the department containing or revealing a trade secret shall be held confidential and access shall be limited to authorized representatives of the director pursuant to chapter 397, HRS, and when relevant in any proceedings pursuant to chapter 397, HRS. [Eff 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-11)

§12-220-26 Evidence. No record or determination of any administrative proceedings pursuant to chapter 397, HRS, or any statement or

report of any kind obtained or received in connection with the administration or enforcement of chapter 397, HRS, shall be admitted or used, whether as evidence or a discovery, in any civil action growing out of any matter mentioned in the record, determination, statement, or report other than an action for enforcement or review under chapter 397, HRS. [Eff 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-12)

§12-220-27 Reporting of accidents. (a)

Whenever an accident, as defined by section 12-220-1, occurs to a pressure retaining item, the owner, user, or maintenance company shall promptly notify the division by submitting a detailed accident report.

(b) Whenever an accident occurs that results in the loss of life the owner, user, or maintenance company shall promptly notify the division by telephone at (808) 586-9141 or electronic mail at dlir.hiosh.boiler@hawaii.gov within eight (8) hours after the event. Whenever an accident occurs involving inpatient hospitalization, the owner, user or maintenance company shall notify the division within twenty-four (24) hours. In either case, the pressure retaining item, or any of its parts, shall not be removed or disturbed before permission has been given by the department, except for the purpose of saving human life and limited consequential damage.

(c) Additional reports, in writing or otherwise, may be required by the director. [Eff 7/6/98; am and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-28 Suspending operation; condemned pressure retaining items. (a) If, upon inspection,

a pressure retaining item is declared unfit for further operation by an inspector, the inspector shall notify the department and the permit to operate shall be suspended by the department. The pressure retaining item shall be stamped on either side of the state number with the letters XXX so that the number would read as follows: XXX-HAW-###-##-XXX. The stamping with the Xs shall designate a condemned item.

(b) Any person, firm, partnership, or corporation operating, using, or selling any unsafe pressure retaining item, and notwithstanding section 12-220-22, shall be subject to a penalty of up to \$10,000 per day of operating, use, or offering for sale any unsafe pressure retaining item. [Eff 7/6/98; am and comp 12/21/19; comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-29 Repealed. [R 12/21/19]

§12-220-29.1 Reinstallation of pressure retaining items. Before an owner or user of a pressure retaining item located in Hawaii relocates the object outside of the jurisdiction for temporary use or repair, an application shall be made by the owner or user to the department for permission to reinstall the pressure retaining item back in the jurisdiction pursuant to section 12-220-5. When a nonstandard pressure retaining item, as defined in section 12-220-2.1(c), is removed, it shall not be reinstalled within Hawaii. [Eff 7/6/98; §12-220-30; am, ren §12-220-29.1, and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-30 Renumbered. [Eff 12/21/19]

§12-220-30.1 Application of [State] state serial numbers. (a) Upon completion of the installation of a pressure retaining item, or at the time of the initial permit inspection of an existing installation, each pressure retaining item shall be stamped or marked by the inspector employed by the department with a state serial number, consisting of letters and figures to be not less than 5/16 inch in height and arranged:

| | |
|----------------------|---------------|
| For power boilers | HAW-####-YEAR |
| For heating boilers | HHB-####-YEAR |
| For pressure vessels | HPV-####-YEAR |

Heating boilers assigned state serial numbers prior to January 1984 had the prefix HAW NO. 0000-YEAR. In each case, the year shall be a part of the number.

(b) All pressure retaining items constructed of cast iron, or of material of a thickness that cannot be stamped in accordance with the ASME BPVC, shall have a securely attached corrosion resistant label plate containing the required manufacturer's stamping, or directly marked by other means on the pressure retaining item. The [State] state serial number shall be stamped or marked by other means on the label plate. [Eff 7/6/98;1 §12-220-31; am, ren §12-220-30.1, and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-31 Renumbered. [Eff 12/21/19]

§12-220-31.1 Notification of transfer and location. The contractor, erector, seller, vendor, or any person responsible for the transfer of ownership, shall notify the department in writing within thirty (30) calendar days giving the address, name, and phone number of the purchaser of any pressure retaining item except those exempted by section 12-220-15.

(1) The owner or user of any existing pressure retaining item operated in the State, except

those exempted by section 12-220-2.1(c), and those for which an operating permit has been issued, shall report the location thereof to the department[+].

- (2) An owner or user planning to install any pressure retaining item except those exempted by section 12-220-2.1(c), shall notify the department in writing or by electronic mail at dlir.hiosh.boiler@hawaii.gov of the proposed location of the installation stating whether the unit is new, reinstalled, or secondhand. If it is a reinstalled or a secondhand pressure retaining item, the owner or user shall, in addition to the above information, give the Hawaii number or otherwise identify the pressure retaining item. The owner or user of a portable pressure retaining item shall not be required to report each change in location unless the change is from one island to another.
- (3) When a pressure retaining item, subject to this chapter, is removed from service, the owner shall notify the department in writing or by electronic mail at dlir.hiosh.boiler@hawaii.gov. The notification shall state the disposition made or planned for the pressure retaining item. The notification shall occur prior to the relocation or removal from service of the pressure retaining item. [Eff 7/6/98; §12-220-32; am, ren §12-220-31.1, and comp 12/21/19; am and comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-32 Renumbered. [Eff 12/21/19]

§12-220-32.1 Records. The boiler inspection branch shall preserve and maintain for at least six years (6) records of reports of its inspections,

witnessing of tests, accident investigations, correspondence, prints, and memoranda for all objects inspected pursuant to chapter 397, HRS. [Eff 7/6/98; §12-220-33; am, ren §12-220-32.1, and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-33 Renumbered. [Eff 12/21/19]

§12-220-33.1 Variances. (a) In cases of practical difficulties, undue hardships, or new developments, an owner, user, contractor, or vendor may apply for a variance from any safety standard under this part. The application must be in writing and may be hand delivered or mailed to the director, or sent by electronic mail to dlir.hiosh.boiler@hawaii.gov, clearly stating the standard from which a variance is sought, the conditions, means, practices, methods, operations, or processes proposed together with drawings, specifications, and other supporting data. The director may issue an order for variance if what is proposed will provide a substantially equivalent level of safety to that provided by the standard.

(b) All variances granted pursuant to this chapter shall have only a future effect. The director may decline to consider an application for variance on a subject or issue for which a citation has been issued to the owner or user and a proceeding on the proposed citation, or period of abatement, is pending.

(c) Before granting the variance, the director shall post a notice on the division's homepage notifying all potentially affected parties of the director's intent to grant the variance. The notice shall provide a period of thirty (30) calendar days to object to the granting of the variance, after which time the variance shall become final if no objections are filed and no hearing is requested.

(d) Any party objecting to the granting of the variance must notify the director in writing within

thirty (30) days of the online posting, stating the reasons why the variance should not be granted and the resultant specific impact on safety. The objecting party's reasons for objection may also be based on grounds other than impact on public safety, including the feasibility of compliance or lack of undue hardship to the petitioner.

(e) The hearing requested by the objecting party shall be held before the director or the director's authorized agent no later than forty-five (45) days after the thirty-day (30) period online posting of the public notice. It shall be held as follows:

- (1) The objecting party or parties and the variance applicant shall be provided notice of the date, time, and place of the hearing at least fourteen (14) calendar days before the scheduled hearing;
- (2) Each party shall be prepared to provide evidence supporting the party's case, including a brief oral statement summarizing the party's evidence;
- (3) The director shall provide a written order to all parties;
- (4) If the director determines that the evidence does not support denial of the variance request, no further notice is required; and
- (5) If the director determines that the evidence supports a denial of the variance request, the director shall post notice on the division's homepage notifying all potentially affected parties of the director's determination.

(f) Every final action granting a variance shall be published by online posting on the division's webpage. The online notice shall specify the alternative to the standard involved in the variance granted by the director.

(g) If a variance application filed pursuant to subsection (a) does not include all the relevant information required, the director may deny the application. The director's order of the denial of an application for nonconformity shall be given to the applicant within thirty (30) calendar days. A notice of denial shall include a brief statement of the grounds

for the denial. A denial of an application shall be without prejudice to the filing of another application. If a variance is not acted upon within ninety (90) calendar days, it shall be deemed granted.

(h) Notice of hearing.

(1) Upon request for a hearing pursuant to this chapter, the director shall serve notice of hearing within thirty (30) days and not more than sixty (60) days after the request for hearing;

(2) A notice of hearing shall include:

(A) The time, place and nature of the hearing;

(B) The legal authority for the hearing;

(C) A specification of the issues of fact and law; and

(D) A designation of a hearing officer appointed by the director; and

(3) A copy of the notice of hearing shall be transmitted to the hearing officer together with the original application and any request for a hearing.

(i) The director shall issue a determination to all affected parties within thirty (30) calendar days after the conclusion of the hearing. (Eff 12/6/82; am 12/8/86; am, ren 12-220-11, and comp 12/6/90; am 7/6/98; am 6/19/00; §12-220-34; am, ren 12-220-33.1, and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-220-34 Renumbered. [Eff 12/21/19]"

**EXHIBIT A
INSTALLATION, REPAIR, OR ALTERATION FEES, AND LICENSURE,
EXAMINATION, AND REGISTRATION FEES**

October 1, 2023

Installation Permits per object:

Power boiler with:

| | |
|--|---------|
| 500 square feet or less of heating surface | \$450 |
| 500 to 3,000 square feet of heating surface | \$650 |
| 3,001 square feet or more of heating surface | \$1,650 |
| Miniature electric boiler | \$300 |
| Heating Boiler | \$300 |
| Non-code or state special (schools) | \$100 |
| Pressure vessel | \$225 |
| Sterilizers and steam kettles (Fired and electrically heated) | \$225 |
| BEP and NBEP | \$330 |

Repair and Alteration Permits

| | |
|----------------------------|-------|
| Routine repair application | \$250 |
| Repair application | \$350 |
| Alteration application | \$550 |
| NBEP repair or alteration | \$350 |

License, Examination and Registration

| | |
|--|---------|
| Certificate of competency examination | \$400 |
| Hawaii Commission, initial or renewal | \$125 |
| National Board Inspector Commission examination | \$550 |
| Quality control systems review for National Board or ASME certificate of authorization ¹ | \$2,200 |
| Quality control systems review for NBEP Certificate of Authorization ¹ | \$2,200 |
| Initial applications for OUIO certification | \$1,100 |
| Re-stamp or replace nameplate application | \$350 |

¹ ***When administered by the department***

EXHIBIT B
INTERNAL & EXTERNAL INSPECTION FEES

October 1, 2023

Power boilers¹

| | |
|---|-------|
| 249 square feet or less (internal) | \$300 |
| 249 square feet or less (external) | \$250 |
| >249 to 500 square feet (internal) | \$350 |
| >249 to 500 square feet (external) | \$250 |
| >500 to 2,999 square feet (internal) | \$500 |
| >500 to 2,999 square feet (external) | \$350 |
| >2,999 to 10,000 square feet (internal) | \$550 |
| >2,999 to 10,000 square feet (external) | \$350 |
| >10,000 square feet (internal) | \$900 |
| >10,000 square feet (external) | \$600 |

Heating boilers¹

| | |
|---|-------|
| Hot-water heating or supply, potable water heater | \$200 |
| 20 square feet or less low pressure steam | \$200 |
| >20 to 100 square feet low pressure steam (internal) | \$300 |
| >20 to 100 square feet low pressure steam (external) | \$200 |
| >100 to 500 square feet low pressure steam (internal) | \$350 |
| >100 to 500 square feet low pressure Steam (external) | \$250 |
| >500 square feet low pressure steam (internal) | \$540 |
| >500 square feet low pressure steam (external) | \$350 |

Pressure vessels

| | |
|---------------------|-------|
| Permit renewal | \$100 |
| Internal inspection | \$200 |

Inspection reports

| | |
|---|------|
| Third-party inspection report review & processing | \$35 |
|---|------|

Permit to operate

| | |
|----------------------------------|------|
| Permit to operate or certificate | \$55 |
| State specials | \$55 |
| Permit reprint | \$35 |

Miscellaneous

| | |
|---------------------------------|-------|
| Ultrasonic testing per hour | \$150 |
| Hydrostatic test per hour | \$150 |
| Jurisdiction audit fee per hour | \$150 |

The fee for any inspection or service not covered above shall be \$150 per hour but not less than \$300 during regular working hours and \$225 per hour but not less than \$450 when outside regular working hours by request.

¹ ***When numbers are specified it is of square feet of heating surface.***

2. Chapter 12-222.1, Hawaii Administrative Rules, entitled "Power Boilers", is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 12

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

SUBTITLE 8

HAWAII OCCUPATIONAL SAFETY AND HEALTH DIVISION

PART 10

BOILER AND PRESSURE VESSELS

CHAPTER 222.1

POWER BOILERS

| | |
|-------------|--|
| §12-222.1-1 | Scope |
| §12-222.1-2 | General requirements for power boilers |
| §12-222.1-3 | Responsibilities of owners and users |
| §12-222.1-4 | Inspections |
| §12-222.1-5 | Technical installation requirements |
| §12-222.1-6 | Pressure relief valves for power boilers |
| §12-222.1-7 | Power boiler appurtenances |
| §12-222.1-8 | Boiler external and non-boiler external piping |
| §12-222.1-9 | Electric and miniature boilers |

| | |
|--------------|--|
| §12-222.1-10 | Attendance |
| §12-222.1-11 | Boiler room and operating area |
| §12-222.1-12 | Operating requirements |
| §12-222.1-13 | Controls and heat-generating apparatus |
| §12-222.1-14 | Emergency valves and controls |
| §12-222.1-15 | Preventive maintenance |

Historical Note: This chapter is based substantially upon chapter 222. [Eff 7/11/74; am 12/30/76; am 8/22/78; am 8/1/78; am 12/6/82; R 12/21/19]

§12-222.1-1 Scope. Unless exempt under section 12-220-2.1(c), the requirements in this section shall apply to power boilers and high-temperature water boilers, but not limited to the following:

- (1) Boilers in which steam or other vapor is generated at a pressure of more than fifteen (15) psig for use external to itself;
- (2) High-temperature water boilers intended for operation at pressures exceeding one hundred sixty (160) psig or temperatures exceeding two hundred fifty (250) degrees Fahrenheit; and
- (3) Unfired steam boilers designed in accordance with ASME BPVC Section I.
[Eff and comp 12/21/19; comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-2 General requirements for power boilers. (a) The following shall apply to all power boilers:

- (1) All power boilers in operation in this jurisdiction shall have a valid and current operating permit issued for a specific location by the department;
- (2) Changes in location or ownership shall require notification of the department and may require re-inspection;

- (3) Power boilers shall bear the ASME BPVC symbol stamp "S", "E", "M", or ASME certification mark with "S", "E", or "M" designator and the National Board registration number;
- (4) ASME and NB stamping shall be legible and not be concealed by insulation or paint; and
- (5) Upon completion of the installation of a new power boiler, each power boiler shall be marked by an inspector employed by the department with a state serial number, consisting of letters and figures to be not less than five sixteenths (5/16) of an inch in height and arranged as HAW####-Year.

(b) The age limit of boilers of standard construction installed prior to the date these rules become effective shall be dependent on thorough internal and external inspection, and where required by the inspector, a pressure test not exceeding one and one-half times (1.5) the maximum allowable working pressure. If the boiler, under these test conditions, exhibits no distress or leakage, it may be continued in operation at the working pressure determined by the applicable provisions of the edition of the ASME BPVC under which they were constructed and stamped.

(c) The age limit of any boiler of nonstandard construction without a lap-riveted longitudinal joint, installed prior to the date these rules become effective, shall be thirty (30) years, unless the department determines it may continue in operation at a pressure determined by the department as long as the following apply:

- (1) The boiler passes a thorough internal and external inspection; and
- (2) If required by an inspector, it passes a pressure test not exceeding one and one-half (1.5) times the maximum allowable working pressure, held for a period of at least thirty (30) minutes during which no distress or leakage develops.

(d) The age limit of any existing nonstandard boiler having lap-riveted longitudinal joints and operated at a pressure in excess of fifty (50) psig shall be twenty (20) years. This type of boiler, when removed from an existing setting, shall not be reinstalled and used at a pressure in excess of fifteen (15) psig. A reasonable time for replacement, not to exceed one (1) year, may be given at the discretion of the department. Lap seam riveted boilers are not allowed in this jurisdiction.

(e) Power boilers designed and stamped in accordance with ASME BPVC Section I, if trimmed for use as low pressure steam boilers, shall be inspected internally and externally on a power boiler frequency, if any of the following is exceeded:

- (1) Heating surface greater than 100 square feet;
- (2) Heat input greater than 400,000 Btu/hr; or
- (3) Power boilers with manways.

(f) The following shall be considered new boiler installations:

- (1) Replacement of an existing power boiler;
- (2) Replacement of boilers at an existing location with a used or second-hand boiler; and
- (3) Used or second-hand power boilers when installed in this jurisdiction, shall be equipped with fittings and appurtenances that comply with new installations.

(g) Replacement or repairs to boiler fittings, appurtenances or appliances, controls, and safety devices, shall comply with the applicable ASME BPVC and National Board Inspection Codes.

(h) Weld repairs, alterations, and inspection records shall be submitted with the installation application.

(i) All boiler piping shall be designed and installed in accordance with ASME BPVC Section I and ASME B31.1 for used or second-hand boilers. The use of galvanized piping is prohibited for power boiler pressure piping. [Eff and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-3 Responsibilities of owners and

users. (a) The following are requirements of owners and users:

- (1) The owner or user of the power boiler is responsible for ensuring that all equipment meets all the requirements of the ~~[jurisdiction]~~ department at the point of installation, including licensing, registration, and certification of those performing installations; provided that power boilers and their associated piping shall not be operated until the required documentation has been provided by the installer to the owner and the department;
- (2) Owners or users shall ensure operating permit renewal inspections are completed prior to the permit expiration date;
- (3) Owners or users shall schedule boiler permit renewal internal inspections. Permit renewal inspections shall include boiler shutdown, dismantling, an internal inspection by an inspector, testing of controls and safety devices, and any additional inspection requirements at the discretion of the inspector;
- (4) Operation of power boilers with expired operating permits is not allowed and may be subject to citation with penalties of up to \$10,000 per day pursuant to section 12-220-22;
- (5) When a boiler task is required, it is the owner or the owner's designee that is expected to perform the task, however, the owner retains responsibility for compliance; and
- (6) Owners or users are responsible to ensure compliance with the preventive maintenance requirements as specified in 12-222.1-14.

(b) Permit extensions. The following shall apply to permit extensions:

- (1) Requests for the extension of operating permits may be considered for valid reasons

- by submitting a written request to the chief boiler inspector; and
- (2) The unavailability of special inspectors to conduct inspections is not a valid reason for requesting permit extensions as deputy boiler inspectors may perform the inspections in the absence of special inspectors; [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

§12-222.1-4 Inspections. (a) Initial power boiler acceptance inspections shall be conducted and witnessed by an inspector employed by the department. The initial inspection shall include internal inspection, post installation pressure test [~~in accordance with the original code of construction~~], and operational testing of controls and safety devices by the installer, contractor, or owner. The tests shall conform to the procedures set forth in the ASME BPVC, NBIC, and this section[~~-~~], as applicable.

(b) All power boilers require annual inspection, including an internal inspection, and if approved by the department, the owner or user shall receive an operating permit. Approximately six (6) months after an initial or annual inspection, power boilers shall be externally inspected and operationally tested. The owner or user or designee shall perform the operational testing with an inspector witnessing the testing.

(c) The owner or user or designated agent shall prepare each boiler for internal inspection prior to the expiration date of the operating permit and shall apply a hydrostatic or pressure test, whenever necessary, at a time mutually agreeable to the inspector and owner or user. The owner or user of a boiler, or designated agent, shall prepare the boiler [~~or pressure vessel~~] for internal inspection to include, but not limited to the following, at the discretion of the inspector:

- (1) Drawing off the water and thoroughly washing the boiler;
- (2) Removing plates for a manhole or handhole, washout plugs, and inspection plugs in the connections of the water column, and in internally fired boilers all grates;
- (3) Ensuring the furnace and combustion chambers are thoroughly cooled and cleaned;
- (4) Removing brickwork or installation as required by the inspector to determine the condition of the boiler, headers, furnace, supports, and other parts;
- (5) Testing the pressure gage at the discretion of the inspector;
- (6) Preventing any leakage of steam or hot water into the boiler by disconnecting the pipe or valve at the most convenient point, or by any method approved by the inspector;
- (7) Closing, tagging, and padlocking the non-return valve, steam stop valves, blowoff valves, and feed valves before opening the cover for a manhole or handhole and entering any parts of the boiler or pressure vessel that connect to a common header with other boilers. In addition, opening the drain valves or cocks located between valves, disconnecting blowoff lines where practical between pressure parts and valves, and opening all drains and vent lines; and
- (8) Any additional requirements at the discretion of the inspector.
- (d) The following shall apply to these specific types of boilers [~~or pressure vessels~~]:
 - (1) Miniature boilers shall be externally or internally inspected and operationally tested biannually; and
 - (2) Miniature and electric steam boilers providing steam for sterilizing chambers shall be inspected and permitted separately from the steam chamber.
- (e) Additional inspection requirements:

- (1) The inspector may require any additional inspections at their discretion when deemed necessary for continued safety;
- (2) The owner or user shall develop safety policies and procedures for entering boiler confined space before any inspection, testing, or operation; and
- (3) The owner or user shall enforce a lockout tagout safety procedure as approved by the inspector when any person enters any confined space.

(f) The inspector providing inservice inspection for the facility in which the power boiler is installed has the following responsibilities:

- (1) Verifying the Boiler Installation Report I-1 (NB-365, see Exhibit 3, titled, "Form I-1 Report of Boiler Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter) has been completed and signed by the installer;
- (2) Verifying power boiler items comply with the laws and regulations of the jurisdiction governing the specific type of boiler;
- (3) Verifying any repairs or alterations to power boiler items, which are conducted prior to, or during, the initial installation, are in accordance with the NBIC; and
- (4) Completing and submitting the first inservice inspection/certificate report to the department. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

- §12-222.1-5 Technical installation requirements.** (a) General requirements. The following shall apply to all power boilers:
- (1) Power boilers shall be installed pursuant to section 12-220-2.1 and this chapter;
 - (2) Owners and users shall adhere to the power boiler installation requirements as specified in NBIC Part 1, and this chapter;
 - (3) An application for installation permit shall be submitted to the department prior to commencement of work;
 - (4) Boilers installed without an installation permit may be subject to citation and penalties of up to \$10,000 per day pursuant to section 12-220-22;
 - (5) Only contractors holding a valid Hawaii C-4 contractor license issued by the contractors license board of the department of commerce and consumer affairs shall install power boilers; and
 - (6) All power boilers shall be equipped with controls and safety devices based upon the Btu/hr burner input, as specified in the original code of construction, and in accordance with the following codes and standards:
 - (A) Boilers with energy input ratings of less than 12,500,000 Btu/hr shall meet the requirements of [~~ASME CSD-1-2012;~~] ASME CSD-1;
 - (B) Boilers with energy input ratings of 12,500,000 Btu/hr and above shall meet the requirements of [~~NFPA-85-2015;~~] NFPA-85;
 - (C) All atmospheric fluidized bed boilers, boilers with pulverized fuel systems, and boilers that are stoker fired shall meet the requirements of [~~NFPA-85-2015;~~] NFPA-85; and
 - (D) No new miniature boiler shall be installed unless it has been constructed and inspected to ASME BPVC standards, bears the ASME certification

mark with the "S", "M", or "E" designator in accordance with the requirements of Part PMB of ASME BPVC Section I, and when required, has controls and safety devices installed that are in accordance with ~~[ASME CSD-1-2012.] ASME CSD-1.~~

(b) First acceptance inspection and certification requirements shall include the following:

- (1) The owner, user, and contractor shall comply with section 12-220-2.1, and upon completion of the installation shall arrange for an acceptance inspection by the department;
- (2) The installing contractor shall operationally test the boiler controls and safety devices prior to scheduling the first acceptance inspection with the department and record the results on form CG-500, ~~[ASME CSD-1-2012.] ASME CSD-1,~~ and file a copy with the department;
- (3) First inspections for power boilers shall include internal inspection, pressure test ~~[in accordance with the original code of construction]~~, and operational testing of the controls and safety devices;
- (4) The installing contractor shall test the boiler as directed and witnessed by an inspector employed by the department;
- (5) An inspector employed by the department shall conduct the first data inspection, acceptance, and mark the state serial number on the power boiler pursuant to section 12-220-29.1~~[, and]~~. Power boilers may not be placed into service until its installation has been inspected and accepted by the department;
- (6) The installer shall complete and certify the NBIC Boiler Installation Report I-1 ~~[(NB-365, see Exhibit 3), found at the end of this chapter],~~ (NB-365, see Exhibit 3,

titled, "Boiler Installation Report I-1", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter) after the completion, inspection, and acceptance of the installation. The [~~Boiler Installation Report I-1 (NB-365, see Exhibit 3)~~] report shall be submitted to the owner and the department[-];

(7) The installer shall exercise care during installation to prevent loose weld material, welding rods, small tools, and miscellaneous scrap metal from getting into the vessel. Prior to making the final closure, the installer shall inspect the interior of the vessel and its appurtenances for the presence of foreign debris, and if present the debris shall be removed;

(8) Subject to department requirements, a leak test may be performed on any components whose pressure test is not documented under the items' Manufacturer's Data Report. This leak test should not exceed 90 per cent of the lowest pressure relief device setpoint. The test data shall be recorded, and the data made available as required; and

(9) All fuel fired boiler and fuel fired pressure vessel combustion air-fuel ratios shall be analyzed, adjusted, and values documented during commissioning to meet emission requirements of the department and limits of the manufacturer, as required.

(c) The following shall apply to power boiler clearances:

(1) Boiler installations shall allow for normal operation, maintenance, and inspections. There shall be at least thirty-six (36) inches of clearance on each side of a boiler to enable access for maintenance and inspection activities. Boilers operated in battery shall not be installed closer than forty-eight (48) inches from each other.

- (2) Alternative clearances in accordance with the manufacturer's recommendations are subject to acceptance by the department;
- (3) Boilers shall be installed to allow for removal and installation of tubes;
- (4) Boilers with a top-opening manhole shall have at least eighty-four (84) inches of unobstructed clearance above the manhole to the ceiling of the equipment room; other manhole openings shall have at least five (5) feet; and
- (5) Boilers with a bottom opening used for inspection or maintenance shall have at least twelve (12) inches of unobstructed clearance.

- (1) Electric and miniature boilers shall be installed at an accessible location for inspection and maintenance;
- (2) Electric and miniature boilers shall not be installed in ceilings unless provided with permanent ladders, floors, and height clearance for safe access;
- (3) Control sides and door openings shall have three (3) feet clearance from any type of interference;
- (4) All other sides shall have eighteen (18) inches of clearance; and
- (5) Alternative clearances in accordance with the manufacturer's recommendations are subject to acceptance by the department.

72

§12-222.1-6 Pressure relief valves for power boilers. (a) General requirements. The following shall apply to all power boilers:

- (1) Each power boiler, miniature boiler, electric boiler, and high-temperature water boiler shall have at least one ASME and NB certified pressure relief valve marked with the ASME certification mark and "V" designator, and National Board NB symbols;
- (2) When a new boiler is installed, ASME Form P-7 Manufacturer's Data Report for Pressure Relief Valves, or ASME Form P-8 Manufacturer's or Assembler's Certificate of Conformance for Pressure Relief Valves, as required by the ASME BPVC, shall be submitted along with the manufacturer's data on the power boiler;
- (3) Pressure relief valves shall be manufactured in accordance with a national or international consensus standard;
- ~~[-3-]~~ (4) Only direct spring-loaded, pilot operated, or power actuated pressure relief valves or pilot operated pressure relief valves designed to relieve steam shall be used for steam service;
- ~~[-4-]~~ (5) Safety relief valves are valves designed to relieve either steam or water, depending on the application;
- ~~[-5-]~~ (6) Deadweight or weighted-lever pressure relief valves shall not be used;
- ~~[-6-]~~ (7) For high-temperature water boilers, safety relief valves shall have a closed bonnet, and valve bodies shall not be constructed of cast iron;
- ~~[-7-]~~ (8) At least one NB capacity certified pressure relief valve shall be installed on the boiler. If the boiler has more than [500] five hundred (500) square feet of bare tube water heating surface, or if an electric boiler has a power input of more than [1,100 kilowatts,] 3.76 million Btu/hr (1,100 kilowatts), two or more NB capacity certified pressure relief valves shall be

installed[†]. For a boiler with combined bare tube and extended water-heating surface exceeding five hundred (500) square feet, two or more pressure relief valves are required only if the maximum designed steaming capacity of the boiler exceeds 4,000 lb/hr;

- ~~[(8) The pressure relief valve capacity for each boiler shall be so that the valve or valves will discharge all the steam that can be generated by the boiler without allowing the pressure to rise more than six per cent (6%) above the highest pressure to which any valve is set, and in no case to more than six per cent (6%) above the maximum allowable working pressure of the boiler. In no case shall the minimum relieving capacity be less than the maximum designed steaming capacity as determined by the manufacturer;]~~
- (9) One or more pressure relief valves on the boiler proper shall be set at or below the maximum allowable working pressure. If additional valves are used, the highest pressure setting shall not exceed the maximum allowable working pressure by more than three per cent (3%). The complete range of pressure settings of all the pressure relief valves on a boiler shall not exceed ten per cent (10%) of the highest pressure to which any valve is set;
- (10) Adjustments, repairs, and reconditioning of pressure relief valves shall be done by a National Board authorized "VR" repair company. The "VR" repair company shall affix a "VR" nameplate to the valve and provide repair documentation and the owner and user shall ensure that the nameplate identification plates remain legible; and
- (11) The owner and user shall maintain all pressure relieving devices in good operating condition. When the valves cannot be tested in service, the user shall maintain and make

available to the inspector records showing the test dates and set pressure for the valves.

(b) Installation of pressure relief valves. The following shall apply to the installation requirements of pressure relief valves:

- (1) Every boiler shall have outlet connections for the pressure relief valve, or valves, independent of any other outside steam connection, and the area of opening shall be at least equal to the aggregate areas of inlet connections of all the attached pressure relief valves. An internal collecting pipe, splash plate, or pan should be used, provided the total area for inlet of steam is not less than twice the aggregate areas of the inlet connections of the attached pressure relief valves. The holes in such collecting pipes shall be at least 1/4 inch in diameter, and the least dimension in any other form of opening for inlet of steam shall be 1/4 inch. If pressure relief valves are attached to a separate steam drum or dome, the opening between the boiler proper and the steam drum or dome shall be not less than ten (10) times the total area of the pressure relief valve inlet;

~~[(2) Every pressure relief valve shall be connected to stand in an upright position with spindle vertical;~~

~~(3) The opening or connection between the boiler and the pressure relief valve shall have at least the area of the valve inlet and the inlet pipe to the pressure relief valve shall be as short and straight as possible, no longer than twice the center-to-end (face) dimension of a corresponding tee fitting of the same diameter, pressure class, and connection type. When a discharge pipe is used, the cross-sectional area shall not be less than the full area of the valve outlet or of the total of the~~

~~areas of the valve outlets. It shall be as short and straight as possible and arranged to avoid undue stresses on the valve or valves;~~

- ~~(4) When a pressure relief valve is exposed to outdoor elements that may affect operation of the valve, the valve may be shielded with a cover. The cover shall be properly vented and arranged to permit servicing and normal operation of the valve;~~
- ~~(5) No valves of any type except a changeover valve as defined below, shall be placed between the pressure relief valves and the boiler, nor on the discharge pipe between the pressure relief valves and the atmosphere. A changeover valve, which allows two redundant pressure relief valves to be installed for the purpose of changing from one pressure relief valve to the other while the boiler is operating, may be used provided the changeover valve is in accordance with the original code of construction. It is recommended that the department be contacted to determine the acceptability of changeover valves on boiler applications. The changeover valve shall be designed such that there is no intermediate position where both pressure relief valves are isolated from the boiler;~~
- ~~(6) When two or more pressure relief valves are used on a boiler, they should be mounted either separately or as twin valves made by placing individual valves on Y-bases, or duplex valves having two valves in the same body casing. Twin valves made by placing individual valves on Y-bases or duplex valves having two valves in the same body shall be of equal size;~~
- ~~(7) When two valves of different sizes are installed singly, the relieving capacity of~~

~~the smaller valve shall not be less than fifty per cent (50%) of that of the larger valve; and~~

~~(8) When a boiler is fitted with two or more pressure relief valves on one connection, this connection to the boiler shall have a cross-sectional area not less than the combined areas of inlet connections of all the pressure relief valves with which it connects.]~~

(2) Pressure relief valves with an inlet connection greater than NPS 3 used for pressure greater than 15 psig shall have a flange or a welded inlet connection. The dimensions of flanges subjected to boiler pressure shall conform to the applicable standards;

(3) All covers, caps, and plugs utilized for shipping or transport shall be removed prior to installation or being placed in service; and

(4) Any wire or restraining device on lifting lever utilized for shipping or transport shall be removed prior to being placed in service.

(c) Discharge pipe. The following shall apply to pressure relief valve discharge piping requirements:

(1) All pressure relief valves shall be piped to a safe point of discharge so located or piped as to be carried clear from running boards or platforms. Provision for an ample gravity drain shall be made in the discharge pipe at or near each pressure relief valve, and where water or condensation may collect. Each valve shall have an open gravity drain through the casing below the level of the valve seat. For iron and steel-bodied valves exceeding NPS 2, the drain hole shall be tapped not less than NPS 3/8;

- (2) Discharge piping from pressure relief valves on high-temperature water boilers shall have adequate provisions for water drainage as well as steam venting;
- (3) If a muffler is used on a pressure relief valve, it shall have sufficient outlet area to prevent back pressure from interfering with the proper operation and discharge capacity of the valve. The muffler plates or other devices shall be so constructed as to avoid a possibility of restriction of the steam passages due to deposits[÷]; mufflers shall not be used on high-temperature water boiler pressure relief valves; and
- (4) When a discharge pipe is used, it shall be at least the same size of the safety valve discharge port and fitted with an open drain to prevent water lodging in the upper part of the safety valve or in the discharge pipe. Sectional areas of a common discharge pipe shall not be less than the same size of the combined multiple valve outlets discharging into the common discharge pipe. The discharge pipe shall be as short and straight as possible and arranged to avoid undue stresses on the valve or valves. Discharge pipe elbows shall be placed close to the safety valve outlet, or the discharge pipe shall be anchored and supported securely. If umbrella type drip pan connection is used, the discharge piping shall be designed to prevent binding due to expansion.

(d) Capacity. The following shall apply to pressure relief valve capacity of power boilers:

- (1) The pressure relief valve capacity for each boiler shall be such that the valve or valves will discharge all the steam that can be generated by the boiler without allowing the pressure to rise more than six

per cent (6%) above the maximum allowable working pressure of the boiler;

- (2) The minimum relieving capacity for other than electric boilers and forced-flow steam generators with no fixed steam line and waterline shall be estimated for the boiler and waterwall heating surfaces as given in NBIC Part I, Table 2.9.1.3 below, but in no case shall the minimum relieving capacity be less than the maximum designed steaming capacity as determined by the manufacturer;
- (3) The required relieving capacity, C, of the pressure relief valves on a high temperature water boiler shall be determined as follows:

 - (A) $C = Q/L$;
 - (B) C = required relieving capacity in lbs/hr (kg/hr);
 - (C) Q = maximum output in BTUH (W) at the boiler nozzle obtained by the firing of any fuel for which the unit is designed; and
 - (D) L = 1,000 BTU/lb (646W hr/kg);
- (4) The minimum pressure relief valve capacity for electric boilers shall not be less than 3.5 lbs/hr/KW input; and
- (5) If the pressure relief valve capacity cannot be computed, or if it is desirable to prove the computations, it should be checked by any one of the following methods; and if found insufficient, additional relieving capacity shall be provided:

 - (A) By performing an accumulation test by shutting off all other steam discharge outlets from the boiler and forcing the fires to maximum (this method should not be used on a boiler with a superheater or reheater, or on a high-temperature water boiler);
 - (B) By measuring the maximum amount of fuel that can be burned and computing the corresponding evaporative capacity on

the basis of the heating value of the fuel; or

- (C) By determining the maximum evaporative capacity by measuring the feedwater. The sum of the pressure relief valve capacities marked on the valves shall be equal to or greater than the maximum evaporative capacity of the boiler. This method should not be used on high-temperature water boilers.

Table 2.9.1.3

MINIMUM POUNDS OF STEAM PER HOUR PER SQUARE FOOT OF HEATING SURFACE
lb steam/hr ft² (kg steam/hr m²)

| | Firetube Boiler | Watertube Boiler |
|------------------------------|-----------------|------------------|
| Boiler Heating Surface | | |
| Hand-fired | 5 (24) | 6 (29) |
| Stoker-fired | 7 (34) | 8 (39) |
| Oil, gas, or pulverized coal | 8 (39) | 10 (49) |
| Waterwall Heating Surface | | |
| Hand-fired | 8 (39) | 8 (39) |
| Stoker-fired | 10 (49) | 12 (59) |
| Oil, gas, or pulverized coal | 14 (68) | 16 (78) |
| Copper-finned Watertubes | | |
| Hand-fired | | 4 (20) |
| Stoker-fired | | 5 (24) |
| Oil, gas, or pulverized coal | | 6 (29) |

Notes:

- When a boiler is fired only by a gas having a heat value not in excess of 200 Btu/ft.³(7.5MJ/m³), the minimum relieving capacity should be based on the values given for hand-fired boilers above.
- The heating surface shall be computed for that side of the boiler surface exposed to the products of combustion, exclusive of the superheating surface. In computing the heating surface for this purpose only the tubes, fireboxes, shells, tubesheets, and the projected area of headers need to be considered, except that for vertical firetube steam boilers, only that portion of the tube surface up to the middle gage cock is to be computed.
- For firetube boiler units exceeding 8,000 Btu/ft.² (9,085 J/cm.²) (total fuel Btu (J) Input divided by total heating surface), the factor from the table will be increased by 1 (4.88) for every 1,000 Btu/ft.² (1,136 J/cm.²) above 8,000 Btu/ft.² (9,085 J/cm.²) For units less than 7,000 Btu/ft.² (7,950 J/cm.²), the factor from the table will be decreased by 1 (4.88).
- For watertube boiler units exceeding 16,000 Btu/ft.² (18,170 J/cm.²)(total fuel Btu input divided by the total heating surface) the factor from the table will be increased by 1 (4.88) for every 1,000 Btu/ft.² (1,136 J/cm.²) above 16,000 Btu/ft.² (18,170 J/cm.²). For units with less than 15,000 Btu/ft.² (17,034 J/cm.²), the factor in the table will be decreased by 1 (4.88) for every 1,000 Btu/ft.² (1,136 J/cm.²) below 15,000 Btu/ft.² (17,034 J/cm.²).

(e) Location. The following shall apply to the location of the installation of pressure relief valves of power boilers:

- (1) Pressure relief valves shall be placed on, or as close as physically possible to, the boiler proper;
- (2) Pressure relief valves shall not be placed on the feedline;
- (3) Pressure relief valves shall be connected to the boiler independent of any other connection without any unnecessary intervening pipe or fittings. The intervening pipe or fittings shall not be longer than the face-to-face dimension of the corresponding tee fitting of the same diameter and pressure rating as listed in the applicable standards;
- (4) Every pressure relief valve shall be connected to stand in an upright position with spindle vertical;
- (5) The opening or connection between the boiler and the pressure relief valve shall have at least the area of the valve inlet, and the inlet pipe to the pressure relief valve shall be as short and straight as possible, no longer than twice the center-to-end (face) dimension of a corresponding tee fitting of the same diameter, pressure

class, and connection type. When a discharge pipe is used, the cross-sectional area shall not be less than the full area of the valve outlet, or of the total of the areas of the valve outlets. The discharge pipe shall be as short and straight as possible and arranged to avoid undue stresses on the valve or valves;

- (6) No valves of any type except a changeover valve as defined below, shall be placed between the pressure relief valves and the boiler, nor on the discharge pipe between the pressure relief valves and the atmosphere;
- (7) A changeover valve, which allows two redundant pressure relief valves to be installed for the purpose of changing from one pressure relief valve to the other while the boiler is operating, may be used provided the changeover valve is in accordance with the original code of construction. It is recommended that the department be contacted to determine the acceptability of changeover valves on boiler applications. The changeover valve shall be designed such that there is no intermediate position where both pressure relief valves are isolated from the boiler;
- (8) When two or more pressure relief valves are used on a boiler, they should be mounted either separately or as twin valves made by placing individual valves on Y-bases, or duplex valves having two valves in the same body casing. Twin valves made by placing individual valves on Y-bases or duplex valves having two valves in the same body shall be of equal size;
- (9) When two valves of different sizes are installed singly, the relieving capacity of the smaller valve shall not be less than fifty per cent (50%) of that of the larger valve; and

- (10) When a boiler is fitted with two or more pressure relief valves on one connection, this connection to the boiler shall have a cross-sectional area not less than the combined areas of inlet connections of all the pressure relief valves with which it connects. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-7 Power boiler appurtenances. (a)

Water level indicators. The following shall apply to ~~[all]~~ water level indicators:

- (1) Each steam boiler having a fixed waterline shall have at least one water gage glass, except ~~[forced flow steam generators with no fixed steam and waterline and high-temperature water boilers of the forced circulation type that have no steam and waterline;]~~ that boilers operated at pressures over 400 psig shall be provided with two water gage glasses that may be connected to a single water column, or connected directly to the drum. The gage glass and pipe connections shall be not less than NPS 1/2. Each water gage glass shall be equipped with a drain valve;
- (2) The lowest visible water level in a gage glass shall be at least two inches above the lowest permissible water level as determined by the manufacturer;
- (3) Gage glasses shall be connected directly to the shell or drum of the boiler or to an intervening water column;
- (4) The lower edge of the steam connection between a water column, gage glass, or water level sending device in the boiler, shall not fall below the highest visible water level in the gage glass. In addition, there shall be no sag or offset in the

pipng that will permit accumulation of water;

- (5) The upper edge of the water connection between water column, gage glass, or water level sensing device in the boiler, shall not be above the lowest visible water level in the gage glass. In addition, no part of the pipe connection shall be above the point of connection at the water column;

- (6) ~~[Boilers having a maximum allowable working pressure of 400 psi or less shall always have at least one gage glass in service;]~~
For installations where the water-gage glass or glasses are not easily viewed by the operator, consideration should be given to install a method of remote transmission of the water level to the operating floor;

- ~~[-(7) Boilers having maximum allowable working pressure greater than 400 psi shall always have two gage glasses in service:-~~
 - ~~-(A) When two gage glasses are required, both may connect to a single water column;~~
 - ~~-(B) Instead of one of the two required gage glasses, two independent remote water level indicators (two discrete systems that continuously measure, transmit, and display water level) may be provided. In addition, minimum water levels shall be clearly marked;~~
 - ~~-(C) When both remote level indicators are in reliable operation, the remaining gage glass may be shut off, but shall be maintained in serviceable condition; and~~
 - ~~-(D) When the water level in at least one gage glass is not readily visible to the operator in the area where control actions are initiated, either a fiber optic cable (with no electrical modification of the optical signal) or mirrors shall be provided to transfer the optical image of the water level to the control area. Alternatively, any~~

~~combination of two of the following shall be provided:~~

- ~~(i) An independent remote water level indicator; and~~
- ~~(ii) An independent continuous transmission and display of an image of the water level in a gage glass. The display of a remote water level indicator shall have a clearly marked minimum water level reference at least two (2) inches above the lowest permissible water level, as determined by the manufacturer;]~~

(7) Boilers of the horizontal firetube type shall be so set that when the water is at the lowest reading in the water-gage glass, it shall be three (3) inches above the lowest permissible water level as determined by the manufacturer. Horizontal firetube boilers that do not exceed sixteen (16) inches in inside diameter shall have the lowest visible level in the gage glass at least one (1) inch above the lowest permissible level as determined by the manufacturer,

(8) Each water-gage glass shall be equipped with a top and a bottom shutoff valve of such through-flow construction as to prevent blockage by deposits of sediment and to indicate by the position of the operating mechanism whether they are in the open or closed position. The pressure-temperature rating shall be at least equal to that of the lowest set pressure of any safety valve on the boiler drum and the corresponding saturated steam pressure; provided that:

(A) Boilers having a maximum allowable working pressure of four hundred (400) psi or less shall always have at least one gage glass in service; or

- (B) Boilers having maximum allowable working pressure greater than 400 psi shall always have two gage glasses in service:
- (i) When two gage glasses are required, both may connect to a single water column;
 - (ii) Instead of one of the two required gage glasses, two independent remote water level indicators (two discrete systems that continuously measure, transmit, and display water level) may be provided. In addition, minimum water levels shall be clearly marked;
 - (iii) When both remote level indicators are in reliable operation, the remaining gage glass may be shut off, but shall be maintained in serviceable condition; and
 - (iv) When the water level in at least one gage glass is not readily visible to the operator in the area where control actions are initiated, either a fiber optic cable (with no electrical modification of the optical signal) or mirrors shall be provided to transfer the optical image of the water level to the control area.

Provided that alternatively any combination of either an independent remote water level indicator or an independent continuous transmission and display of an image of the water level in a gage glass may be used. If the latter is used, then the display of a remote water level indicator shall have a clearly marked minimum water level reference at least two (2) inches above the lowest permissible water level, as determined by the manufacturer;

- [~~(8)~~] (9) Gage glass assemblies with multiple sections, whether of tubular or other construction, shall:
- (A) Ensure a one-foot overlap of all adjoining sections so the water level is visible; or
 - (B) Ported or reflex gages using refractive light to aid determination of water level may omit the requirement of overlapping sections;
- [~~(9)~~] (10) The gage glass cock connections shall not be less than one-half (1/2) of an inch NPS;
- [~~(10)~~] (11) Each gage glass, externally mounted water level, or water level controlling device shall be fitted with a drain cock or valve having an unrestricted drain opening of not less than one-fourth (1/4) of an inch in diameter to facilitate cleaning;
- [~~(11)~~] ~~No outlet connections, except for damper regulators, feedwater regulators, drains, steam gages, or apparatus of a form that does not permit the escape of an appreciable amount of steam or water therefrom, shall be placed in the pipes connecting a water column or gage glass to a boiler;~~
- ~~(12)~~ ~~The water column shall be fitted with a drain cock or drain valve of at least three-fourths (3/4) of an inch nominal pipe size and shall be piped to a safe point of discharge;~~
- ~~(13)~~ ~~Connections from the boiler to the water column shall be at least NPS 1;~~
- ~~(14)~~ ~~Connections for gage glasses connected directly to the boiler or to an intervening water column shall be at least NPS one-half (1/2);~~
- ~~(15)~~ ~~Connections from the boiler to a remote water level indicator shall be at least NPS three-fourths (3/4), including the isolation valve; and from there to the~~

- ~~remote level indicator at least one-half (1/2) of an inch in OD tubing;~~
- ~~(16) Water level connections shall be completely independent of other connections for any function other than water level indication;~~
- ~~(17) The steam and water connections to a water column or a water gage glass shall be readily accessible for internal inspection and cleaning; and~~
- ~~(18) Shutoff valves shall not be used in the pipe connections between a boiler and a water column, or between a boiler and the shutoff valves required for the gage glass, except:~~
- ~~(A) Outside screw and yoke or lever lifting-type gate valves or stopcocks with lever permanently fastened thereto and marked in line with their passage; and~~
- ~~(B) Another through flow construction that prevents stoppage by deposits of sediment, and to indicate by the position of the operating mechanisms whether they are in open or closed position. These valves or cocks shall be locked or sealed open. Where stopcocks are used, they shall be of a type with the plug held in place by a guard or gland.~~
- (12) Connections for gage glasses connected directly to the boiler or to an intervening water column shall be at least NPS one-half (1/2);
- (13) Connections from the boiler to a remote water level indicator shall be at least NPS three-fourths (3/4), including the isolation valve; and from there to the remote level indicator at least one-half (1/2) of an inch in OD tubing;
- (14) Water level connections shall be completely independent of other connections for any function other than water level indication; and

- (15) Electric steam boilers shall have at least one water-gage glass. On electrode type electric boilers, the gage glass shall be located as to indicate the water levels both at startup and maximum steam load conditions, as established by the boiler manufacturer. On resistance element type electric steam boilers, the lowest visible part of the gage glass shall be located at least 1 inch above the lowest permissible water level established by the boiler manufacturer.
- (b) Low-water fuel cutoffs and water feeding devices. The following shall apply to low-water fuel cutoffs and water feeding devices:
- (1) ~~Each automatically fired[~~high pressure steam~~] steam or vapor system boiler[~~except miniature boilers,~~] shall have [at least two] an automatic [low water] low-water fuel [cut-off devices. When installed external to the boiler, each device shall be installed in individual chambers (water columns), which shall be attached to the boiler by separate pipe connections below the waterline. A common steam connection is permissible. Each cut-off device shall be installed to prevent startup and cut off the boiler fuel or energy supply automatically when the surface of the water falls to a level not lower than the lowest visible part of the gage glass. One control shall be set to function ahead of the other;]~~ cutoff device so located as to automatically cut off the fuel supply when the surface of the water falls to the lowest visible part of the water-gage glass. If a water feeding device is installed, it shall be so constructed that the water inlet valve cannot feed water into the boiler through the float chamber and so located as to supply requisite feedwater; provided that such a fuel cutoff or water feeding device may be attached

directly to the boiler. A fuel cutoff or water feeding device may also be installed in the tapped openings available for attaching a water glass directly to the boiler, provided the connections are made to the boiler with nonferrous tees or Ys not less than NPS one-half (1/2) inch between the boiler and water glass so that the water glass is attached directly and as close as possible to the boiler, the run of the tee or Y shall take the water glass fittings, and the side outlet or branch of the tee or Y shall take the fuel cutoff or water feeding device. The ends of all nipples shall be reamed to full-size diameter. In addition, a secondary low-water fuel cutoff with manual reset shall be provided on each automatically fired steam or vapor system boiler;

- (2) Functioning of the lower of the two controls shall cause safety shutdown and lockout. The manual reset may be incorporated in the lower ~~[cut-off]~~ cutoff control. Where a reset device is separate from the low-water fuel cutoff, a means shall be provided to indicate actuation of the ~~[low-water]~~ low-water fuel cutoff. The manual reset device may be of the instantaneous type or may include a time delay of not more than three (3) minutes after the fuel has been cut off;
- (3) The fuel ~~[cut-off]~~ cutoff device may be inserted internally or attached externally to the boiler. An external ~~[cut-off]~~ cutoff device may be attached on piping connecting a water column to the boiler or combined with a water column;
- (4) Water column piping and connections shall be at least NPS 1 (DN 25). If the low-water fuel cutoff is connected to the boiler by pipe or fittings, no shutoff valves of any type shall be placed in such piping. The steam and water connections to a water

column shall be readily accessible for internal inspection and cleaning. Some acceptable methods of meeting this requirement are by providing a cross-fitting with a back outlet at each right-angle turn to permit inspection and cleaning in both directions or by using pipe bends or fittings of a type that does not leave an internal shoulder or pocket in the pipe connection and with a radius of curvature that will permit the passage of a rotary cleaner. Fuel ~~[cut-off]~~ cutoff devices embodying a separate chamber shall have a vertical drainpipe and blowoff valve, not less than NPS 3/4, located at the lowest point of the chamber or water-equalizing pipe connections, so that the chamber and the equalizing pipe can be flushed and the device tested;

(5) Fuel cutoffs and water feeding devices embodying a separate chamber shall have a vertical drainpipe, extended to a safe point of discharge, and a blowoff valve not less than NPS 3/4, located at the lowest point in the water equalizing pipe connections so that the chamber and the equalizing pipe can be flushed and the device tested;

~~[(+5)]~~ (6) Each miniature boiler, except electric boilers of the electrode type, shall have at least one [low-water] low-water fuel [cut-off] cutoff device;

(7) Each electric steam boiler of the resistance element type shall be equipped with an automatic low-water cutoff so located as to automatically cut off the power supply to the heating elements before the surface of the water falls below the visible part of the glass. No low-water cutoff is required for electrode-type boilers;

- [~~(6)~~] (8) These devices shall be installed in such a manner that they cannot be rendered inoperative by the manipulation of any manual control or regulating apparatus;
- [~~(7)~~] (9) In boilers with a fixed water line, the low-water fuel cutoff devices shall be tested regularly by lowering the water level sufficiently to shut off the fuel supply to the burner when the water level reaches the lowest safe level for operation. Boilers that do not have a fixed water line shall be equipped with a flow sensing device, thermal couple or expansion ring that is listed by a nationally recognized testing agency to prevent burner operation at a flow rate inadequate to protect the boiler unit against overheating;
- [~~(8)~~] (10) Boilers with single drain electronic solenoid valve shall be fitted with a manual by-pass drain line to facilitate testing of the [~~low-water~~] low-water cutoff safety device;
- [~~(9)~~] (11) The low-water cutoff shall be rated for a pressure and temperature equal to or greater than the MAWP and temperature of the boiler;
- [~~(10)~~] (12) For high-temperature water boilers requiring forced flow circulation, an approved flow sensing device shall be installed on the outlet, as close to the boiler as possible;
- [~~(11)~~] (13) When a low-water fuel cutoff and feedwater pump control is combined in a single device, an additional separate low-water fuel cutoff shall be installed. The additional control shall be wired in series electrically with the existing low-water fuel cutoff;
- [~~(12)~~] (14) When a low-water fuel cutoff is housed in either the water column or a separate chamber it shall be provided with a blowdown pipe and valve not less than 3/4

inch NPS. The arrangement shall be such that when the water column is blown down, the water level in it will be lowered sufficiently to activate the lower-water fuel cutoff device; and

- ~~[(13)]~~ (15) If a water feed device is utilized, it shall be constructed to prevent feedwater from entering the boiler through the water column or separate chamber of the low-water fuel cutoff.

(c) Pressure gages. The following shall apply to pressure gages:

- (1) Each steam boiler shall have a pressure gage connected to the steam space or to the steam connection to the water column. When a pressure-reducing valve is installed in the steam supply piping, a pressure gage shall be installed on the low pressure side of the pressure-reducing valve;
- (2) The dial range shall not be less than 1.5 times and no greater than approximately two times the pressure at which the lowest pressure relief valve is set;
- (3) For a steam boiler, the gage or connection shall contain a siphon or equivalent device that will develop and maintain a water seal that will prevent steam from entering the gage tube. A valve or cock shall be placed in the gage connection adjacent to the gage. An additional valve or cock should be located near the boiler providing it is locked or sealed in the open position. No other shut-off valves shall be located between the gage and the boiler; and
- (4) Pressure gage connections shall be suitable for the maximum allowable working pressure and temperature, but if the temperature exceeds 406°F, brass or copper pipe or tubing shall not be used. The connections to the boiler, except for the siphon, if used, shall not be less than NPS 1/4 inch. Where steel or wrought iron pipe or tubing is used, it shall not be less than 1/2 inch

inside diameter. The minimum size of a siphon, if used, shall be 1/4 inch inside diameter.

(d) Water columns. The following are requirements for water columns:

- (1) The water column shall be directly connected to the boiler. Outlet connections (except for damper regulator, feedwater regulator, low-water fuel cutoff, drains, steam gages, or such apparatus that does not permit the escape of an appreciable amount of steam or water) should not be placed on the piping that connects the water column to the boiler;
- (2) Straight-run globe valves of the ordinary type shall not be used on piping that connects the water column to the boiler. Where water columns are seven (7) feet or more above the floor level, adequate means for operating gage cocks or blowing out the water glass shall be provided;
- (3) When automatic shutoff valves are used on piping that connects the water column to the boiler, they shall conform to the requirements of the code of construction for the boiler;
- (4) When shutoff valves are used on the connections to a water column, they shall be either outside-screw and yoke or lever-lifting-type gate valves or stop cocks with levers permanently fastened thereto and marked in line with their passage, or of such other through-flow constructions to prevent stoppage by deposits of sediment and to indicate by the position of the operating mechanism whether they are in open or closed position;
provided that the valves or cocks shall be locked or sealed open;
- (5) The water column shall be fitted with a drain cock or drain valve of at least three-fourths (3/4) of an inch nominal pipe

size and shall be piped to a safe point of discharge;

- (6) Connections from the boiler to the water column shall be at least NPS 1;
 - (7) The steam and water connections to a water column or a water gage glass shall be readily accessible for internal inspection and cleaning; and
 - (8) Shutoff valves shall not be used in the pipe connections between a boiler and a water column, or between a boiler and the shutoff valves required for the gage glass, except:
 - (A) Outside screw-and-yoke or lever-lifting-type gate valves or stopcocks with lever permanently fastened thereto and marked in line with their passage; and
 - (B) Another through-flow construction that prevents stoppage by deposits of sediment, and to indicate by the position of the operating mechanisms whether they are in open or closed position. These valves or cocks shall be locked or sealed open. Where stopcocks are used, they shall be of a type with the plug held in place by a guard or gland. [Eff and comp 12/21/19; am and comp]
- (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-8 Boiler external and non-boiler external piping. Boiler external piping (BEP).

- (1) BEP shall be designed, fabricated, installed and stamped in accordance with ASME BPVC Section I and ASME B31.1;
- (2) Manufacturers of BEP shall possess an ASME certificate of authorization to use the certification mark with the "S" or "PP" designator;

- (3) BEP may be installed by a manufacturer or contractor other than the manufacturer of the boiler, provided the organization has been issued a certificate of authorization to use the certification mark with the "S", "PP" or "A" designator; and in possession of a current and valid Hawaii contractors license as required in section 12-220-15;
- (4) Prior to starting BEP installation, an application for installation shall be submitted to the department for an installation permit; and
- (5) Welded repairs or alterations to boiler external piping shall be done by a company in possession of a valid NB "R" certificate of authorization.
- (b) Non-boiler external piping (NBEP).
- (1) NBEP design, fabrication, installation, alteration, or repair shall be done in accordance with the applicable provisions of the ASME BPVC, ASME B31.1, NBIC and this part;
- (2) NBEP may be designed, fabricated, installed, altered, or repaired by organizations with valid ASME "S", "PP", or "A" designators or a NB "R" certificate of authorization, or organizations with a valid Hawaii NBEP certificate of authorization;
- (3) Applicants whose quality control program have been reviewed, approved, and issued an NBEP certificate of authorization by the department shall be qualified to design, fabricate, install, alter, or repair NBEP within the provisions of ASME B31.1 and NBIC Part 3; and
- (4) Application for authorization for design, fabrication, installation, alteration, or repair shall be submitted to the department as prescribed in section 12-220-9.1. [Eff and comp 12/21/19; comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-9 Electric and miniature boilers. (a)

In accordance with ASME BPVC Section 1, new miniature boilers shall be constructed, inspected, and bear the ASME certification mark with the "S", "M", or "E" designator. The controls and safety devices shall be installed in accordance with ASME CSD-1. New miniature boiler installations shall comply with section 12-222.1-5.

(b) Miniature boilers used in generating steam for autoclave sterilizers shall be registered separately from the autoclave. The autoclave shall be registered as a pressure vessel if size and pressure is within limits unless exempted by section 12-220-2.1(c).

(c) The maximum allowed working pressure is 100 psi in accordance with the ASME BPVC section 1.

(d) Each miniature boiler shall be equipped with a sealed spring-loaded pop safety valve of not less than one-half (1/2) inch NPS.

(e) Each steam line from a miniature boiler shall be provided with a steam rated stop valve located as close to the boiler shell or drum as is practicable, except when the boiler and steam receiver is operated as a closed system.

(f) Miniature boilers for operation with a definite water level shall be equipped with a glass water gage for determining the water level. The lowest permissible water level for vertical boilers shall be at a point one-third (1/3) of the height of the shell above the bottom head or tube sheet. The following shall apply:

- (1) Tubular gage glasses on electric boilers shall be equipped with protective rods or shields; and
- (2) Each gage glass shall be fitted with a drain cock and valve having an unrestricted drain opening of not less than one-fourth (1/4) inch diameter to facilitate water flush draining of the gage glass.

(g) Where the boiler is equipped with an internal furnace, the water level shall not be less than one-

third (1/3) of the length of the tubes above the top of the furnace tube sheet.

(h) In the case of small boilers operated in a closed system where there is insufficient space for the usual glass water gage, water level indicators of the glass bull's eye type may be used.

(i) Miniature boilers shall be provided with at least one feed pump or other feeding device, except where it is connected to a water main carrying sufficient pressure to feed the boiler or where it is operated with no extraction of steam (closed system). In the latter case, in lieu of a feeding device, a suitable connection or opening shall be provided to fill the boiler when cold. Such connection shall be no less than one-half (1/2) inch NPS for iron or steel pipe and one-fourth (1/4) inch NPS for brass or copper pipe.

(j) The feed pipe shall be provided with a check valve and a stop valve of a size not less than that of the pipe. The feedwater may be delivered through the blowoff opening if desired.

(k) Miniature boilers shall be equipped with a blowoff connection, not less than one-half (1/2) inch NPS, located to drain from the lowest water space practicable. The blowoff piping shall be equipped with a stop valve not less than one-half (1/2) inch NPS.

(l) Miniature boilers solely equipped with an automatic/timed blowoff valve shall be equipped with a manual bypass loop which bypasses automatic valve to facilitate testing of the [~~low water~~] low-water cutoff controls.

(m) Miniature boilers exceeding twelve (12) inches internal diameter or having more than ten (10) square feet of heating surface shall be fitted with not less than three (3) brass washout plugs of one-inch NPS which shall be screwed into openings in the shell near the bottom. In miniature boilers of the closed type system heated by removable internal electric heating elements, the openings for these elements, when suitable for cleaning purposes, may be substituted for washout openings.

(n) Boilers not exceeding twelve (12) inches internal diameter and having less than ten (10) square

feet of heating surface need not have more than two (2) one-inch openings for clean-outs, one of which may be used for the attachment of the blow-off valve. These openings shall be opposite to each other where possible. The following shall apply:

- (1) All threaded openings shall be opposite to each other where possible; and
- (2) All threaded openings in the boiler shall be provided with a riveted or welded reinforcement to give four (4) full threads therein.

(o) Electric boilers of a design employing a removable top cover flange for inspection and cleaning need not be fitted with washout openings.

(p) All valves, pipe fittings, and appliances connected to a miniature boiler shall be equal to at least the requirements of Class 125 or Class 150 of the appropriate ASME Standard as listed in ASME BPVC Section I.

(q) All welded repairs and alterations to miniature boilers must comply with the rules in this part ~~[as defined in]~~ and NBIC Part 3~~[-]~~ requirements.
[Eff and comp 12/21/19; am and comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-10 Attendance. (a) An unattended power boiler log ~~[(Exhibit 4)]~~, an example of which is in Exhibit 4, titled, "Unattended Power Boiler Log", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, shall be maintained by owners or operators at the boiler operating area to record daily checks and inspections and the following shall apply:

- (1) Boiler operation log entries shall be updated; daily, not to exceed twelve (12) hours for a single entry; and
- (2) The daily operating log shall be available to the inspector of record for a period of not less than six (6) months.

(b) Power boilers, waste heat boilers, and high-temperature water boilers subject to this chapter shall

not be left in operation unattended by a competent attendant for a period of time longer than it will take the water level to drop from a normal operating level to the lowest permissible water level, as indicated by the water gage glass, or by indicating devices or recorders, when the feed water is shut off and the boiler is forced to its maximum capacity, unless all of the following are complied with where applicable:

- (1) The boiler is equipped with a strobe or flashing light that will operate when the water reaches the lowest permissible operating level, or, for boilers having no fixed steam or water line, when the highest permissible operating temperature is reached. The strobe or flashing light shall be so located that can be plainly seen at the most remote point from the boiler at which the attendant is required to work. Audible alarms, when used, shall be distinctly audible above the ambient noise level;
- (2) The boiler is equipped with two [~~low-water~~] low-water safety devices with separate water connections to the boiler that will shut off the fuel to the burner or burners when the water reaches the lowest permissible operating level, or, for boilers having no fixed steam or water line, when the highest permissible operating temperature is reached. These devices shall require manual resetting unless the burner is equipped with a full safety pilot control;
- (3) A competent attendant personally checks the operation of the boiler, the necessary auxiliaries, and the water level of the boiler at such intervals, not exceeding sixty (60) minutes, as necessary to insure the safe operation of the boiler. The operation of the automatic water level controls shall be tested such that fuel to the burner will be shut off at the beginning of each daily period of operation and at intervals not to exceed twelve (12) operating hours. A record of each inspection and check of controls shall be

maintained and available to an inspector for a period of six (6) months prior to the inspection;

- (4) There is a conspicuous and readily accessible safety disconnect switch located adjacent to the boiler room entrance or, in the situation where the boiler is located outside, in the immediate vicinity of the boiler which, when operated, will cut off all power to the boiler and cause it to shut down in a safe manner. Immediately adjacent to the disconnect device there shall be posted a sign conspicuously directing the observer to use the device for shutting down the boiler in event of emergency, such as observing any unsafe condition or functioning of the boiler or its appurtenances or any condition or function of the boiler which is unusual, or which is, in the observer's opinion, potentially hazardous;
- (5) A competent attendant means a person who is familiar with the operation of the boiler and may be certified by a curriculum accredited college, university, technical school, or organization serving the boiler industry;
- (6) The minimum standards to be met for an attendant to be competent include, but are not limited to the following, as detailed in the ASME BPVC Section VII:
 - (A) The ability to explain the function and operation of all controls and safety devices on the boiler and operate the boiler in a safe manner;
 - (B) The knowledge of all possible methods of feeding water to the boiler; and boiler blowoff/blowdown procedure; and
 - (C) Shutting down the boiler or boilers in a safe manner; and
- (7) The attendant performs a recommended operation checklist schedule recorded at each regular shift not to exceed twelve (12) hours, and checks and records the following:
 - (A) Externally examine unit for leaks or unusual conditions;

- (B) Check burner flame;
 - (C) Check gages, monitors, and indicators;
 - (D) [~~Low-water~~] Low-water cutoff and alarm test; and
 - (E) Water column and gage glass blowdown.
- [Eff and comp 12/21/19; comp]
- (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-11 Boiler room and operating area. (a)

The following shall apply to the care of the boiler room:

- (1) The boiler room shall be free from accumulation of rubbish and materials that obstruct access to the boiler, its setting, or firing equipment;
 - (2) The storage of flammable material or gasoline powered equipment in the boiler room is prohibited;
 - (3) The roof over boilers designed for indoor installations, shall be free from leaks and maintained in good condition;
 - (4) Adequate drainage shall be provided;
 - (5) All exit doors shall open outward; and
 - (6) It is recommended that the ASME BPVC Section VII be used as a guide for proper and safe operating practices.
- (b) The following shall apply to boiler supports, foundations, and settings:
- (1) Each boiler and its associated piping shall be safely supported. Design of supports, foundations, and settings shall consider vibration, including seismic where necessary, movement including thermal expansion and contraction, and loadings including the weight of the fluid in the system during a pressure test in accordance with jurisdictional requirements, manufacturers recommendations, and other industry standards as applicable; and
 - (2) If the boiler is supported by structural steel, the steel supporting members shall be

so located or insulated that the heat from the furnace will not affect their strength. Structural steel shall be installed in accordance with jurisdictional requirements, manufacturer's recommendations, and other industry standards, as applicable.

(c) Exit. Two means of exit shall be provided for equipment rooms exceeding five hundred (500) square feet of floor area and containing one or more boilers having a combined fuel capacity of 1,000,000 Btu/hr or more (or equivalent electrical heat input). Each elevation shall be provided with at least two means of exit, each to be remotely located from each other. A platform at the top of a single boiler is not considered an elevation.

(d) Ladders and runways. The following shall apply to ladders and runways:

- (1) All walkways, runways, and platforms shall be of metal construction or equivalent material;
- (2) Provided between or over the top of boilers that are more than eight (8) feet above the operating floor to afford accessibility for normal operation, maintenance, and inspection;
- (3) Constructed of safety treads, standard grating, or similar material and have a minimum width of thirty (30) inches; of bolted, welded, or riveted construction; and equipped with handrails forty-two (42) inches high with an intermediate rail and four (4) inch toe-board;
- (4) Stairways that serve as a means of access to walkways, runways, or platforms shall not exceed an angle of forty-five (45) degrees from the horizontal and shall be equipped with handrails forty-two (42) inches high with an intermediate rail;
- (5) Ladders that serve as a means of access to walkways, runways, or platforms shall:
 - (A) Be made of metal construction and not less than eighteen (18) inches wide;
 - (B) Have rungs that extend through the side members and are permanently secured;

- (C) Have a clearance of not less than thirty (30) inches from the front of rungs to the nearest permanent object on the climbing side of the ladder;
 - (D) Have a clearance of not less than six and a half (6-1/2) inches from the back of rungs to the nearest permanent object; and
 - (E) Have a clearance width of at least fifteen (15) inches from the center of the ladder on either side across the front of the ladder; and
- (6) There shall be at least two permanently installed means of exit from walkways, runways, or platforms that exceed six (6) feet in length.
- (e) Fuel. Fuel systems, whether firing coal, oil, gas, or other substance, shall be installed in accordance with departmental, environmental requirements, manufacturer's recommendations, and industry standards, as applicable.
- (f) Ventilation and combustion air. The following shall apply to ventilation and combustion air:
- (1) The equipment room shall have an adequate air to permit clean, safe combustion, minimize soot formation, and maintain a minimum of nineteen and a half per cent (19.5%) oxygen in the air of the equipment room and sufficient to maintain ambient temperatures as recommended by the boiler manufacturer. The combustion and ventilation air should be supplied by either an unobstructed air opening or by power ventilation or fans[~~When combustion air is supplied to the boiler by an independent duct, with or without the employment of power ventilators or fans, the duct shall be sized and installed in accordance with the manufacturer's recommendations~~];
 - (2) When combustion air is supplied to the boiler, heater, or vessel by an independent duct, with or without the employment of power ventilators or fans, the duct shall be sized

and installed in accordance with the manufacturer's recommendations~~[7]~~provided that ventilation for the equipment room must still be considered;

- (3) Unobstructed air openings shall be sized based on the manufacturer's recommendations, or as specified by the National Fire Protection Association (NFPA) standards for oil and gas burning installations for the particular job conditions, or 1 square inch free area per 2000 Btu/hr maximum fuel input of the combined burners located in the equipment room. The equipment room supply openings shall be kept clear at all times;
- (4) Power ventilators or fans shall be sized on the basis of 0.2 cfm for each 1000 Btu/hr of maximum fuel input for the combined burners of all boilers and heaters located in the equipment room. Additional capacity may be required for other fuel burning equipment in the equipment room;
- (5) When power ventilators or fans are used to supply combustion air, they shall be installed with interlock devices so that burners will not operate without an adequate number of ventilators or fans in operation;
- (6) The size of openings specified in subsection (c) may be reduced when special engineered air supply systems approved by the ~~[jurisdiction]~~ department are used; and
- (7) Care shall be taken to ensure that steam, water, and fluid lines are not routed across combustion air openings, where freezing may occur.

(g) Lighting. The equipment room shall be well lit and have an emergency light source for use in case of power failure.

(h) Chimneys or stacks shall be installed in accordance with jurisdictional, environmental requirements, manufacturer's recommendations, and industry standards, as applicable.

(i) Ash removal systems shall be installed in accordance with jurisdictional, environmental

requirements, manufacturer's recommendations, and industry standards, as applicable.

(j) Carbon monoxide (CO) detector/alarm. The owner or user shall install a carbon monoxide detector/alarm in equipment rooms where fuel fired boilers or fuel fired pressure vessels are located, in accordance with manufacturer's recommendation, and industry standards, as applicable.

~~[(j)]~~ (k) Water (cleaning). A convenient water supply shall be provided for flushing out the boiler and its appurtenances, adding water to the boiler while it is not under pressure, and cleaning the equipment room floor.

(l) Final acceptance. A power boiler may not be placed into service until its installation has been inspected and accepted by the department. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-12 Operating requirements. (a)

Feedwater volume. The source of feedwater shall be capable of supplying a sufficient volume of water as determined by the boiler manufacturer to prevent damage to the boiler when all the safety relief valves are discharging at full capacity.

(b) Feedwater connection. The following shall apply to feedwater connection:

- (1) To prevent thermal shock, feedwater shall be introduced into a boiler in such a manner that the water will not be discharged directly against surfaces exposed to high temperature gases or to direct radiation from the flame;
- (2) For boiler operating pressures of 400 psig or higher, the feedwater inlet through the drum shall be fitted with shields, sleeves, or other suitable means to reduce the effects of temperature differentials in the shell or head;
- (3) Feedwater other than condensate return shall not be introduced through the blowoff;

- (4) Boilers having more than 500 square feet of water heating surface shall have at least two means of supplying feedwater. For boilers that are fired with solid fuel not in suspension, and boilers whose setting or heat source can continue to supply sufficient heat to cause damage to the boiler if the feedwater supply is interrupted, one such means of supplying feedwater shall not be subject to the same interruption as the first method. Boilers fired by gaseous, liquid, or solid fuel in suspension may be equipped with a single means of supplying feedwater, provided means are furnished for the immediate removal of heat input if the supply of feedwater is interrupted;
- (5) For boilers having a water heating surface of not more than 100 square feet, the feedwater piping and connection to the boiler shall not be smaller than NPS 1/2. For boilers having a water heating surface more than 100 square feet, the feedwater piping and connection to the boiler shall not be less than NPS 3/4;
- (6) Electric boiler feedwater connections shall not be smaller than NPS 1/2; and
- (7) High-temperature water boilers shall be provided with means of adding water to the boiler or system while under pressure.
- (c) Pumps. The following shall apply to pumps:
 - (1) Boiler feedwater pumps shall have discharge pressure more than the highest set pressure relief valve to compensate for frictional losses, entrance losses, regulating valve losses, and normal static head, etc. Each source of feedwater shall be capable of supplying feedwater to the boiler at a minimum pressure of three per cent (3%) higher than the highest setting of any pressure relief valve on the boiler proper. Detailed engineering evaluation of the pump selection shall be performed and available for review. Table 2.5.1.3 is a guideline for estimating feedwater pump differential;

TABLE 2.5.1.3

GUIDE FOR FEEDWATER PUMP DIFFERENTIAL

| Boiler Pressure | | Boiler Feedwater Pump Discharge Pressure | |
|-----------------|--------|--|--------|
| psig | (MPa) | psig | (MPa) |
| 200 | (1.38) | 250 | (1.72) |
| 400 | (2.76) | 475 | (3.28) |
| 800 | (5.52) | 925 | (6.38) |
| 1,200 | (8.27) | 1,350 | (9.31) |

- (2) For forced-flow steam generators with no fixed steam or water line, each source of feedwater shall be capable of supplying feedwater to the boiler at a minimum pressure equal to the expected maximum sustained pressure at the boiler inlet corresponding to operation at maximum designed steaming capacity with maximum allowable pressure at the superheater outlet; and
- (3) Control devices may be installed on feedwater piping to protect the pump against overpressure.
- (d) Feedwater valves. The following shall apply to feedwater valves:
 - (1) The feedwater piping shall be provided with a check valve and a stop valve. The stop valve shall be located between the check valve and the boiler;
 - (2) When two or more boilers are fed from a common source, there shall also be a globe or regulating valve on the branch to each boiler located between the check valve and the feedwater source;
 - (3) When the feedwater piping is divided into branch connections and all such connections are equipped with stop and check valves, the stop and check valve in the common source may be omitted;
 - (4) On single boiler-turbine unit installations, the boiler feedwater stop valve may be

- located upstream from the boiler feedwater check valve;
- (5) If a boiler is equipped with duplicate feedwater supply arrangements, each such arrangement shall be equipped as required by these rules;
 - (6) A check valve shall not be a substitute for a stop valve;
 - (7) A combination feedwater stop-and-check valve in which there is only one seat and disk and a valve stem is provided to close the valve when the stem is screwed down shall be considered only as a stop valve; a separate check valve shall also be installed;
 - (8) Whenever globe valves are used on feedwater piping, the inlet shall be under the disk of the valve;
 - (9) Stop valves and check valves shall be placed on the inlet of economizers or feedwater-heating devices; and
 - (10) The recirculating return line for a high-temperature water boiler shall be provided with the stop valve, or valves, required for the main discharge outlet on the boiler.
- (e) Blowoff.
- (1) Except for forced-flow steam generators with no fixed steam or water line, each boiler shall have a blowoff pipe, fitted with a stop valve, in direct connection with the lowest water space practicable. When the maximum allowable working pressure of the boiler exceeds one hundred (100) psig (700 kPa), there shall be two valves installed;
 - (2) The blowoff piping for each electric boiler pressure vessel having a nominal water content not exceeding one hundred (100) gallons is required to extend through only one valve;
 - (3) When two valves are required, each bottom blowoff pipe shall have two slow-opening valves, or one quick-opening valve, at the boiler nozzle followed by a slow-opening valve;

- (4) Two independent slow-opening valves, or a slow-opening valve and quick-opening valve, may be combined in one body provided the combined fitting is the equivalent of two independent slow-opening valves, or a slow-opening valve and a quick-opening valve, and the failure of one to operate cannot affect the operation of the other;
- (5) Straight-run globe valves or valves where dams or pockets can exist for the collection of sediment shall not be used;
- (6) The blowoff valve or valves and the pipe and fittings between them and the boiler shall be of the same size. The minimum size of pipe and fittings shall be NPS 1, except boilers with one hundred (100) square feet or less of heating surface should be NPS 3/4. The maximum size of pipe and fittings shall not exceed NPS 2-1/2;
- (7) For electric boilers, the minimum size of blowoff pipes and fittings shall be NPS 1, except for boilers of two hundred (200) kw input or less where the minimum size should be NPS 3/4;
- (8) Fittings and valves shall comply with the appropriate national standard except that austenitic stainless steel and malleable iron are not permitted;
- (9) When the maximum allowable working pressure exceeds one hundred 100 psig, blowoff piping shall be at least Schedule 80 and the required valves and fittings shall be rated for at least 1.25 times the maximum allowable working pressure of the boiler. When the maximum allowable working pressure exceeds 900 psig, blowoff piping shall be at least Schedule 80 and the required valves and fittings shall be rated for at least the maximum allowable working pressure of the boiler plus 225 psi;
- (10) All blowoff piping, when exposed to furnace heat, shall be protected by fire brick or

- other heat resisting material so constructed that the piping may be readily inspected;
- (11) On a boiler having multiple blowoff pipes, a single master stop valve should be placed on the common blowoff pipe from the boiler and one stop valve on each individual blowoff. Either the master valve or the valves on the individual blowoff lines shall be of the slow-opening type;
- (12) The discharge of blowoff pipes shall be located so as to prevent injury to personnel;
- (13) All waterwalls or water screens that do not drain back into the boiler and integral economizers forming part of a boiler shall be equipped with blowoff piping and valves conforming to the requirements of this subsection;
- (14) Blowoff piping from a boiler should not discharge directly into a sewer. A blowoff tank, constructed to the provisions of a code of construction acceptable to the jurisdiction, shall be used where conditions do not provide an adequate and safe open discharge;
- (15) Galvanized pipe shall not be used;
- (16) Boiler blowoff systems should be constructed in accordance with the Guide for Blowoff Vessels (NB-27), which can be found on the National Board website at www.nationalboard.org;
- (17) Where necessary to install a blowoff tank underground, it shall be enclosed in a concrete or brick pit with a removable cover so that inspection of the entire shell and heads of the tank can be made; and
- (18) Piping connections used primarily for continuous operation, such as deconcentrators on continuous blowdown systems, are not classed as blowoffs; but the pipe connections and all fittings up to and including the first shutoff valve shall be equal at least to the pressure requirements for the lowest set pressure of any safety valve on the

boiler drum and with the corresponding saturated-steam temperature. Further, such connections shall not exceed NPS 2-1/2.

(f) Drains. Each boiler shall have at least one drainpipe fitted with a stop valve at the lowest point of the boiler. If the connection is not intended for blowoff purposes, a single valve is acceptable if it can be locked in the closed position or a blank flange can be installed downstream of the valve. If the connection is intended for blowoff purposes, requirements of (e) shall be followed.

(1) For high temperature water boilers, the minimum size of the drainpipe shall be NPS 1; and

(2) Drainpipes, valves, and fittings within the same drain line shall be the same size.

~~[(e)]~~ (g) Electrical. A disconnecting means capable of being locked in the open position shall be installed at an accessible location at the boiler so that the boiler can be disconnected from all sources of potential. This disconnecting means shall be an integral part of the boiler or adjacent to it.

~~[(f)]~~ (h) Wiring. All wiring for controls, heat generating apparatus, and other appurtenances necessary for the operation of the boiler or boilers should be installed in accordance with the provisions of national or international standards and comply with the applicable local electrical codes.

~~[(g)]~~ (i) Remote emergency shutdown switches. The following shall apply to remote emergency shutdown switches:

(1) A manually operated remote shutdown switch or circuit breaker shall be located just outside the equipment room door and marked for easy identification. Consideration should also be given to the type and location of the switch to safeguard against tampering. Where approved by the ~~[jurisdiction,]~~ department, alternate locations of remote emergency switches may be provided;

(2) For equipment rooms exceeding 500 square feet floor area, or containing one or more boilers having a combined fuel capacity of 1,000,000

Btu/hr or more, additional manually operated remote emergency shutdown switches shall be located at suitably identified points of egress acceptable to the [~~jurisdiction~~] department;

- (3) Where a boiler is located indoors in a facility and not in an equipment room, a remote emergency shutdown switch shall be located within fifty (50) feet of the boiler along the primary egress route from the boiler area;
- (4) For atmospheric-gas burners and for oil burners where a fan is on the common shaft with the oil pump, the emergency remote shutdown switches or circuit breakers must disconnect all power to the burner controls; [~~and~~]
- (5) For power burners with detached auxiliaries, the emergency remote shutdown switches or circuit breakers need only shut off the fuel input to the burner[~~-~~];and
- (6) When existing boiler installations do not include remote emergency shutdown switches, it is not required that these switches be retroactively installed unless required by the department. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-13 Controls and heat-generating apparatus. (a) Oil and gas-fired and electrically heated boilers shall be equipped with suitable primary (flame safe-guard) safety controls, safety limit switches and controls, and burners or electric elements as required by a nationally or internationally recognized standard.

(b) The symbol of the certifying organization that has approved such equipment as having complied with a nationally recognized standard shall be affixed to the equipment and shall be considered as evidence

that the unit was manufactured in accordance with that standard.

(c) These devices shall be installed in accordance with departmental, environmental requirements, manufacturer's recommendations, and industry standards, as applicable.

(d) Each automatically fired steam boiler shall be protected from overpressure by two pressure operated controls.

(e) Each individual steam boiler or each system of commonly connected steam boilers shall have a control that will cut off the fuel supply when the steam pressure reaches an operating limit, which shall be less than the maximum allowable working pressure.

(f) Each individual automatically fired steam boiler shall have a safety limit control, with a manual reset, that will cut off the fuel supply to prevent steam pressure from exceeding the maximum allowable working pressure of the boiler. Each control shall be constructed to prevent a pressure setting above the maximum allowable working pressure of the boiler.

(g) Shutoff valves of any type shall not be placed in the steam pressure connection between the boiler and the controls described in subsections (e) and (f). These controls shall be protected with a siphon or equivalent means of maintaining a water seal that will prevent steam from entering the control. The connections to the boiler shall not be less than NPS 1/4 (DN 8) for lengths up to and including five (5) feet (1.5 meters), and not less than NPS 1/2 (DN 15) for lengths over five (5) feet (1.5 meters), but where steel or wrought iron pipe or tubing is used, they shall not be less than NPS 1/2 (DN 15) for lengths up to and including five (5) feet (1.5 meters), and not less than NPS 1 (DN 25) for lengths over five (5) feet (1.5 meters). The minimum size of an external siphon shall be NPS 1/4 (DN 8) or 3/8 inch (10 millimeters) outside diameter nonferrous tubing. [Eff and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-14 Emergency valves and controls. All emergency shut-off valves and controls shall be accessible from a floor, platform, walkway, or runway. Accessibility shall mean within a six (6) foot elevation of the standing space and not more than twelve (12) inches horizontally from the standing space edge. [Eff and comp 12/21/19; comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-222.1-15 Preventive maintenance. The owner or user of the pressure retaining item is responsible for ensuring that all equipment is maintained as listed in [~~Exhibits 1 2 and 4 of this section.~~] Exhibit 1, titled, "Recommended Preventative Maintenance Schedule", dated October 1, 2023; Exhibit 2, titled, "Table D-1-1 Periodic Testing Recommended Checklist", dated October 1, 2023; and Exhibit 4, titled, "Unattended Power Boiler Log", dated October 1, 2023. Exhibits 1, 2, and 4 are made part of this chapter and located at the end of this chapter. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

Recommended Preventive Maintenance Schedule

D-1 INTRODUCTION

Operation and maintenance instructions in this Appendix are intended for general applications. Table D-1-1 presents a periodic checklist for these recommended preventive maintenance tasks. For specific operating and maintenance instructions, consult the equipment manufacturer.

D-2 DAILY

- (a) Check gages, monitors, and indicators.
- (b) Check instrument and equipment settings.
- (c) For high-pressure boilers, test all low-water fuel cutoff devices and alarms.
- (d) Check burner flame.

D-3 WEEKLY

- (a) For low-pressure boilers, test all low-water fuel cutoff devices and alarms.
- (b) Check igniter.
- (c) Check flame signal strength.
- (d) Check flame failure detection system.
- (e) Check firing rate control.
- (f) Make aural and visual check of pilot and main fuel valves.

D-4 MONTHLY

- (a) Check flue, vent, stack, or outlet dampers.
- (b) Test low draft, fan air pressure, and damper position interlocks.
- (c) Check low fire start interlock.
- (d) Test high and low oil pressure and oil temperature interlocks.
- (e) Test high and low gas-pressure interlocks.

D-5 SEMIANNUALLY

- (a) Recalibrate all indicating and recording gages.
- (b) For steam boilers, perform a slow drain test of all the low-water fuel cutoff devices.
- (c) Check flame failure detection system components.
- (d) Check firing rate control.
- (e) Check piping and wiring of all interlocks and shutoff valves.
- (f) Inspect burner components.

D-6 ANNUALLY

- (a) Flame failure detection system, conduct pilot turn-down test.
- (b) Flame failure detection system, test for hot refractory hold-in.
- (c) Check dual fuel change over control.
- (d) Test high-limit and operating temperature or steam pressure controls.
- (e) Replace vacuum tubes, scanners, or flame rods in accordance with manufacturer's instructions.
- (f) Conduct a combustion test.
- (g) Check all coils and diaphragms; test other operating parts of all safety shutoff and control valves.
- (h) Test safety shutoff valve proof-of-closure switch(es) in accordance with manufacturer's instructions.
- (i) Perform leakage test on pilot and main gas and/or oil fuel valves and valve proving systems in accordance with manufacturer's instructions.
- (j) Test purge air switch in accordance with manufacturer's instructions.
- (k) Test air/steam interlock in accordance with manufacturer's instructions.
- (l) Test burner position interlock in accordance with manufacturer's instructions.
- (m) Test rotary cup interlock in accordance with manufacturer's instructions.
- (n) Test low fire start interlock in accordance with manufacturer's instructions.
- (o) Test for gas leakage on all threaded and flanged connections.
- (p) Verify burner is operating within manufacturer's specifications.

D-7 AS REQUIRED

- (a) Recondition or replace low-water fuel cutoff device.
- (b) For oil-fired burners, clean atomizers and oil strainers.
- (c) For gas-fired burners, check sediment trap and gas strainers.
- (d) Flame failure detection system, conduct pilot turn-down test.
- (e) Flame failure detection system, test for hot refractory hold-in.

(f) Test safety/safety relief valves in accordance with ASME Boiler and Pressure Vessel Code, Sections VI and VII.

(g) For parallel positioning systems, verify actuator-to-fuel-valve couplings and actuator-to-damper couplings are properly connected.

(h) For combustion air fan variable frequency drive applications, test interlocks wired to the primary flame safety device including drive fault interlocks and improper speed control interlocks.

EXHIBIT 2 October 1, 2023

Table D-1-1 Periodic Testing Recommended Checklist

| Frequency [Note (1)] | | | | | | | | Accomplished By | |
|----------------------|-----|-----|-----|-----|-----|---|---|-----------------|--------------------|
| D | W | M | S/A | A | A/R | Component/Item | Recommended Test | Boiler Operator | Service Technician |
| X | ... | ... | ... | ... | ... | Gages, monitors, and indicators | Make visual inspection and record readings in boiler log. | X | ... |
| ... | ... | ... | X | ... | ... | Gages, monitors, and indicators | Recalibrate all indicating and recording gages. | ... | X |
| X | ... | ... | ... | ... | ... | Instrument and equipment settings | Make visual check against factory-recommended specifications. | X | ... |
| X | ... | ... | ... | ... | ... | Low-water fuel cutoff devices (high-pressure boilers) | Test all low-water fuel cutoff devices according to manufacturer's instructions. | X | ... |
| ... | X | ... | ... | ... | ... | Low-water fuel cutoff devices (low-pressure boilers) | Test all low-water fuel cutoff devices according to manufacturer's instructions. | X | ... |
| ... | ... | ... | X | ... | ... | Low-water fuel cutoff devices (steam boilers) | For steam boilers, perform a slow drain test in accordance with ASME Boiler and Pressure Vessel Code, Section VI. | ... | X |
| ... | ... | ... | ... | ... | X | Low-water fuel cutoff devices | Recondition or replace each low-water fuel cutoff device. | ... | X |
| ... | ... | ... | ... | X | ... | Operating and/or limit controls | Test high-limit and operating temperature or steam pressure controls. | ... | X |
| ... | ... | ... | ... | ... | X | Safety/safety relief valves | Test safety/safety relief valves in accordance with ASME Boiler and Pressure Vessel Code, Sections VI and VII. | ... | X |
| ... | ... | X | ... | ... | ... | Flue, vent, stack, or outlet dampers | Make visual inspection of linkage, and check for proper operation. | X | ... |
| X | ... | ... | ... | ... | ... | Burner flame | Make visual inspection of burner flame [Note (2)]. | X | ... |
| ... | X | ... | ... | ... | ... | Igniter | Make visual inspection, and check flame signal strength if meter-fitted. | X | ... |
| ... | X | ... | ... | ... | ... | Flame signal strength | If flame signal meter is installed, read and log. For both pilot and main flames, notify service organization if readings are very high, very low, or fluctuating (refer to manufacturer's instructions). | X | ... |
| ... | X | ... | ... | ... | ... | Flame failure detection system | Close manual fuel supply for (1) pilot, (2) main fuel cock, and/or (3) valve(s). Check safety shutdown timing and log. | X | ... |

EXHIBIT 2 Continued

| Frequency [Note (1)] | | | | | | | | Accomplished By | |
|----------------------|-----|-----|-----|-----|-----|--|--|-----------------|--------------------|
| D | W | M | S/A | A | A/R | | | Boiler Operator | Service Technician |
| ... | ... | ... | X | ... | ... | Flame failure detection system | Check flame failure detection system components, such as vacuum tubes, amplifier, and relays. | ... | X |
| ... | ... | ... | ... | X | ... | Flame failure detection system | Replace vacuum tubes, scanners, or flame rods in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | X | Flame failure detection system (pilot turndown test) | Conduct pilot turndown test according to manufacturer's instructions. This test is required annually and after any adjustments to flame scanner mount or pilot burner. | ... | X |
| ... | ... | ... | ... | X | X | Flame failure detection system (hot refractory hold in test) | Test for hot refractory hold-in. This test is required annually and after any adjustments to the flame scanner mount or pilot burner. | ... | X |
| ... | X | ... | ... | ... | ... | Firing rate control | Check firing rate control, and verify factory settings (refer to manufacturer's instructions). | X | ... |
| ... | ... | ... | X | ... | ... | Firing rate control | Check firing rate control, and verify factory settings (refer to manufacturer's instructions). | ... | X |
| ... | ... | ... | ... | X | ... | Firing rate control | Conduct a combustion test, and verify settings are in accordance with manufacturer's instructions. | ... | X |
| ... | X | ... | ... | ... | ... | Pilot and/or main fuel valves | Open limit switch, and make aural and visual check. Check valve position indicators, and check fuel meters if so fitted. | X | ... |
| ... | ... | ... | ... | X | ... | Pilot and/or main fuel valves | Check all coils and diaphragms. Test other operating parts of all safety shutoff and control valves. | ... | X |
| ... | ... | ... | ... | X | ... | Pilot and/or main fuel valves | Test fuel valve interlock switch in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | ... | Pilot and/or main fuel valves | Perform leakage test on pilot and main gas and/or oil fuel valves, in accordance with manufacturer's instructions. | ... | X |
| ... | ... | X | ... | ... | ... | Low draft, fan, air pressure, and damper position interlocks | Test low draft, fan, air pressure, and damper position interlocks according to manufacturer's instructions. | X | ... |

EXHIBIT 2 Continued

| Frequency [Note (1)] | | | | | | | | Accomplished By | |
|----------------------|-----|-----|-----|-----|-----|--|---|-----------------|--------------------|
| D | W | M | S/A | A | A/R | Component/Item | Recommended Test | Boiler Operator | Service Technician |
| ... | ... | ... | ... | X | ... | Low draft, fan, air pressure, and damper position interlocks | Test purge switch in accordance with manufacturer's instructions. | ... | X |
| ... | ... | X | ... | ... | ... | Low fire start interlock | Check low fire start interlock according to manufacturer's instructions. | X | ... |
| ... | ... | ... | ... | X | ... | Low fire start interlock | Test low fire start interlock according to manufacturer's instructions. | ... | X |
| ... | ... | X | ... | ... | ... | Oil pressure and temperature interlocks | Test high and low oil pressure and temperature interlocks according to manufacturer's instructions. | X | ... |
| ... | ... | X | ... | ... | ... | Gas pressure interlocks | Test high and low gas-pressure interlocks according to manufacturer's instructions. | X | ... |
| ... | ... | ... | X | ... | ... | Interlocks and valves | Check piping and wiring of all interlocks and shutoff valves. | ... | X |
| ... | ... | ... | ... | X | ... | Atomizing air/steam interlock | Test air/steam interlock in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | ... | Burner position interlock | Test burner position interlock in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | ... | Rotary cup burner interlock | Test rotary cup interlock in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | X | ... | ... | Burner components | Inspect burner components according to manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | X | Burner components | Check dual fuel change over control. If automatically controlled by gas utility, perform test under the supervision of gas utility. | ... | X |
| ... | ... | ... | ... | ... | X | Burner components | For oil-fired burners, clean atomizers and oil strainers. | ... | X |
| ... | ... | ... | ... | ... | X | Burner components | For gas-fired burners, check sediment trap and gas strainer. | ... | X |

GENERAL NOTE: See manufacturer's instructions.

NOTES:

(1) D = daily; W = weekly; M = monthly; S/A = semiannually; A = annually; A/R = as-required.

(2) Caution should be used when viewing burner flame. Personal protective equipment, such as filtered eyewear, may be necessary.

EXHIBIT 3 October 1, 2023**FORM I-1 REPORT OF BOILER INSTALLATION**in accordance with provisions of the *National Board Inspection Code*INSTALLATION: ☐ New ☐ Reinstalled ☐ Second Hand Date ____/____/____

| INSTALLER | | OWNER-USER | | OBJECT LOCATION | |
|------------------|--|--------------------|--|------------------|--|
| Name | | Name | | Name | |
| Street | | Street, PO Box, RR | | Street | |
| City, State, ZIP | | City, State, ZIP | | City, State, ZIP | |

| Jurisdiction No. | National Board No. | Manufacturer | | Mfg. Serial No. | Year Built | Boiler Type | Boiler Use |
|----------------------------|------------------------------------|---|---------------|---|-------------------------|--|------------|
| Fuel | Method of Firing | Btu/kW input | Btu/kW output | Operating PSI | ASME Code Designator(s) | <input type="checkbox"/> A <input type="checkbox"/> S <input type="checkbox"/> U <input type="checkbox"/> HLW <input type="checkbox"/> M <input type="checkbox"/> E <input type="checkbox"/> H <input type="checkbox"/> Other | |
| Stamped MAWP | Heating Surface, Sq. Ft. | Cast Iron | Manhole | Specific On-Site Location, i.e., Utility Room | | | |
| Pressure Relief Valve Size | Pressure Relief Valve Set Pressure | Pressure Relief Valve Capacity <input type="checkbox"/> Btu/hr <input type="checkbox"/> Lb/hr | Manufacturer | Low-Water Fuel Cutoff Mfg. No. | | | |
| 1. _____ | 1. _____ | 1. _____ | 1. _____ | Probe Type | _____ | | |
| 2. _____ | 2. _____ | 2. _____ | 2. _____ | Flow Switch | _____ | | |
| 3. _____ | 3. _____ | 3. _____ | 3. _____ | Float & Chamber | _____ | | |
| 4. _____ | 4. _____ | 4. _____ | 4. _____ | Other (Specify) | _____ | | |

| | | |
|---|---|---|
| PRESSURE/ALTITUDE GAGE: Dial Graduation _____ Valve/Cock Size _____ MAWP _____ Pipe Connection Size _____ Siphon or Equivalent Device <input type="checkbox"/> Yes <input type="checkbox"/> No | EXPANSION TANK: ASME Constructed <input type="checkbox"/> Yes <input type="checkbox"/> No Other _____ MAWP _____ No. Gallons _____ | VENTILATION AND COMBUSTION AIR Unobstructed Opening (sq. in.) _____ Power Ventilator Fan (CFM) _____ |
| WATER LEVEL INDICATORS: Number of Gage Glasses _____ Number of Remote Indicators _____ Size of Connection Piping _____ | FEED WATER SUPPLY: Number of Feeding Means _____ Pipe Size _____ Stop Valve Size _____ MAWP _____ Check Valve Size _____ MAWP _____ | |
| STOP VALVES: Number of Valves _____ Valve Size _____ | EXTERNAL PIPING ASME CODE: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other _____ | FUEL TRAIN: <input type="checkbox"/> CSD-1 <input type="checkbox"/> NFPA-85 <input type="checkbox"/> Other _____ |
| BOTTOM BLOWDOWN CONNECTIONS: Number of Valves _____ Valve Size _____ MAWP _____ Piping Run Full Size <input type="checkbox"/> Yes <input type="checkbox"/> No | POTABLE WATER HEATER UNIQUE REQUIREMENTS <input type="checkbox"/> Yes <input type="checkbox"/> No Inlet Stop Valve Size _____ MAWP _____ Outlet Stop Valve Size _____ MAWP _____ Drain Valve Size _____ Thermometer <input type="checkbox"/> Yes | |
| Manufacturer's Certification Attached: <input type="checkbox"/> Yes <input type="checkbox"/> No Does boiler replace existing one: <input type="checkbox"/> Yes <input type="checkbox"/> No | Clearance from walls and floors: Side _____ Bottom _____ Top _____ | |

Additional recommendations and remarks by installer:

| | | |
|---|--|--|
| Installer Name (PRINT) _____ Registration # _____ | | I HEREBY CERTIFY THAT THE INSTALLATION COMPLIES WITH NBIC, Part 1 Installer Signature _____ |
|---|--|--|

EXHIBIT 3 Continued

1.4.5.1.1 GUIDE FOR COMPLETING NATIONAL BOARD BOILER INSTALLATION REPORT (21)

- 1) **INSTALLATION:** Indicate the type and date of installation — new, reinstalled, or second hand.
- 2) **INSTALLER:** Enter the installer's name and physical address.
- 3) **OWNER-USER:** Enter the name and mailing address of the owner-user of the boiler.
- 4) **OBJECT LOCATION:** Enter the name of the company or business and physical address where the installation was made.
- 5) **JURISDICTION NO.:** Enter the Jurisdiction number if assigned at the time of installation.
- 6) **NATIONAL BOARD NO.:** Enter the assigned National Board number.
Note:
Cast section boilers do not require National Board registration.
- 7) **MANUFACTURER:** Enter the boiler manufacturer's name.
- 8) **MFG. SERIAL NO.:** Enter the assigned boiler manufacturer's serial number.
- 9) **YEAR BUILT:** Enter the year the boiler was manufactured.
- 10) **BOILER TYPE:** Enter the type of boiler, e.g., watertube, firetube, cast, electric, etc.
- 11) **BOILER USE:** Enter the service for which or for how the boiler will be used, e.g., heating (steam or water), potable water, etc.
- 12) **FUEL:** Enter the type of fuel, e.g., natural gas, diesel, wood, etc. If more than one fuel type, enter the types for which the boiler is equipped.
- 13) **METHOD OF FIRING:** Enter the method of firing, e.g., automatic, hand, stoker, etc.
- 14) **Btu/kW INPUT:** Enter the Btu/hr or kW input of the boiler.
- 15) **Btu/kW OUTPUT:** Enter the Btu/hr or kW output of the boiler.
- 16) **OPERATING PSI:** Enter the allowed operating pressure.
- 17) **ASME CODE DESIGNATOR'S:** Check the ASME Code designator shown on the code nameplate or stamping of other certification mark (specify).
- 18) **STAMPED MAWP:** Enter the maximum allowable working pressure shown on the nameplate or stamping.
- 19) **HEATING SURFACE SQ. FT.:** Enter the boiler heating surface shown on the stamping or nameplate.
Note:
This entry is not required for electric boilers.

EXHIBIT 3 Continued

- 20) CAST BOILER: Enter the total number of sections for cast boilers.
Note:
Not all cast boilers are sectional. Mono-block cast boilers should be described as having one (1) section.
- 21) MANHOLE: Indicate whether the boiler has a manway.
- 22) SPECIFIC ON-SITE LOCATION: Enter the on-site location of the boiler in sufficient detail to allow location of that boiler.
- 23) PRESSURE RELIEF VALVE SIZE: Enter the inlet and outlet size of all installed boiler safety or safety relief valves.
- 24) PRESSURE RELIEF VALVE SET PRESSURE: Enter the set pressure of all installed boiler safety or safety relief valves.
- 25) PRESSURE RELIEF VALVE CAPACITY: Enter the capacity in either lbs. of steam per hour or Btu/hr for each installed boiler safety or safety relief valve.
- 26) MANUFACTURER: Enter the manufacturer of each installed boiler safety and safety relief valve.
- 27) LOW-WATER FUEL CUTOFF: Enter the manufacturer's name, type, number, and maximum allowable working pressure of all installed low-water fuel cutoff devices.
- 28) PRESSURE/ALTITUDE GAGE: Enter the dial range of the installed pressure or altitude gage, cutout valve or cock size, a maximum allowable working pressure, and gage pipe connection size. For steam boilers, indicate gage siphon or equivalent device installed.
- 29) EXPANSION TANK: Indicate code of construction of installed expansion tank, tank maximum allowable working pressure, and tank capacity in gallons.
- 30) VENTILATION AND COMBUSTION AIR: Indicate total square inches of unobstructed opening or total cubic feet per minute of power ventilator fan(s) available for ventilation and combustion air.
- 31) WATER LEVEL INDICATORS: Enter the number of gage glasses and/or remote indicators and connecting pipe size.
- 32) FEEDWATER SUPPLY: Enter the total number of feeding means, connecting pipe size, stop and check valve size, and maximum allowable working pressure.
- 33) STOP VALVE(S): Enter the number of stop valves installed, valve size, and maximum allowable working pressure.
- 34) POTABLE WATER HEATER UNIQUE REQUIREMENTS: Indicate if stop valves are installed and, if so, enter size and maximum allowable working pressure. Enter drain valve size and indicate installation of thermometer at or near boiler outlet.
- 35) MANUFACTURER'S CERTIFICATION ATTACHED: Indicate if manufacturer's certificate is attached (mandatory for new installations).
- 36) CLEARANCE REQUIREMENTS AND REPLACEMENT OF EXISTING BOILER: Indicate clearances and whether the installation replaced an existing boiler.
- 37) ADDITIONAL REMARKS: Enter any remarks or comments you deem appropriate.
- 38) INSTALLER'S NAME AND SIGNATURE: Print installer's name and registration number and sign completed report.

EXHIBIT 4 October 1, 2023

Unattended Power Boiler Log

| Line No. | Year | Month | Company | Day | 5am | 8am | 7am | earn | 9am | 10am | 11am | Noon | 1pm | 2pm | 3pm | 4pm | 5pm | Remarks (Including date & time) |
|--------------|------|-------|---------|-----|-----|-----|-----|------|-----|------|------|------|-----|-----|-----|-----|---------|---------------------------------|
| Ex- Jmpte | | | | | 1 | 3 | VS | 3 | 3 | 3 | V | V | V | "2 | V | V | V6 4 | |
| 1 | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | | | | | | | |

CODE

1 Normal Operating Check (boiler in service)

Started Boiler & Tested Low Water Control

Tested LWC (required every 12 hours when the boiler

is in service) Test with the Burner On, Test Must

Extinguish Burner and Ring Low Water Alarm

3 Added Chemicals

4 Blow-down

5 Tested Safety Valve (first working day of the month hand

raise spindle)

6 Stopped Boiler

NOTE: The completed log must be available to the boiler inspector for at least six (6) months.

EXHIBIT 4 Continued

| Day | 6pm | 7pm | 8pm | 9pm | 10pm | 11pm | Mid-night | 1am | 2am | 3am | 4am | Remarks |
|-----|-----|-----|-----|-----|------|------|-----------|-----|-----|-----|-----|---------|
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | |
| 25 | | | | | | | | | | | | |
| 26 | | | | | | | | | | | | |
| 27 | | | | | | | | | | | | |
| 28 | | | | | | | | | | | | |
| 29 | | | | | | | | | | | | |
| 30 | | | | | | | | | | | | |
| 31 | | | | | | | | | | | | |

CODE

1 Normal Operating Check (boiler in service)
Started Boiler & Tested Low Water Control

2 Tested LWC (required every 12 hours when the boiler is in service) Test with the Burner On, Test Must Extinguish Burner and Ring Low Water Alarm

3 Added Chemicals

4 Blow down

5 Tested Safety Valve (first working day of the month hand raise spindle)

6 Stopped Boiler

3. Chapter 12-223.1, Hawaii Administrative Rules, entitled "Heating Boilers - Steam Heating Boilers, Hot-Water Heating Boilers, Hot-Water Supply Boilers, and Potable Water Heaters", is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 12

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

SUBTITLE 8

HAWAII OCCUPATIONAL SAFETY AND HEALTH DIVISION

PART 10

BOILER AND PRESSURE VESSELS

CHAPTER 223.1

HEATING BOILERS - STEAM HEATING BOILERS, HOT-WATER
HEATING BOILERS, HOT-WATER SUPPLY BOILERS, AND
POTABLE WATER HEATERS

| | |
|--------------|--|
| \$12-223.1-1 | Scope |
| \$12-223.1-2 | General requirements for heating boilers |
| \$12-223.1-3 | Responsibility of owners and users |
| \$12-223.1-4 | Inspections |
| \$12-223.1-5 | Technical installation requirements |
| \$12-223.1-6 | Controls and safety devices |

| | |
|---------------|--|
| \$12-223.1-7 | Instruments, fittings, and controls |
| \$12-223.1-8 | Modular steam heating, modular hot-water heating boilers, and modular water heaters |
| \$12-223.1-9 | Pressure relief valves for steam heating, hot-water heating, hot-water supply boilers, and potable water heaters |
| \$12-223.1-10 | Acceptable installation of pressure relief valves for steam heating, hot-water heating, hot-water supply boilers |
| \$12-223.1-11 | Acceptable installation of temperature and pressure relief valves for potable water heaters |
| \$12-223.1-12 | Heating boiler room and operating area |
| \$12-223.1-13 | Operating systems |
| \$12-223.1-14 | Preventive maintenance schedule |

Historical Note: This chapter is based substantially upon chapter 223. [Eff 12/6/82; am 12/9/83; am and comp 12/6/90; am 7/6/98; am 11/18/12; R 12/21/19]

§12-223.1-1 Scope. Service limitations. The requirements of this section shall apply to heating boilers including steam heating boilers not exceeding fifteen (15) psig, hot-water heating boilers, hot-water supply boilers, and potable water heaters, but not limited to the following:

- (1) Steam heating boiler: steam or vapor boiler operating at pressures not exceeding fifteen (15) psig;
- (2) Hot-water heating boiler: hot-water boiler installed to operate at pressures not exceeding 160 psig or temperatures more than 250 degrees Fahrenheit;
- (3) Hot-water supply boiler: a boiler that furnishes hot water to be used externally to itself at a pressure less than or equal to 160 psig or a temperature less than or equal

to 250 degrees Fahrenheit at or near the boiler outlet;

- (4) Modular boiler: a steam or hot-water heating assembly consisting of a group of individual heating boilers called modules, without intervening stop valves in between the modules, intended to be installed as a system unit, with a single inlet and single outlet. Modules may be under one jacket or may be individually jacketed;
- (5) Pool heater: a boiler in which no steam is generated, from which hot water is circulated to a swimming pool, hot tub, or spa and returned to the boiler, and which operates at a pressure not exceeding 160 psig or a temperature not exceeding 250 degrees Fahrenheit;
- (6) Potable water heaters: a corrosion resistant appliance that includes the controls and safety devices to supply potable hot water at pressure not exceeding 160 psig and temperature not more than 210 degrees Fahrenheit and includes the following types:
 - (A) Fired storage water heater: a potable water heater in which water is heated by electricity, the combustion of solid, liquid, or gaseous fuels, and stores water within the same appliance;
 - (B) Indirect fired water heater: a potable water heater in which water is heated by an internal coil or heat exchanger that receives its heat from an external source. Indirect fired water heaters provide water directly to the system or store water within the same appliance; and
 - (C) Circulating water heater: a potable water heater which furnishes water directly to the system or to a separate storage tank. Circulating water heaters may be either natural or forced flow; and

- (7) Modular water heaters: a hot-water heating assembly consisting of a group of individual water heaters called modules having an aggregate input value greater than 200,000 Btu per hour (58.6 KW), with or without intervening stop valves in between the modules, intended to be installed as a system unit, with a single inlet and single outlet. Modules may be under one jacket or may be individually jacketed. [Eff and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

12-223.1-2 General requirements for heating boilers. (a) The following shall apply to all heating boilers:

- (1) All heating boilers in operation in this jurisdiction shall have a current and valid operating permit issued to a specific location by the department;
 - (2) Changes in location or ownership shall require department notification and may require reinspection;
 - (3) Heating boilers shall bear the ASME Code Symbol Stamp "H", "HLW" or ASME certification mark with "H", "HLW" designator and the NB registration number;
 - (4) ASME and NB stamping shall be legible and not be concealed by insulation or paint; and
 - (5) Upon completion of the installation of a new heating boiler, it shall be marked by the inspector employed by the department with a state serial number, consisting of letters and figures to be not less than 5/16 inch in height and arranged as HHB####-Year.
- (b) Steam heating boilers not in use for a period of one year or more, for any reason, shall be inspected internally and externally before being placed into operation.

(c) Replacement of an existing heating boiler shall be in accordance with the requirements for new heating boiler installations.

(d) Replacement of a heating boiler at an existing location with a used or secondhand boiler shall comply with the requirements of new heating boiler installations. The following shall apply to used or secondhand heating boilers:

- (1) Used or secondhand heating boilers when installed in this jurisdiction, shall be equipped with fittings and appurtenances that comply with new installations; and
- (2) Weld repairs, alterations, and inspection records shall be submitted with the installation application for used or secondhand heating boilers.

(e) Replacement or repairs to boiler fittings, appurtenances or appliances, controls and safety devices, shall comply with the requirements for new installations and applicable ASME BPVC and NBIC sections.

(f) Galvanized pipe shall not be used for steam supply and blowdown piping.

(g) State specials: applicable provisions include sections 12-220-2(b) and 12-220-16(e)(6). [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

12-223.1-3 Responsibility of owners and users.

The following are requirements of owners and users:

- (1) The owner or user of the pressure retaining item is responsible for ensuring that all equipment meets all the requirements of the department at the point of installation including licensing, registration, and certification of those performing installations. The department may require additional safety standards and when a conflict arises, the rules of the department shall prevail;

- (2) Owners or users shall ensure heating boilers are operated only with a valid operating permit. The operation of a heating boiler with an expired operating permit is not allowed and may be subject to penalties as described in this part. Changes in location or ownership shall require notification of the department and may require reinspection;
- (3) Owners or users shall ensure operating permit renewal inspections are completed prior to the permit expiration date. It is the responsibility of the owner or user to schedule boiler permit renewal inspections. Permit renewal inspections shall include boiler shutdown, dismantling, internal inspection where applicable, and testing of controls and safety devices;
- (4) Additional inspection requirements may be conducted at the inspector's discretion, e.g., internal inspections, pressure tests, and non-destructive exams (NDEs);
- (5) Request for the extension of the operating permit expiration date may be considered for valid reasons by submitting a written request to the chief boiler inspector;
- (6) The unavailability of the special inspector to conduct inspections is not a valid reason for requesting permit extensions; deputy inspectors may perform the inspection in the absence of the special inspectors;
- (7) When a boiler task is required, it is the owner or the owner's designee that is expected to perform such task, however, the owner retains responsibility for compliance; and
- (8) Owners or users are responsible to ensure compliance with the preventive maintenance requirements as specified in 12-223.1-14.
[Eff and comp 12/21/19; comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-223.1-4 Inspections. (a) Initial heating boiler acceptance inspections shall be conducted and witnessed by the chief boiler inspector or a deputy inspector designee. The initial inspection shall include internal inspection where construction permits, post-installation pressure test ~~[in accordance with the requirements of the original code of construction]~~, and operational testing of controls and safety devices in accordance with ASME CSD-1, NBIC, and this chapter by the installer, contractor, or owner.

(b) Permit renewal inspections. The following shall apply to permit renewal inspections:

- (1) Steam or vapor heating boilers shall have an external inspection every two years, or where construction permits, an internal inspection at the discretion of the inspector;
- (2) Steam or vapor heating boilers with a heating surface greater than twenty (20) square feet and less than or equal to one hundred (100) square feet shall be internally inspected at least every four years;
- (3) Steam or vapor heating boilers with any one of the following criteria: a manway, a Btu per hour input greater than 400,000, or a heating surface greater than one hundred (100) square feet, shall be internally inspected annually. They shall be externally inspected and operationally tested approximately six months after the internal inspection;
- (4) Hot-water heating, hot-water supply heating boilers, potable water heaters (including modular installations) shall have an external inspection every two years, or where construction permits, an internal inspection at the discretion of the inspector;
- (5) Pool heaters shall have an external inspection every two years;
- (6) State special: see sections 12-220-2(b) and 12-220-16(e)(6); and
- (7) Based upon actual service conditions by the owner or user of the operating equipment, the department may, at its discretion, permit

variations in the inspection frequency requirements. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

12-223.1-5 Technical installation requirements.

(a) General requirements. The following shall apply to all heating boilers:

- (1) Heating boilers shall be installed pursuant to sections 12-220-2, 12-220-2.1, 12-220-5, 12-220-6, 12-220-15, and this chapter;
- (2) Owners and users shall adhere to the heating boiler installation requirements as specified in the NBIC Part 1;
- (3) An application for installation permit shall be submitted to the department prior to commencement of work;
- (4) Heating boilers installed without an installation permit may be subject to penalties of up to \$10,000 per day pursuant to section 12-220-22;
- (5) Only contractors holding a valid Hawaii C-4 contractor license shall install steam heating, hot-water heating, hot-water supply heating boilers, and water heaters with more than 200,000 Btu per hour (58.6 KW);
- (6) Contractors holding a valid Hawaii C-37 contractor license may install water heaters up to 200,000 Btu per hour; and
- (7) All heating boilers shall be equipped with controls and safety devices based upon the Btu per hour burner input, as specified in the original code of construction.

(b) First acceptance inspection and certification requirements shall include the following:

- (1) The owner and contractor shall comply with section 12-220-2.1 and upon completion of the installation, shall arrange for an acceptance inspection by the department;
- (2) For heating boilers subject to ASME CSD-1 requirements, the installing contractor shall

operationally test the controls and safety devices prior to scheduling the first acceptance inspection with the department, and record the results on form CG-500, ASME CSD-1 (Exhibit 4[+]), titled, "Manufacturer's/Installing Contractor's Report for ASME CSD-1", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter), and file a copy with the department;

- (3) Additional inspection requirements may be conducted at the inspector's discretion, e.g. internal inspections, pressure tests, and non-destructive exams (NDEs);
- (4) The installing contractor shall test the boiler as directed and witnessed by the chief boiler inspector or designated deputy inspector;
- (5) The chief boiler inspector or designated deputy inspector shall conduct the first data inspection, acceptance, and mark the state serial number on the heating boiler pursuant to section 12-220-29.1; and
- (6) The installer shall complete and certify the NB Boiler Installation Report I-1 (NB-365, see Exhibit 3[+]), titled, "Form I-1 Report of Boiler Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter), after the completion, inspection, and acceptance of the installation by an inspector employed by the department. The NB Boiler Installation Report I-1 [~~NB365, see Exhibit 3~~] shall be submitted to the owner and the department.

(c) The following shall apply to heating boiler clearances:

- (1) Heating boilers shall have a minimum distance of at least thirty-six (36) inches between the top of the heating boiler and any overhead structure and at least thirty-six (36) inches between all sides of the heating boiler and adjacent walls, structures, or other equipment. Heating boilers with

- manholes shall have at least eighty-four (84) inches of clearance between the manhole opening and any wall, ceiling, piping, or other equipment that may prevent a person from entering the heating boiler. Alternative clearances in accordance with the manufacturer's recommendations are subject to acceptance by the ~~[jurisdiction;]~~ department;
- (2) Modular heating boilers that require individual units to be set side by side, front to back, or by stacking shall provide clearances in accordance with the manufacturer's recommendations and subject to acceptance by the department;
 - (3) Heating boilers shall be located so that adequate space is provided for proper operation, maintenance, and inspection of equipment and appurtenances, which shall include the removal of tubes if applicable;
 - (4) Heating boilers with a top opening manhole shall have at least eighty-four (84) inches of unobstructed clearance above the manhole to the ceiling of the equipment room; and
 - (5) Heating boilers with a bottom opening used for inspection or maintenance shall have at least twelve (12) inches of unobstructed clearance. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

12-223.1-6 Controls and safety devices. Where applicable, steam heating, hot-water heating, and hot-water supply heating boilers, shall be equipped with controls and safety devices as specified in the original code of construction, and in accordance with ASME CSD-1. [Eff and comp 12/21/19; comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

12-223.1-7 Instruments, fittings, and controls.

(a) The following shall apply to steam heating boilers:

- (1) Gages. The following shall apply to gages:
 - (A) Each steam boiler shall have a steam gage, or a compound steam gage connected to its steam space or to its water column or to its steam connection. The gage or connection shall contain a siphon or equivalent device that will develop and maintain a water seal that will prevent steam from entering the gage tube. The connection shall be so arranged that the gage cannot be shut off from the boiler except by a cock placed in the pipe at the gage and provided with a tee-handle or lever-handle arranged to be parallel to the pipe in which it is located when the cock is open. The connections to the boiler shall be not less than NPS 1/4. Where steel or wrought iron pipe or tubing is used, the connection and external siphon shall be not less than NPS 1/2. The minimum size of a siphon, if used, shall be NPS 1/4. Ferrous and nonferrous tubing having inside diameters at least equal to that of standard pipe sizes listed above may be substituted for pipe; and
 - (B) The scale on the dial of a steam boiler gage shall be graduated to not less than thirty (30) psig nor more than sixty (60) psig. The travel of the pointer from zero (0) psig to thirty (30) psig pressure shall be at least three (3) inches;
- (2) Water gage glasses. The following shall apply to water gage glasses:
 - (A) Each steam boiler shall have one or more water-gage glasses attached to the water column or boiler by means of valved fittings not less than NPS 1/2, with the

- lower fitting provided with a drain valve of a type having an unrestricted drain opening not less than NPS 1/4 to facilitate cleaning. Gage glass replacement shall be possible under pressure. Water glass fittings may be attached directly to a boiler. Heating boilers having an internal vertical height of less than ten (10) inches should be equipped with a water level indicator of the glass bulls-eye type provided the indicator is of sufficient size to show the water at both normal operating and low-water cutoff levels;
- (B) The lowest visible part of the water-gage glass shall be at least one (1) inch above the lowest permissible water level recommended by the boiler manufacturer. With the boiler operating at this lowest permissible water level, there shall be no danger of overheating any part of the boiler;
 - (C) In electric heating boilers of the submerged electrode type, the water-gage glass shall be so located to indicate the water levels both at startup and under maximum steam load conditions as established by the manufacturer;
 - (D) In electric heating boilers of the resistance element type, the lowest visible part of the water gage shall be located at least one (1) inch above the lowest permissible water level specified by the manufacturer. Each electric boiler of this type shall also be equipped with an automatic low-water cutoff on each boiler so located as to automatically cut off the power supply to the heating elements before the surface of the water falls below the visible part of the glass;
 - (E) Tubular water glasses on electric heating boilers having a normal water

content not exceeding 100 gallons shall be equipped with a protective shield; and

- (F) Transparent material other than glass may be used for the water gage provided that the material will remain transparent and has proved suitable for the pressure, temperature, and corrosive conditions expected in service;
- (3) Water column and water level control pipes. The following shall apply to water column and water level control pipes:
- (A) The minimum size of ferrous or nonferrous pipes connecting a water column to a steam boiler shall be NPS 1. No outlet connections, except for damper regulator, feedwater regulator, steam gages, or apparatus that does not permit the escape of any steam or water except for manually operated blowdown, shall be attached to a water column or the piping connecting a water column to a boiler for introduction of feedwater into a boiler. If the water column, gage glass, low-water fuel cutoff, or other water level control device is connected to the boiler by pipe and fittings, no shutoff valves of any type shall be placed in such pipe and a cross or equivalent fitting to which a drain valve and piping may be attached shall be placed in the water piping connection at every right angle turn to facilitate cleaning and inspection. The water column drain pipe and valve shall be not less than 3/4-inch diameter; and
 - (B) The steam connections to the water column of a horizontal firetube wrought boiler shall be taken from the top of the shell or the upper part of the head, and the water connection shall be taken from a point not above the center line of the shell. For a cast-iron boiler,

the steam connection to the water column shall be taken from the top of an end section or the top of the steam header, and the water connection shall be made on an end section not less than six (6) inches below the bottom connection to the water-gage glass;

- (4) Pressure control. The following shall apply to pressure control:
- (A) Each automatically fired steam boiler shall be protected from overpressure by two pressure-operated controls. Each individual steam boiler or each system of commonly connected steam heating boilers shall have a control that will cut off the fuel supply when the steam pressure reaches an operating limit, which shall be less than the maximum allowable pressure;
 - (B) Each individual automatically fired steam boiler shall have a safety limit control, with a manual reset that will cut off the fuel supply to prevent steam pressure from exceeding the fifteen (15) psig maximum allowable working pressure of the boiler. Each control shall be constructed to prevent a pressure setting above fifteen (15) psig; ~~and~~
 - (C) Shutoff valves of any type shall not be placed in the steam pressure connection between the boiler and the controls described in subparagraphs (A) and (B). These controls shall be protected with a siphon or equivalent means of maintaining a water seal that will prevent steam from entering the control. The connections to the boiler shall not be less than NPS 1/4~~[-]~~ for lengths up to five (5) feet, but where steel or wrought iron pipe or tubing is used, they shall not be less than NPS 1/2~~[-]~~ for lengths up to five (5) feet, and not less than NPS 1 for lengths over five

- (5) feet. The minimum size of an external siphon shall be NPS 1/4 or 3/8 inch outside diameter nonferrous tubing. For manifold connections, the minimum size shall be as specified in the original code of construction; and
- (D) Pressure controls should have separate connections, however, manifolding is permitted. When multiple pressure controls are connected to the boiler with a common manifold, the connection at the boiler up to and including the entire manifold, for pipe of nonferrous material, shall not be less than NPS 1/2 for lengths up to five (5) feet, and not less than NPS 3/4 for lengths over five (5) feet. For manifolds using ferrous material, the connection at the boiler up to and including the entire manifold shall not be less than NPS 3/4 for lengths up to five (5) feet, and not less than NPS 1-1/4 for lengths over five (5) feet. Individual controls are to be piped from the manifold according to the provisions of subparagraph (C);
- (5) Automatic low-water fuel cutoff and water feeding devices. The following shall apply to automatic low-water fuel cutoff and water feeding devices:
- (A) Each automatically fired steam [~~or vapor system~~] boiler shall have an automatic low-water fuel cutoff. The low-water fuel cutoffs must be [se] located [as] to automatically cut off the fuel supply when the surface of the water falls to [~~the lowest visible part of the water-gage glass~~] a level not lower than the lowest visible part of the water-gage glass. If a water feeding device is installed, it shall be so constructed that the water inlet valve cannot feed water into the boiler through the float

chamber and so located as to supply requisite feedwater;

- (B) Such a fuel cutoff or water feeding device may be attached directly to a boiler. A fuel cutoff or water feeding device may also be installed in the tapped openings available for attaching a water glass directly to a boiler, provided the connections are made to the boiler with nonferrous tees or Y fittings not less than NPS 1/2 between the boiler and water glass so that the water glass is attached directly and as close as possible to the boiler; the run of the tee or Y-fitting shall take the water glass fittings, and the side outlet or branch of the tee or Y-fittings shall take the fuel cutoff or water feeding device. The ends of all nipples shall be reamed to full-size diameter;
- (C) In addition to the requirements in subparagraphs (A) and (B), a secondary low-water fuel cutoff with manual reset shall be provided on each automatically fired steam [~~or vapor system~~] boiler; and
- (D) Fuel cutoffs and water feeding devices embodying a separate chamber shall have a vertical drain pipe and a blowoff valve not less than NPS 3/4, located at the lowest point in the water equalizing pipe connections so that the chamber and the equalizing pipe can be flushed and the device tested.

(b) Hot-water heating or hot-water supply boilers. The following shall apply to hot-water heating or hot-water supply boilers:

- (1) Pressure or altitude gages:
 - (A) Each hot-water heating or hot-water supply boiler shall have a pressure or altitude gage connected to it or to its flow connection in such a manner that it

- cannot be shut off from the boiler except by a cock with tee or lever handle, placed on the pipe near the gage. The handle of the cock shall be parallel to the pipe in which it is located when the cock is open;
- (B) The scale on the dial of the pressure or altitude gage shall be graduated approximately to not less than one and a half (1-1/2) nor more than three and a half (3-1/2) times the pressure at which the safety relief valve is set; and
 - (C) Piping or tubing for pressure or altitude gage connections shall be of nonferrous metal when smaller than NPS 1;
- (2) Thermometers: each hot-water heating or hot-water supply boiler shall have a thermometer so located and connected that it shall be easily readable. The thermometer shall be so located that it shall always indicate the temperature of the water in the boiler at or near the outlet;
- (3) Temperature controls. Each automatically fired hot-water heating or hot-water supply boiler shall be protected from over-temperature by two temperature-operated controls. The following shall apply to automatically fired hot-water heating and hot-water supply boilers:
- (A) Each individual hot-water heating or hot-water supply boiler or each system of commonly connected heating boilers shall have ~~[a]~~ at least one control that will cut off the fuel supply when the water temperature reaches an operating limit, which shall be less than the maximum allowable temperature; and
 - (B) Each individual automatically fired hot-water heating or hot-water supply boiler shall have a safety limit control with manual reset that will cut off the fuel supply to prevent the water temperature

- from exceeding the maximum allowable temperature at the boiler outlet; ~~and~~
- (C) Each operating and safety limit control shall have its own sensing element and operating switch; and
 - (D) Alternately, integrated controls with multiple sensors may be used to meet the requirements of subparagraphs (A) and (B);
- (4) Low-water fuel cutoff. The following shall apply to automatically fired hot-water heating boilers:
- (A) Each automatically fired hot-water heating boiler shall have an automatic low-water fuel cutoff with manual reset. The low-water fuel cutoff shall be designed for hot-water service, and it shall be so located as to automatically cut off the fuel supply when the surface of the water falls to the level established in subparagraph (B);
 - (B) As there is no normal waterline to be maintained in a hot-water boiler, any location of the low-water fuel cutoff above the lowest safe permissible water level established by the boiler manufacturer is satisfactory;
 - (C) In lieu of the requirements for low-water fuel cutoffs in subparagraph (A), heating boilers requiring forced circulation to prevent overheating of the tubes, coils, or vessel, shall have an accepted flow-sensing or temperature-sensing device to prevent burner operation at a flow rate inadequate to protect the boiler unit against overheating at all allowable firing rates. This safety control(s) shall shut down the burner and prevent restarting until an adequate flow is restored and shall be independent of all other controls; and

- (D) A means shall be provided for testing the operation of the external low-water fuel cutoff without resorting to draining the entire system. Such means shall not render the device inoperable except as follows: if the means temporarily isolates the device from the boiler during this testing, it shall automatically return to its normal position. The connection may be so arranged that the device cannot be shut off from the boiler except by a cock placed at the device and provided with a tee or lever-handle arranged to be parallel to the pipe in which it is located when the cock is open;
- (c) Potable water heaters. The following shall apply to potable water heaters:
 - (1) Temperature controls. The following shall apply to the temperature controls of potable water heaters:
 - (A) Each individual automatically fired water heater, in addition to the operating control used for normal water heater operation, shall have a separate high limit temperature actuated combustion control that will automatically cut off the fuel supply. The temperature range of the high limit temperature actuated control shall not allow a setting over 210 degrees Fahrenheit;
 - (B) Gas-fired water heaters: the high limit temperature control when actuated shall shut off the fuel supply with a shutoff means other than the operating control valve. Separate valves may have a common body;
 - (C) Electrically heated water heaters: the high limit temperature control when

- actuated shall cut off all power to the operating controls;
- (D) Oil-fired water heaters: the high limit temperature control when actuated shall cut off all current flow to the burner mechanism; and
 - (E) Indirect water heating systems: the high limit temperature control when activated shall cut off the source of heat;
- (2) Pressure or altitude gages. The following shall apply to pressure or altitude gages:
- (A) Each potable water heater shall have a pressure or altitude gage connected to it or to its flow connection in such a manner that it cannot be shut off from the boiler except by a cock with tee or lever handle placed on the pipe near the gage. The handle of the cock shall be parallel to the pipe in which it is located when the cock is open;
 - (B) The scale on the dial of the pressure or altitude gage shall be graduated approximately to not less than one and a half (1-1/2) nor more than three (3) times the maximum allowable working pressure; and
 - (C) Piping or tubing for pressure or altitude gage connections shall be of nonferrous metal when smaller than 1-inch pipe size;
- (3) Thermometers: each installed water heater shall have a thermometer so located and connected that it shall be easily readable. The thermometer shall be so located that it shall always indicate the temperature of the water in the water heater at or near the outlet; and
- (4) Flow-sensing device: potable water heaters requiring forced circulation to prevent overheating of the tubes, coils, or vessel

should have an acceptable flow-sensing device or temperature-sensing device to prevent burner operation at a flow rate inadequate to protect the water heater unit against overheating at all allowable firing rates. This safety controls shall shut down the burner and prevent restarting until an adequate flow is restored and shall be independent of all other controls.
[Eff and comp 12/21/19; am and
comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

12-223.1-8 Modular steam heating, modular hot-water heating boilers, and modular water heaters. (a)
Individual modules. The following shall apply to individual modules:

- (1) The individual modules shall comply with all the requirements of the code of construction~~[=]~~ and this subsection. The individual modules shall be limited to a maximum input of 400,000 Btu per hour (117 kw/hr) for gas, 3 gallons/hour (11.4 l/hr) for oil, or 117 kw for electricity;
- (2) Each module of a modular steam heating boiler shall be equipped with a:
 - (A) Safety valve, see section 12-223.1-9(a) (1);
 - (B) Blowoff valve, see section 12-223.1-13(o) (1); and
 - (C) Drain valve, see section 12-223.1-13(o) (2); and
- (3) Each module of a modular hot-water heating boiler shall be equipped with a:
 - (A) Safety relief valve, see section 12-223.1-9(a) (2); and
 - (B) Drain valve, see section 12-223.1-13(o) (2).

(b) Assembled Modular Heating boilers. The following shall apply to assembled modular heating boilers:

- (1) The individual modules shall be manifolded together at the job site without any intervening valves;
- (2) The assembled modular steam heating boiler shall also be equipped with a:
 - (A) Feedwater connection, see Exhibit 5, titled, "Steam Boilers in Battery - Pumped Return Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, and [6+] Exhibit 6, titled, "Steam Boilers in Battery - Gravity Return Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter; and
 - (B) Return pipe connection, see Exhibit 5, titled, "Steam Boilers in Battery - Pumped Return Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, and 6[+], titled, "Steam Boilers in Battery - Gravity Return Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter; and
- (3) The assembled modular hot-water boiler shall also be equipped with a:
 - (A) Makeup water connection, see Exhibit 7[+], titled, "Hot Water Boilers in Battery Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter;
 - (B) Provision for thermal expansion, see Exhibit 7, titled, "Hot Water Boilers in Battery Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, and Exhibit 8[+], titled, "Expansion Tank Capacities for

Gravity Hot-Water Systems", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter; and

- (C) ~~Stop valves[, see Exhibit [7]6 (treating the assembled modular boiler as a single unit).]~~ (treating the assembled modular boiler as a single unit), see Exhibit 7, titled, "Hot Water Boilers in Battery Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter.

(c) Modular hot-water heating boilers. The following shall apply to modular hot-water heating boilers:

- (1) Each module of a modular hot-water heating boiler shall be equipped with a:
- (A) Pressure or altitude gage, see section 12-223.1-7(b) (1);
 - (B) Thermometer, see section 12-223.1-7(b) (2); and
 - (C) Temperature control, see section 12-223.1-7(b) (3) (A); and
- (2) The assembled modular hot-water heating boiler shall be equipped with a:
- (A) Temperature control, see 12-223.1-7(b) (3) (B); and
 - (B) Low-water fuel cutoff, see 12-223.1-7(b) (4).

(d) Modular steam heating boilers. The following shall apply to modular steam heating boilers:

- (1) Each module of a modular steam boiler shall be equipped with a:
- (A) Steam gage, see section 12-223.1-7(a) (1);
 - (B) Water-gage glass, see section 12-223.1-7(a) (2);
 - (C) Pressure control, see section 12-223.1-7(a) (4) (A); and
 - (D) Low-water cutoff, see section 12-223.1-7(a) (5); and

- (2) The assembled modular steam heating boiler shall also be equipped with a pressure control, see section 12-223.1-7(a) (4) (B).
 - (e) Modular water heaters. The individual modules shall comply with all the requirements of the code of construction and this paragraph. Each module of a modular water heater shall be equipped with a:
 - (1) Safety relief valve, see section 12-223.1-9(a) (3);
 - (2) Drain valve, see section 12-223.1-13(o) (2);
 - (3) Pressure or altitude gage, see section 12-223.1-7(c) (2);
 - (4) Thermometer, see section 12-223.1-7(c) (3);
 - (5) Temperature control, see section 12-223.1-7(c) (1); and
 - (6) Flow-sensing device, see section 12-223.1-7(c) (4).
 - (f) Assembled modular water heaters having an aggregate input value greater than 200,000 Btu per hour or aggregate water containing capacity greater than 120 gallons. The individual modules shall be manifolded together at the job site with or without any intervening valves. The assembled modular potable water heater shall be equipped with a:
 - (1) Safety relief valve, see section 12-223.1-9(a) (3);
 - (2) Drain valve, see section 12-223.1-13(o) (2);
 - (3) Pressure/altitude gage, see 12-223.1-7(c) (2);
 - (4) Thermometer, see section 12-223.1-7(c) (3);
 - (5) Temperature control, see section 12-223.1-7(c) (1); and
 - (6) Flow-sensing device, see 12-223.1-7(c) (4).
- [Eff and comp 12/21/19; am and comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-223.1-9 Pressure relief valves for steam heating, hot-water heating, hot-water supply boilers, and potable water heaters. Pressure relief valves for steam heating, hot-water heating, hot-water supply boilers, and potable water heaters shall be ASME and NB certified and marked with the ASME certification mark

and "HV" designator, and National Board "NB" symbols.
The following shall apply to these objects:

- (1) Pressure relief valve requirements for steam heating boilers shall include the following:
 - (A) Pressure relief valves shall be manufactured in accordance with a national or international standard;
 - (B) Each steam boiler shall have one or more NB capacity certified pressure relief valves of the spring pop type adjusted and sealed to discharge at a pressure not to exceed fifteen (15) psig;
 - (C) No pressure relief valve for a steam boiler shall be smaller than NPS 1/2. No pressure relief valve shall be larger than NPS 4. The inlet opening shall have an inside diameter equal to or greater than the seat diameter;
 - (D) The minimum valve capacity in lbs./hr. shall be the greater of that determined by dividing the maximum Btu per hour output at the boiler nozzle obtained by the firing of any fuel for which the unit is installed by 1,000 Btu per hour/lbs., or shall be determined based on the lbs. of steam/hr/square feet of boiler heating surface. For cast iron heating boilers, the minimum valve capacity shall be determined by the maximum output method. In many cases a greater relieving capacity of valves will have to be provided than the minimum specified in this chapter (see Exhibit ~~[10]~~ 9, titled, "Minimum Pounds of Steam Per Hour Per Square Foot of Heating Surface", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter. In every case the requirements of subparagraph (E) shall be met;
 - (E) The pressure relief valve capacity for each steam boiler shall be such that with the fuel burning equipment

- installed, and operated at maximum capacity, the pressure cannot rise more than five (5) psig above the maximum allowable working pressure; and
- (F) When operating conditions are changed, or additional boiler heating surface is installed, the valve capacity shall be increased, if necessary, to meet the new conditions and be in accordance with section 12-223.1-9(a) (2) (G). The additional valves required, because of changed conditions, may be installed on the outlet piping provided there is no intervening valve; and
- (2) Pressure relief valve requirements for hot-water heating or hot-water supply heating boilers shall include the following:
- (A) Each hot-water heating or hot-water supply boiler shall have at least one NB capacity certified pressure relief valve, of the automatic reseating type set to relieve at or below the maximum allowable working pressure of the boiler;
 - (B) Hot-water heating or hot-water supply heating boilers limited to a water temperature not more than 210 degrees Fahrenheit may have, in lieu of the valve(s) specified in subparagraph(A), one or more NB capacity certified temperature and pressure relief valves of the automatic reseating type set to relieve at or below the maximum allowable working pressure of the boiler;
 - (C) When more than one pressure relief valve is used on either hot-water heating or hot-water supply heating boilers, the additional valves shall be NB capacity certified and may have a set pressure within a range not to exceed six (6) psig above the maximum allowable working pressure of the boiler up to and

including sixty (60) psig, and five per cent (5%) for those having a maximum allowable working pressure exceeding sixty (60) psig;

- (D) No pressure relief valve shall be smaller than NPS 3/4 nor larger than NPS 4, except that heating boilers having a heat input not greater than 15,000 Btu per hour should be equipped with a rated pressure relief valve of NPS 1/2;
- (E) The required relieving capacity, in lbs./hr, of the pressure relief device or devices on a boiler shall be the greater of that determined by dividing the maximum output in Btu per hour at the boiler nozzle obtained by the firing of any fuel for which the unit is installed by 1,000 Btu per hour/lb., or shall be determined on the basis of lbs. steam/hr/square feet as given in Exhibit 9[-] titled, "Minimum Pounds of Steam Per Hour Per Square Foot of Heating Surface", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter. For cast iron heating boilers, the minimum valve capacity shall be determined by the maximum output method. In many cases a greater relieving capacity of valves will have to be provided than the minimum specified in this chapter. In every case the requirements of subparagraph (G) shall be met;
- (F) When operating conditions are changed, or additional boiler heating surface is installed, the valve capacity shall be increased, if necessary, to meet the new conditions and shall be in accordance with NBIC Part 1. The additional valves required, on account of changed conditions, may be installed on the outlet piping provided there is no intervening valve; and

- (G) Pressure relief valve capacity for each boiler with a single pressure relief valve shall be such that, with the fuel burning equipment installed and operated at maximum capacity, the pressure cannot rise more than ten per cent (10%) above the maximum allowable working pressure. When more than one pressure relief valve is used, the over pressure shall be limited to ten per cent (10%) above the set pressure of the highest set valve; and
- (3) Pressure relief valve requirements for potable water heaters shall include the following:
 - (A) Each water heater shall have at least one NB capacity certified temperature and pressure relief valve. No temperature and pressure relief valve shall be smaller than NPS 3/4;
 - (B) Pressure relief valves for potable water heaters shall be ASME and NB certified marked with the ASME certification mark and "HV" designator, and National Board "NB" symbols;
 - (C) The pressure setting shall be less than or equal to the maximum allowable working pressure of the water heater. However, if any of the other components in the hot-water supply system (such as valves, pumps, expansion, storage tanks, or piping) have a lesser working pressure rating than the water heater, the pressure setting for the temperature and pressure relief valve(s) shall be based upon the component with the lowest maximum allowable working pressure rating. If more than one temperature and pressure relief valve is used, the additional valve(s) may be set within a range not to exceed ten per cent (10%) over the set pressure of the first valve;

- (D) The required relieving capacity in Btu per hour of the temperature and pressure relief valve shall not be less than the maximum allowable input unless the water heater is marked with the rated burner input capacity of the water heater on the casing in a readily visible location, in which case the rated burner input capacity may be used as a basis for sizing the temperature pressure relief valves. The relieving capacity for electric water heaters shall be 3,500 Btu per hour per kw of input;
- (E) The relieving capacity for electric water heaters shall be 3,500 Btu per hour (1.0 kw) per kw of input. In every case, the temperature and pressure relief valve capacity for each water heater shall be such that with the fuel burning equipment installed and operated at maximum capacity, the pressure cannot rise more than ten per cent (10%) above the maximum allowable working pressure;
- (F) Many temperature and pressure relief valves have a NB capacity certified rating which was determined according to ASME BPVC requirements, and a lower Canadian Standards Association (CSA) rating value. Where the ASME BPVC is the only referenced code of construction the NB capacity certified rating may be used; and
- (G) If operating conditions are changed or additional heating surface is installed, the temperature and pressure relief valve capacity shall be increased, if necessary, to meet the new conditions and shall be in accordance with the above provisions. In no case shall the increased input capacity exceed the maximum allowable input capacity. The additional valves required, because of changed conditions, may be installed on

the outlet piping providing there is no
intervening valve. [Eff and comp
12/21/19; am and comp]
(Auth: HRS \$397-4) (Imp: HRS \$397-4)

§12-223.1-10 Acceptable installation of pressure relief valves for steam heating, hot-water heating, hot-water supply boilers. The following shall apply to the installation of pressure relief valves for steam heating, hot-water heating, and hot-water supply boilers:

- (1) Pressure relief valves shall be located at the top side of the boiler. The top side of the boiler shall mean the highest practicable part of the boiler proper but in no case shall the safety valves be located below the normal operating level and in no case shall the pressure relief valve be located below the lowest permissible water level. They shall be connected directly to a tapped or flanged opening in the boiler, to a fitting connected to the boiler by a short nipple, to a Y-base, or to a valveless header connecting steam or water outlets on the same boiler. Coil or header type heating boilers shall have the pressure relief valve located on the steam or hot-water outlet end. Pressure relief valves shall be installed with their spindles vertical. The opening or connection between the boiler and any pressure relief valve shall have at least the area of the valve inlet;
- (2) When a boiler is fitted with two or more pressure relief valves on one connection, this connection shall have a cross-sectional area not less than the combined areas of inlet connections of all the pressure relief valves with which it connects;
- (3) When a Y-base is used, the inlet area shall be not less than the combined outlet areas. When the size of the boiler requires a

pressure relief valve larger than NPS 4, two or more valves having the required combined capacity shall be used. When two or more valves are used on a boiler, they may be single, directly attached, or installed on a Y-base;

- (4) A threaded connection may be used for attaching a valve;
- (5) Pressure relief valves shall not be connected to an internal pipe in the boiler;
- (6) No shutoff valve of any description shall be placed between the pressure relief valve and the boiler or on discharge pipes between such valves and the atmosphere;
- (7) A discharge pipe shall be used. It shall be not less than the nominal size of the valve outlet. Where multiple valves relieve into a common discharge pipe, the cross-sectional flow area of the common discharge pipe shall be equal to or greater than the sum of the individual temperature and pressure relief valve discharge pipe areas. Discharge pipes shall be securely anchored and supported, as short and straight as possible and arranged as to avoid undue stress on the valve or valves. A union may be installed in the discharge piping close to the valve outlet. When an elbow is placed on a pressure relief valve discharge pipe, it shall be located close to the valve outlet downstream of the union to minimize reaction moment stress;
- (8) The discharge from pressure relief valves shall be so arranged that there will be no danger of scalding attendants. The pressure relief valve discharge shall be piped away from the boiler to a safe point of discharge, and there shall be provisions made for properly draining the piping. The size and arrangement of discharge piping shall be such that any pressure that may exist or develop will not reduce the relieving capacity of the relieving devices below that required to protect the boiler; and

- (9) Hot-water heating or hot-water supply heating boilers limited to a water temperature of 210 degrees Fahrenheit may have one or more NB capacity certified temperature and pressure relief valve(s) installed. The requirements of paragraphs (1) through (8) shall be met, except as follows:
- (A) A Y-type fitting shall not be used; and
 - (B) If additional valves are used, they shall be temperature and pressure relief valves, and when the temperature and pressure relief valve is installed directly on the boiler with no more than four (4) inches maximum interconnecting piping, the valve may be installed in the horizontal position with the outlet pointed down. [Eff and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

12-223.1-11 Acceptable installation of temperature and pressure relief valves for potable water heaters. The following shall apply to the installation of temperature and pressure relief valves for potable water heaters:

- (1) Temperature and pressure relief valves shall be installed by either the ~~[installer or the manufacturer]~~ water heater manufacturer or installer before a water heater is placed in operation;
- (2) Temperature and pressure relief valves shall be connected directly to a tapped or flanged opening in the top of the water heater, ~~[to a fitting connected to the water heater by a short nipple, to a Y-base, or to a valve-less header connecting water outlets on the same heater;]~~ or to a fitting connected to the water heater by a short nipple;
- (3) Temperature and pressure relief valves shall be installed with their spindles upright and vertical with no horizontal connecting pipe,

except ~~[that,]~~ when the temperature and pressure relief valve is ~~[installed]~~ connected directly on the water heater vessel with no more than four (4) inches maximum interconnecting piping, the valve may be installed in the horizontal position with the outlet pointed down. The center line of the temperature and pressure relief valve connection shall be no lower than four (4) inches from the top of the shell;

- (4) No piping or fitting used to install the temperature and pressure relief valve shall be of nominal pipe size less than that of the valve inlet;
- (5) When a potable water heater is fitted with two or more temperature and pressure relief valves on one connection, this connection shall have a cross-sectional area not less than the combined areas of inlet connections of all the temperature and pressure release valves with which it connects;
- (6) When a Y-base is used, the inlet area shall be not less than the combined outlet areas;
- (7) When the size of the water heater requires a temperature and pressure relief valve larger than NPS 4 two or more valves having the required combined capacity shall be used;
- (8) When two or more valves are used on a water heater, they may be single, directly attached, or installed on a Y-base;
- (9) A threaded connection may be used for attaching a temperature and pressure relief valve;
- (10) Temperature and pressure relief valves shall not be connected to an internal pipe in the water heater or a cold-water feed line connected to the water heater;
- (11) No shutoff valve of any description shall be placed between the temperature and pressure relief valve and the water heater or on discharge pipes between such valves and the atmosphere; and

- (12) The discharge from temperature and pressure relief valves shall be so arranged that there will be no danger of scalding attendants. When the temperature and pressure relief valve discharge is piped away from the water heater to the point of discharge, there shall be provisions for properly draining the piping and valve body. The size and arrangement of discharge piping shall be such that any pressure that may exist or develop will not reduce the relieving capacity of the relieving devices below that required to protect the water heater. The following shall apply to discharge pipes:
- (A) When a discharge pipe is used, it shall be not less than the nominal size of the valve outlet, and shall be as short and straight as possible, properly supported and so arranged as to avoid undue stress on the valve. When an elbow is placed on a temperature and pressure relief discharge pipe, it shall be located close to the valve outlet; ~~[and]~~
 - (B) Where multiple valves relieve into a common discharge pipe, the cross-sectional flow area of the common discharge pipe shall be equal to or greater than the sum of the individual temperature and pressure relief valve discharge pipe areas~~[÷]~~;
 - (C) Discharge piping shall be rated for the discharge fluid conditions of pressure and temperature including a minimum and maximum design temperature. Material selection for the discharge piping shall consider the reduction in material toughness at the low end of design temperature and the reduction in material strength at the high end of design temperature. Rigid pipe or tubing should be used for discharge lines that carry hot water or steam;

- (D) Plastic discharge pipe and fittings are permitted (when compatible with the process fluid, system design temperatures, and other ambient conditions such as light and humidity) and shall conform to NSF/ANSI 14 Plastics Piping System Components and Related Materials; and
- (E) Discharge piping shall be rated for any static pressure present and the back pressure that may develop when the pressure relief device is at full capacity. Where multiple pressure relief devices or vents discharge into common piping, the back pressure that could develop due to simultaneous flow from all sources shall be considered. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-223.1-12 Heating boiler room and operating area. (a) The following shall apply to the care of heating boiler rooms:

- (1) The heating boiler room shall be free from accumulation of rubbish, and materials that obstruct access to the boiler, its setting, or firing equipment;
- (2) The storage of flammable material or gasoline-powered equipment in the heating boiler room is prohibited;
- (3) The roof over heating boilers designed for indoor installations shall be free from leaks and maintained in good condition;
- (4) All exit doors shall open outward; and
- (5) It is recommended that the ASME BPVC Section VI, covering the care and operation of heating boilers be used as a guide for proper and safe operating practices.

(b) Foundation, supports, and settings. Each heating boiler, potable water heater, and thermal fluid

heater and its associated piping must be safely supported. Design of supports, foundations, and settings shall consider vibration (including seismic where necessary), movement (including thermal expansion and contraction), grounding/bonding to minimize electrolytic corrosion, and loadings (including the weight of the fluid in the system during a pressure test) in accordance with jurisdictional requirements, manufacturers recommendations, and other industry standards, as applicable.

(c) Exit. Two means of exit shall be provided for equipment rooms exceeding 500 square feet of floor area and containing one or more heating boilers, potable water heaters, or thermal fluid heaters having a combined fuel capacity of 1,000,000 Btu per hour or more[~~-~~] (or equivalent electrical heat input). Each elevation shall be provided with at least two means of exit, each to be remotely located from the other. A platform at the top of a single heating boiler is not considered an elevation.

(d) The following shall apply to ladders and runways:

- (1) All walkways, runways, and platforms shall be of metal construction or equivalent material;
- (2) Provided between or over the top of heating boilers that are more than eight (8) feet above the operating floor to afford accessibility for normal operation, maintenance, and inspection;
- (3) Constructed of safety treads, standard grating, or similar material and have a minimum width of thirty (30) inches of bolted, welded, or riveted construction, and equipped with handrails forty-two (42) inches high with an intermediate rail and four (4) inches toe board; and
- (4) Stairways that serve as a means of access to walkways, runways, or platforms shall not exceed an angle of forty-five (45) degrees from the horizontal and be equipped with handrails forty-two (42) inches high with an intermediate rail.

(e) Drains. At least one floor drain shall be installed in the equipment room. Drains receiving blowdown water should be connected to the sanitary sewer by way of an acceptable blowdown tank or separator or an air gap that will allow the blowdown water to cool to at least 140 degrees Fahrenheit and reduce the pressure to five (5) psig or less.

(f) Water. The following shall apply to water:

- (1) A means to add water to or fill the boiler, while not under pressure, shall be provided. A valve or threaded plug may be used to shut off the fill connection when the boiler is in service;
- (2) Water fill connections shall be installed. A means shall be provided at or near the boiler to prevent back-feeding. Such means shall be rated for the boiler design pressure and temperature; and
- (3) Provision should also be made in every equipment room for a convenient water supply that can be used to flush out the boiler and to clean the equipment room floor. [Eff and comp 12/21/19; am and comp]
(Auth: HRS §397-4) (Imp: HRS §397-4)

§12-223.1-13 Operating systems. (a) Feedwater.

- (1) Steam heating boilers. Feedwater or water treatment shall be introduced into a boiler through the return piping system. Alternatively, feedwater or water treatment shall be introduced through an independent connection. A cross or equivalent fitting shall be placed in the water piping connection at every right angle turn to facilitate cleaning and inspection. The water flow from the independent connection shall not discharge directly against parts of the boiler exposed to direct radiant heat from the fire. Feedwater or water treatment shall not be introduced through openings or connections provided for inspection or

cleaning, safety valve, water column, water-gage glass, or pressure gage. The feedwater pipe shall be provided with a check valve, or a backflow preventer containing a check valve, near the boiler and a stop valve or cock between the check valve and the boiler, or between the check valve and the return pipe system;

- (2) Hot-water heating boilers. Makeup water may be introduced into a boiler through the piping system or through an independent connection. The water flow from the independent connection shall not discharge directly against parts of the boiler exposed to direct radiant heat from the fire. Makeup water shall not be introduced through openings or connections provided exclusively for inspection or cleaning, safety relief valve, pressure gage, or temperature gage. The makeup water pipe shall be provided with a check valve, or a backflow preventer containing a check valve, near the boiler and a stop valve or cock between the check valve and the boiler, or between the check valve and the piping system; and

- (3) The following shall apply to potable water heaters:

- (A) Water supply shall be introduced into a water heater through an independent water supply connection. Feedwater shall not be introduced through openings or connections provided for cleaning, safety relief valves, drain, pressure gage, or temperature gage; and
- (B) If the water supply pressure to a water heater exceeds seventy-five per cent (75%) of the set pressure of the safety relief valve, a pressure reducing valve is required.

(b) Stop valves. Stop valves shall conform with the applicable portions of an acceptable code of construction and may be ferrous or nonferrous. The minimum pressure rating of all stop valves shall be at

least equal to the pressure stamped upon the boiler, and the temperature rating of such stop valves shall be not less than 250 degrees Fahrenheit.

- (1) The following shall apply to steam heating, hot-water heating, and hot-water supply boilers:

- (A) When a stop valve is used in the supply pipe connection of a single steam boiler, there shall be one installed in the return pipe connection;
- (B) Stop valves for single hot-water heating and hot-water supply heating boilers shall be located at an accessible point in the supply and return pipe connections as near to the boiler as possible, to permit draining the boiler without emptying the system; and
- (C) Stop valves shall be used in each supply and-return pipe connection for boiler installations of two or more heating boilers connected to a common system; and

- (2) Potable water heaters. Stop valves shall be installed in the supply and discharge pipe connections of a water heater installation to permit draining the water heater without emptying the system.

(c) Fuel. Fuel systems shall be installed in accordance with jurisdictional and environmental requirements, manufacturer's recommendations, and industry standards, as applicable.

(d) Electrical. The following shall apply to steam heating, hot-water heating, and hot-water supply boilers:

- (1) All wiring for controls, heat generating apparatus, and other appurtenances necessary for the operation of the heating boilers shall be installed in accordance with the provisions of national or international standards and shall comply with the applicable local electrical codes;
- (2) A disconnecting means capable of being locked in the open position shall be installed at an

accessible location at the boiler so that the boiler can be disconnected from all sources of potential. This disconnecting means shall be an integral part of the boiler or adjacent to it;

- (3) A manually operated remote shutdown switch or circuit breaker shall be located just outside the equipment room door and marked for easy identification. Consideration should also be given to the type and location of the switch to safeguard against tampering;
- (4) If the equipment room door is on the building exterior, the shutdown switch should be located just inside the door. If there is more than one door to the equipment room, there shall be a shutdown switch located at each door of egress;
- (5) For atmospheric-gas burners, and oil burners where a fan is on a common shaft with the oil pump, the complete burner and controls should be shut off; and
- (6) For power burners with detached auxiliaries, only the fuel input supply to the firebox need be shut off.
- (e) Potable water heaters. The following shall apply to potable water heaters:
 - (1) All wiring for controls, heat generating apparatus, and other appurtenances necessary for the operation of the potable water heaters shall be installed in accordance with the provisions of national or international standards and comply with the applicable local electrical codes;
 - (2) A disconnecting means capable of being locked in the open position should be installed at an accessible location at the heater so that the heater can be disconnected from all sources of potential. This disconnecting means shall be an integral part of the heater or adjacent to it;
 - (3) For atmospheric-gas burners, and oil burners where a fan is on a common shaft with the oil

pump, the complete burner and controls should be shut off; ~~and~~

- (4) For power burners with detached auxiliaries, only the fuel input supply needs be shut off~~[-]~~;

- (5) A manually operated remote shutdown switch or circuit breaker shall be located just outside the equipment room door and marked for easy identification. Consideration should also be given to the type and location of the switch to safeguard against tampering; and

- (6) If the equipment room door is on the building exterior, the switch should be located just inside the door. If there is more than one door to the equipment room, there should be a switch located at each door of egress.

(f) Controls and heat generating apparatus. The following shall apply to controls and heat generating apparatus:

- (1) Oil and gas-fired and electrically heated heating boilers and water heaters shall be equipped with suitable primary (flame safeguard) safety controls, safety limit controls, and burners or electric elements as required by a nationally or internationally recognized standard;

- (2) The symbol of the certifying organization that has investigated such equipment as having complied with a nationally recognized standard shall be affixed to the equipment and shall be considered as evidence that the unit was manufactured in accordance with that standard; and

- (3) These devices shall be installed in accordance with jurisdictional and environmental requirements, manufacturer's recommendations, and industry standards, as applicable.

(g) Ventilation and combustion air. The following shall apply to ventilation and combustion air:

- (1) The equipment room shall have an adequate air to permit clean, safe combustion, minimize soot formation, and maintain a minimum of

nineteen and a half per cent (19.5%) oxygen in the air of the equipment room and sufficient to maintain ambient temperatures as recommended by the boiler, heater, or vessel manufacturer[. ~~The combustion and ventilation air should be supplied by either an unobstructed air opening or by power ventilation or fans. When combustion air is supplied to the boiler by an independent duct, with or without the employment of power ventilators or fans, the duct shall be sized and installed in accordance with the manufacturer's recommendations. However, ventilation for the equipment room must still be considered~~];

- (2) When combustion air is supplied to the boiler, heater, or vessel by an independent duct, with or without the employment of power ventilators or fans, the duct shall be sized and installed in accordance with the manufacturer's recommendations. However, ventilation for the equipment room must still be considered;
- (3) Unobstructed air openings shall be sized based on the manufacturer's recommendations, or as specified by the National Fire Protection Association (NFPA) standards for oil and gas burning installations for the particular job conditions, or one (1) square inch of free area per 2000 Btu per hour (586 W) maximum fuel input of the combined burners located in the equipment room. The equipment room supply openings shall be kept clear at all times;
- (4) Power ventilators or fans shall be sized based on 0.2 cfm for each 1000 Btu per hour (293 W) of maximum fuel input for the combined burners of all heating boilers and heaters located in the equipment room. Additional capacity may be required for other fuel burning equipment in the equipment room;
- (5) When power ventilators or fans are used to supply combustion air, they shall be

- installed with interlock devices so that burners will not operate without an adequate number of ventilators/fans in operation;
- (6) When power ventilators or fans are used to supply combustion air, they shall be installed with interlock devices so that burners will not operate without an adequate number of ventilators/fans in operation;
 - (7) The size of openings specified in paragraph (3) may be reduced when special engineered air supply systems approved by the ~~[jurisdiction]~~ department are used; and
 - (8) Care should be taken to ensure that steam, water and fluid lines are not routed across combustion air openings, where freezing may occur.
- (h) Breeching and dampers. Breeching and dampers shall be installed in accordance with jurisdictional and environmental requirements, manufacturer's recommendations, and industry standards, as applicable.
- (i) Burners and stokers. Burners and stokers shall be installed in accordance with jurisdictional and environmental requirements, manufacturer's recommendations, and industry standards, as applicable.
- (j) Lighting. The equipment room shall be well-lit and have an emergency light source for use in the case of a power failure.
- (k) Emergency valves and controls. All emergency shut-off valves and controls shall be accessible from a floor, platform, walkway, or runway. Accessibility shall mean within a six (6) feet elevation of the standing space and not more than twelve (12) inches horizontally from the standing space edge.
- (l) Chimney or stack. Chimneys or stacks shall be installed in accordance with ~~[jurisdictional and environmental]~~ the department's requirements, manufacturer's recommendations, and industry standards, as applicable.
- (m) Ash removal. Ash removal systems shall be installed in accordance with jurisdictional and environmental requirements, manufacturer's recommendations, and industry standards, as applicable.

(n) Return pipe connections. The following shall apply to return pipe connections:

- (1) The return pipe connections of each boiler supplying a gravity return steam heating system shall be so arranged as to form a loop so that the water in each boiler cannot be forced out below the safe water level; and
- (2) Provision shall be made for cleaning the interior of the return piping at or close to the boiler. Washout openings should be used for return pipe connections and the washout plug placed in a tee or a cross so that the plug is directly opposite and as close as possible to the opening in the boiler.

(o) Bottom blowoff and drain valves. The following shall apply to bottom blowoff and drain valves of steam heating, hot-water heating, and hot-water supply heating boilers:

- (1) Each steam boiler shall have a bottom blowoff connection fitted with a valve or cock connected to the lowest water space practicable with a minimum size as shown in the NBIC. The discharge piping shall be full size to the point of discharge. Heating boilers having a capacity of twenty-five (25) gallons or less are exempt from the above requirements, except that they shall have a NPS three-fourths (3/4) minimum drain valve;
- (2) Each steam or hot-water boiler shall have one or more drain connections, fitted with valves or cocks connecting to the lowest water containing spaces. All parts of the boiler must be capable of being drained (the boiler design will dictate the number and size of drains). The minimum size of the drain piping, valves, and cocks shall be NPS 3/4. The discharge piping shall be full size to the point of discharge. When the blowoff connection is located at the lowest water containing space, a separate drain connection is not required; and
- (3) The minimum pressure rating of valves and cocks used for blowoff or drain purposes

shall be at least equal to the pressure stamped on the boiler but in no case less than thirty (30) psig. The temperature rating of such valves and cocks shall not be less than 250 degrees Fahrenheit.

(p) Each potable water heater shall have a bottom drain pipe connection fitted with a valve or cock connected with the lowest water space practicable. The minimum size bottom valve shall be NPS three-fourths (3/4). Any discharge piping connected to the bottom drain connection shall be full size to the point of discharge.

(q) Provisions for thermal expansion of expansion tanks and piping for steam heating, hot-water heating, and hot-water supply heating boilers shall comply with the following:

- (1) Expansion tanks for hot-water heating and hot-water supply heating boilers shall be installed so that all hot-water heating systems incorporating hot-water tanks or fluid relief columns prevent freezing under normal operating conditions;
- (2) Heating systems with an open expansion tank shall have an indoor overflow from the upper portion of the expansion tank in addition to an open vent, the indoor overflow shall be carried within the building to a suitable plumbing fixture or drain;
- (3) In closed heating systems an expansion tank shall be installed in a closed heating system that will be consistent with the volume and capacity of the system. If the system is designed for a working pressure of thirty (30) psig or less, the tank shall be suitably designed for a minimum hydrostatic test pressure of seventy-five (75) psig. Expansion tanks for systems designed to operate above thirty (30) psig shall be constructed in accordance with an acceptable code of construction. Provisions shall be made for draining the tank without emptying the system~~[, and]~~ except for pressurized tanks.
The minimum capacity of the closed-type

expansion tank should be determined from NBIC Part 1, Tables 3.7.9.1-a and 3.7.9.1-b or from the following formula where the necessary information available:

US Customary:

$$V_t = \frac{(0.00041T - 0.0466)V_s}{(Pa/P_f) - (Pa/P_o)}$$

where,

V_t = minimum volume of tanks, gallons

V_s = volume of system, not including tanks, gallons

T = average operating temperature, °F

t₁ = lower temperature

t₂ = higher temperature

P_a = atmospheric pressure, psia

P_f = fill pressure, psia

P_o = maximum operating pressure, psia

Metric:

$$V_t = \frac{(0.000738T - 0.3348)V_s}{(Pa/P_f) - (Pa/P_o)}$$

where,

V_t = minimum volume of tanks, liters

V_s = volume of system, not including tanks, liters

T = average operating temperature, °C

P_a = atmospheric pressure, kPa

P_f = fill pressure, kPa

P_o = maximum operating pressure, kPa; and

- (4) Hot-water supply systems. If a system is equipped with a check valve or pressure-reducing valve in the cold-water inlet line, consideration should be given to the installation of an airtight expansion tank or other suitable air cushion. Otherwise, due to the thermal expansion of the water, the safety relief valve may lift periodically. If an expansion tank is provided, it shall be constructed in accordance with an acceptable code of construction. Except for pre-pressurized tanks, which should be installed on the cold-water side, provisions shall be made for draining the tank without emptying the system[=] (for a typical acceptable

installation see Exhibit 7, titled, "Hot Water Boilers in Battery Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter).

(r) Piping for steam heating, hot-water heating, and hot-water supply boilers. Provisions shall be made for the expansion and contraction of steam and hot water mains connected to boiler(s) so there will be no undue strain transmitted to the boiler(s) [-] (for typical schematic arrangements of piping incorporating strain absorbing joints for steam and hot-water heating boilers see Exhibit 5, titled, "Steam Boilers in Battery - Pumped Return Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, Exhibit 6, titled, "Steam Boilers in Battery - Gravity Return Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, and Exhibit 7, titled, "Hot Water Boilers in Battery Acceptable Piping Installation", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter).

(s) Expansion tanks and piping for potable water heaters. The following shall apply to expansion tanks and piping for potable water heaters:

- (1) If a system is equipped with a check valve or pressure-reducing valve in the cold-water inlet line, consideration should be given to the installation of an airtight expansion tank or other suitable air cushion. Otherwise, due to the thermal expansion of the water, the safety relief valve may lift periodically. If an expansion tank is provided, it shall be constructed in accordance with an acceptable code of construction. Except for pre-pressurized diaphragm-type tanks, which should be installed on the cold-water side, provisions shall be made for draining the tank without emptying the system; [~~and~~]

- (2) Piping. Provisions shall be made for the expansion and contraction of hot water mains connected to potable water heater(s) so that there will be no undue stress transmitted to the potable water heater(s).

TABLE 3.7.9.1-a

EXPANSION TANK CAPACITIES FOR GRAVITY HOT-WATER SYSTEMS

| Based on a two-pipe system with average operating water temperature 170°F (77°C), using cast-iron column radiation with heat emission rate 150 Btu/hr/ft ² (473 W/m ²) equivalent direct radiation. | | |
|--|-----|---------------------------|
| Installed Equivalent Direct Radiation, ft ² (m ²) (Note) | No. | Tank Capacity, gallon (l) |
| up to 350 (33) | 1 | 18 (68) |
| up to 450 (42) | 1 | 21 (79) |
| up to 650 (60) | 1 | 24 (91) |
| up to 900 (84) | 1 | 30 (114) |
| up to 1,100 (102) | 1 | 35 (132) |
| up to 1,400 (130) | 1 | 40 (151) |
| up to 1,600 (149) | 2 | 60 (227) |
| up to 1,800 (167) | 2 | 60 (227) |
| up to 2,000 (186) | 2 | 70 (265) |
| up to 2,400 (223) | 2 | 80 (303) |

Note:

For systems with more than 2,400 ft² (223 m²) of installed equivalent direct water radiation, the required capacity of the cushion tank shall be increased on the basis of 1 gallon (3.79 l) tank capacity/33 ft² (3.1 m²) of additional equivalent direct radiation.

TABLE 3.7.9.1-b

EXPANSION TANK CAPACITIES FOR FORCED HOT-WATER SYSTEMS

| Based on average operating water temperature 195°F [91°C], fill pressure 12 psig [83 kPa], and maximum operating pressure 30 psig [200 kPa] | | |
|---|----------------------------|---------------------|
| Tank Capacities, gallon (l) | | |
| System Volume | Pressurized Diaphragm Type | Nonpressurized Type |
| 100 (379) | 9 (34) | 15 (57) |
| 200 (757) | 17 (64) | 30 (114) |
| 300 (1136) | 25 (95) | 45 (170) |
| 400 (1514) | 33 (125) | 60 (227) |
| 500 (1893) | 42 (159) | 75 (284) |
| 1,000 (3785) | 83 (314) | 150 (568) |
| 2,000 (7571) | 165 (625) | 300 (1 136) |

Note: System volume includes volume of water in boiler, radiation, and piping, not including the expansion tank. Expansion tank capacities are based on an

acceptance factor of 0.4027 for pre-pressurized types and 0.222 for non-pressurized types. For other cases or metric calculations see Chapter 12 of the 1996 HVAC Systems and Equipment Volume of the ASHRAE Handbook.

(t) Carbon monoxide (CO) detector/alarm. The owner or user shall install a carbon monoxide detector/alarm in equipment rooms where fuel fired boilers are located in accordance with manufacturer's recommendation, and industry standards, as applicable.

(u) Testing and final acceptance. The completed boiler shall be pressure tested in the shop or in the field in accordance with the original code of construction and documented on the appropriate manufacturer's data report.

- (1) The installer shall exercise care during installation to prevent loose weld material, welding rods, small tools, and miscellaneous scrap metal from getting into the vessel. Prior to making the final closure, the installer shall inspect the interior of the vessel and its appurtenances for the presence of foreign debris, and if present it shall be removed;
- (2) Subject to the department's requirements, a leak test may be performed on any components whose pressure test is not documented under the items' manufacturer's data report. This leak test should not exceed ninety (90%) of the lowest pressure relief device setpoint. The test data shall be recorded, and the data made available as required;
- (3) Prior to final acceptance, an operational test shall be performed on the completed installation. The test shall include operating controls, limit controls and safety devices, and witnessed as required by the department. The test data shall be recorded, and the data made available to the department as evidence that the installation complies with provisions of the governing code(s) of construction; and

- (4) All fuel fired boiler and fuel fired pressure vessel combustion air-fuel ratios shall be analyzed, adjusted, and values documented during commissioning to meet emission requirements and limits of the manufacturer.
[Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

§12-223.1-14 Preventive maintenance schedule.

Maintenance. The owner or user of the pressure retaining item is responsible for ensuring that all equipment is maintained as listed in this section. Steam boiler maintenance shall be performed as per ASME BPVC Section VI, Steam Boiler - Sec 7.7 Maintenance, and ASME CSD-1, Part CM (see ~~[Exhibits 1 and 2]~~ Exhibit 1, titled, "Recommended Preventative Maintenance Schedule", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, and Exhibit 2, titled, "Table D-1-1 Periodic Testing Recommended Checklist", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter). Hot-water boiler and hot-water heating boiler maintenance shall be performed as per ASME BPVC Section VI, Hot-Water Boiler and Hot-Water Heating Boiler - Sec 8.7 Maintenance, and ~~[ASME CSD-1, Part CM (see chart below Exhibit 1)]~~ Exhibit 1, titled, "Recommended Preventative Maintenance Schedule", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter, and Exhibit 2, titled, "Table D-1-1 Periodic Testing Recommended Checklist", dated October 1, 2023, which is made a part of this chapter and located at the end of this chapter." [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

Recommended Preventive Maintenance Schedule

D-1 INTRODUCTION

Operation and maintenance instructions in this Appendix are intended for general applications. Table D-1-1 presents a periodic checklist for these recommended preventive maintenance tasks. For specific operating and maintenance instructions, consult the equipment manufacturer.

D-2 DAILY

- (a) Check gages, monitors, and indicators.
- (b) Check instrument and equipment settings.
- (c) For high-pressure boilers, test all low-water fuel cutoff devices and alarms.
- (d) Check burner flame.

D-3 WEEKLY

- (a) For low-pressure boilers, test all low-water fuel cutoff devices and alarms.
- (b) Check igniter.
- (c) Check flame signal strength.
- (d) Check flame failure detection system.
- (e) Check firing rate control.
- (f) Make aural and visual check of pilot and main fuel valves.

D-4 MONTHLY

- (a) Check flue, vent, stack, or outlet dampers.
- (b) Test low draft, fan air pressure, and damper position interlocks.
- (c) Check low fire start interlock.
- (d) Test high and low oil pressure and oil temperature interlocks.
- (e) Test high and low gas-pressure interlocks.

D-5 SEMIANNUALLY

- (a) Recalibrate all indicating and recording gages.
- (b) For steam boilers, perform a slow drain test of all the low-water fuel cutoff devices.
- (c) Check flame failure detection system components.
- (d) Check firing rate control.
- (e) Check piping and wiring of all interlocks and shutoff valves.
- (f) Inspect burner components.

(f) Test safety/safety relief valves in accordance with ASME Boiler and Pressure Vessel Code, Sections VI and VII.

(g) For parallel positioning systems, verify actuator-to-fuel-valve couplings and actuator-to-damper couplings are properly connected.

D-6 ANNUALLY

- (a) Flame failure detection system, conduct pilot turn-down test.
- (b) Flame failure detection system, test for hot refractory hold-in.
- (c) Check dual fuel change over control.
- (d) Test high-limit and operating temperature or steam pressure controls.
- (e) Replace vacuum tubes, scanners, or flame rods in accordance with manufacturer's instructions.
- (f) Conduct a combustion test.
- (g) Check all coils and diaphragms; test other operating parts of all safety shutoff and control valves.
- (h) Test safety shutoff valve proof-of-closure switch(es) in accordance with manufacturer's instructions.
- (i) Perform leakage test on pilot and main gas and/or oil fuel valves and valve proving systems in accordance with manufacturer's instructions.
- (j) Test purge air switch in accordance with manufacturer's instructions.
- (k) Test air/steam interlock in accordance with manufacturer's instructions.
- (l) Test burner position interlock in accordance with manufacturer's instructions.
- (m) Test rotary cup interlock in accordance with manufacturer's instructions.
- (n) Test low fire start interlock in accordance with manufacturer's instructions.
- (o) Test for gas leakage on all threaded and flanged connections.
- (p) Verify burner is operating within manufacturer's specifications.

D-7 AS REQUIRED

- (a) Recondition or replace low-water fuel cutoff device.
- (b) For oil-fired burners, clean atomizers and oil strainers.
- (c) For gas-fired burners, check sediment trap and gas strainers.
- (d) Flame failure detection system, conduct pilot turn-down test.
- (e) Flame failure detection system, test for hot refractory hold-in.

(h) For combustion air fan variable frequency drive applications, test interlocks wired to the primary flame safety device including drive fault interlocks and improper speed control interlocks.

Table D-1-1 Periodic Testing Recommended Checklist

| Frequency [Note (1)] | | | | | | | | Accomplished By | |
|----------------------|-----|-----|-----|-----|-----|---|---|-----------------|--------------------|
| D | W | M | S/A | A | A/R | Component/Item | Recommended Test | Boiler Operator | Service Technician |
| X | ... | ... | ... | ... | ... | Gages, monitors, and indicators | Make visual inspection and record readings in boiler log. | X | ... |
| ... | ... | ... | X | ... | ... | Gages, monitors, and indicators | Recalibrate all indicating and recording gages. | ... | X |
| X | ... | ... | ... | ... | ... | Instrument and equipment settings | Make visual check against factory-recommended specifications. | X | ... |
| X | ... | ... | ... | ... | ... | Low-water fuel cutoff devices (high-pressure boilers) | Test all low-water fuel cutoff devices according to manufacturer's instructions. | X | ... |
| ... | X | ... | ... | ... | ... | Low-water fuel cutoff devices (low-pressure boilers) | Test all low-water fuel cutoff devices according to manufacturer's instructions. | X | ... |
| ... | ... | ... | X | ... | ... | Low-water fuel cutoff devices (steam boilers) | For steam boilers, perform a slow drain test in accordance with ASME Boiler and Pressure Vessel Code, Section VI. | ... | X |
| ... | ... | ... | ... | ... | X | Low-water fuel cutoff devices | Recondition or replace each low-water fuel cutoff device. | ... | X |
| ... | ... | ... | ... | X | ... | Operating and/or limit controls | Test high-limit and operating temperature or steam pressure controls. | ... | X |
| ... | ... | ... | ... | ... | X | Safety/safety relief valves | Test safety/safety relief valves in accordance with ASME Boiler and Pressure Vessel Code, Sections VI and VII. | ... | X |
| ... | ... | X | ... | ... | ... | Flue, vent, stack, or outlet dampers | Make visual inspection of linkage, and check for proper operation. | X | ... |
| X | ... | ... | ... | ... | ... | Burner flame | Make visual inspection of burner flame [Note (2)]. | X | ... |
| ... | X | ... | ... | ... | ... | Igniter | Make visual inspection, and check flame signal strength if meter-fitted. | X | ... |
| ... | X | ... | ... | ... | ... | Flame signal strength | If flame signal meter is installed, read and log. For both pilot and main flames, notify service organization if readings are very high, very low, or fluctuating (refer to manufacturer's instructions). | X | ... |
| ... | X | ... | ... | ... | ... | Flame failure detection system | Close manual fuel supply for (1) pilot, (2) main fuel cock, and/or (3) valve(s). Check safety shutdown timing and log. | X | ... |

ASME CSD-1-2021

EXHIBIT 2 Continued

| Frequency [Note (1)] | | | | | | | | Accomplished By | |
|----------------------|-----|-----|-----|-----|-----|--|--|-----------------|--------------------|
| D | W | M | S/A | A | A/R | Component/Item | Recommended Test | Boiler Operator | Service Technician |
| ... | ... | ... | X | ... | ... | Flame failure detection system | Check flame failure detection system components, such as vacuum tubes, amplifier, and relays. | ... | X |
| ... | ... | ... | ... | X | ... | Flame failure detection system | Replace vacuum tubes, scanners, or flame rods in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | X | Flame failure detection system (pilot turndown test) | Conduct pilot turndown test according to manufacturer's instructions. This test is required annually and after any adjustments to flame scanner mount or pilot burner. | ... | X |
| ... | ... | ... | ... | X | X | Flame failure detection system (hot refractory hold in test) | Test for hot refractory hold-in. This test is required annually and after any adjustments to the flame scanner mount or pilot burner. | ... | X |
| ... | X | ... | ... | ... | ... | Firing rate control | Check firing rate control, and verify factory settings (refer to manufacturer's instructions). | X | ... |
| ... | ... | ... | X | ... | ... | Firing rate control | Check firing rate control, and verify factory settings (refer to manufacturer's instructions). | ... | X |
| ... | ... | ... | ... | X | ... | Firing rate control | Conduct a combustion test, and verify settings are in accordance with manufacturer's instructions. | ... | X |
| ... | X | ... | ... | ... | ... | Pilot and/or main fuel valves | Open limit switch, and make aural and visual check. Check valve position indicators, and check fuel meters if so fitted. | X | ... |
| ... | ... | ... | ... | X | ... | Pilot and/or main fuel valves | Check all coils and diaphragms. Test other operating parts of all safety shutoff and control valves. | ... | X |
| ... | ... | ... | ... | X | ... | Pilot and/or main fuel valves | Test fuel valve interlock switch in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | ... | Pilot and/or main fuel valves | Perform leakage test on pilot and main gas and/or oil fuel valves, in accordance with manufacturer's instructions. | ... | X |
| ... | ... | X | ... | ... | ... | Low draft, fan, air pressure, and damper position interlocks | Test low draft, fan, air pressure, and damper position interlocks according to manufacturer's instructions. | X | ... |

EXHIBIT 2 Continued

| Frequency [Note (1)] | | | | | | Component/Item | Recommended Test | Accomplished By | |
|----------------------|-----|-----|-----|-----|-----|--|---|-----------------|--------------------|
| D | W | M | S/A | A | A/R | | | Boiler Operator | Service Technician |
| ... | ... | ... | ... | X | ... | Low draft, fan, air pressure, and damper position interlocks | Test purge switch in accordance with manufacturer's instructions. | ... | X |
| ... | ... | X | ... | ... | ... | Low fire start interlock | Check low fire start interlock according to manufacturer's instructions. | X | ... |
| ... | ... | ... | ... | X | ... | Low fire start interlock | Test low fire start interlock according to manufacturer's instructions. | ... | X |
| ... | ... | X | ... | ... | ... | Oil pressure and temperature interlocks | Test high and low oil pressure and temperature interlocks according to manufacturer's instructions. | X | ... |
| ... | ... | X | ... | ... | ... | Gas pressure interlocks | Test high and low gas-pressure interlocks according to manufacturer's instructions. | X | ... |
| ... | ... | ... | X | ... | ... | Interlocks and valves | Check piping and wiring of all interlocks and shutoff valves. | ... | X |
| ... | ... | ... | ... | X | ... | Atomizing air/steam interlock | Test air/steam interlock in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | ... | Burner position interlock | Test burner position interlock in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | ... | Rotary cup burner interlock | Test rotary cup interlock in accordance with manufacturer's instructions. | ... | X |
| ... | ... | ... | X | ... | ... | Burner components | Inspect burner components according to manufacturer's instructions. | ... | X |
| ... | ... | ... | ... | X | X | Burner components | Check dual fuel change over control. If automatically controlled by gas utility, perform test under the supervision of gas utility. | ... | X |
| ... | ... | ... | ... | ... | X | Burner components | For oil-fired burners, clean atomizers and oil strainers. | ... | X |
| ... | ... | ... | ... | ... | X | Burner components | For gas-fired burners, check sediment trap and gas strainer. | ... | X |

GENERAL NOTE: See manufacturer's instructions.

NOTES:

(1) D = daily; W = weekly; M = monthly; S/A = semiannually; A = annually; A/R = as-required.

(2) Caution should be used when viewing burner flame. Personal protective equipment, such as filtered eyewear, may be necessary.

EXHIBIT 3 October 1, 2023**FORM I-1 REPORT OF BOILER INSTALLATION**in accordance with provisions of the *National Board Inspection Code*INSTALLATION: ☐ New ☐ Reinstalled ☐ Second Hand Date ____/____/____

| INSTALLER | | OWNER-USER | | OBJECT LOCATION | |
|------------------|--|--------------------|--|------------------|--|
| Name | | Name | | Name | |
| Street | | Street, PO Box, RR | | Street | |
| City, State, ZIP | | City, State, ZIP | | City, State, ZIP | |

| | | | | | | | |
|----------------------------|------------------------------------|---|---------------|---|-------------------------|--|------------|
| Jurisdiction No. | National Board No. | Manufacturer | | Mfg. Serial No. | Year Built | Boiler Type | Boiler Use |
| Fuel | Method of Firing | Btu/kW input | Btu/kW output | Operating PSI | ASME Code Designator(s) | <input type="checkbox"/> A <input type="checkbox"/> S <input type="checkbox"/> U <input type="checkbox"/> HLW <input type="checkbox"/> M <input type="checkbox"/> E <input type="checkbox"/> H <input type="checkbox"/> Other | |
| Stamped MAWP | Heating Surface, Sq. Ft. | Cast Iron | Manhole | Specific On-Site Location, i.e., Utility Room | | | |
| Pressure Relief Valve Size | Pressure Relief Valve Set Pressure | Pressure Relief Valve Capacity <input type="checkbox"/> Btu/hr <input type="checkbox"/> Lb/hr | Manufacturer | Low-Water Fuel Cutoff Mfg. No. _____ | | | |
| 1. _____ | 1. _____ | 1. _____ | 1. _____ | Probe Type | _____ | | |
| 2. _____ | 2. _____ | 2. _____ | 2. _____ | Flow Switch | _____ | | |
| 3. _____ | 3. _____ | 3. _____ | 3. _____ | Float & Chamber | _____ | | |
| 4. _____ | 4. _____ | 4. _____ | 4. _____ | Other (Specify) | _____ | | |

| | | | | | |
|---|--|---|--|---|--|
| PRESSURE/ALTITUDE GAGE: Dial Graduation _____ Valve/Cock Size _____ MAWP _____ Pipe Connection Size _____ Siphon or Equivalent Device <input type="checkbox"/> Yes <input type="checkbox"/> No | | EXPANSION TANK: ASME Constructed <input type="checkbox"/> Yes <input type="checkbox"/> No Other _____ MAWP _____ No. Gallons _____ | | VENTILATION AND COMBUSTION AIR Unobstructed Opening (sq. in.) _____ Power Ventilator Fan (CFM) _____ | |
| WATER LEVEL INDICATORS: Number of Gage Glasses _____ Number of Remote Indicators _____ Size of Connection Piping _____ | | FEED WATER SUPPLY: Number of Feeding Means _____ Pipe Size _____ Stop Valve Size _____ MAWP _____ Check Valve Size _____ MAWP _____ | | | |
| STOP VALVES: Number of Valves _____ Valve Size _____ | | EXTERNAL PIPING ASME CODE: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Other _____ | | FUEL TRAIN: <input type="checkbox"/> CSD-1 <input type="checkbox"/> NFPA-85 <input type="checkbox"/> Other _____ | |
| BOTTOM BLOWDOWN CONNECTIONS: Number of Valves _____ Valve Size _____ MAWP _____ Piping Run Full Size <input type="checkbox"/> Yes <input type="checkbox"/> No | | POTABLE WATER HEATER UNIQUE REQUIREMENTS <input type="checkbox"/> Yes <input type="checkbox"/> No Inlet Stop Valve Size _____ MAWP _____ Outlet Stop Valve Size _____ MAWP _____ Drain Valve Size _____ Thermometer <input type="checkbox"/> Yes | | | |
| Manufacturer's Certification Attached: <input type="checkbox"/> Yes <input type="checkbox"/> No Does boiler replace existing one: <input type="checkbox"/> Yes <input type="checkbox"/> No | | Clearance from walls and floors: Side _____ Bottom _____ Top _____ | | | |

Additional recommendations and remarks by installer:

| | | |
|---|--|--|
| Installer Name (PRINT) _____ Registration # _____ | | I HEREBY CERTIFY THAT THE INSTALLATION COMPLIES WITH NBIC, Part 1 Installer Signature _____ |
|---|--|--|

EXHIBIT 3 Continued

1.4.5.1.1 GUIDE FOR COMPLETING NATIONAL BOARD BOILER INSTALLATION REPORT (21)

- 1) **INSTALLATION:** Indicate the type and date of installation — new, reinstalled, or second hand.
- 2) **INSTALLER:** Enter the installer's name and physical address.
- 3) **OWNER-USER:** Enter the name and mailing address of the owner-user of the boiler.
- 4) **OBJECT LOCATION:** Enter the name of the company or business and physical address where the installation was made.
- 5) **JURISDICTION NO.:** Enter the Jurisdiction number if assigned at the time of installation.
- 6) **NATIONAL BOARD NO.:** Enter the assigned National Board number.
Note:
Cast section boilers do not require National Board registration.
- 7) **MANUFACTURER:** Enter the boiler manufacturer's name.
- 8) **MFG. SERIAL NO.:** Enter the assigned boiler manufacturer's serial number.
- 9) **YEAR BUILT:** Enter the year the boiler was manufactured.
- 10) **BOILER TYPE:** Enter the type of boiler, e.g., watertube, firetube, cast, electric, etc.
- 11) **BOILER USE:** Enter the service for which or for how the boiler will be used, e.g., heating (steam or water), potable water, etc.
- 12) **FUEL:** Enter the type of fuel, e.g., natural gas, diesel, wood, etc. If more than one fuel type, enter the types for which the boiler is equipped.
- 13) **METHOD OF FIRING:** Enter the method of firing, e.g., automatic, hand, stoker, etc.
- 14) **Btu/kW INPUT:** Enter the Btu/hr or kW input of the boiler.
- 15) **Btu/kW OUTPUT:** Enter the Btu/hr or kW output of the boiler.
- 16) **OPERATING PSI:** Enter the allowed operating pressure.
- 17) **ASME CODE DESIGNATOR'S:** Check the ASME Code designator shown on the code nameplate or stamping of other certification mark (specify).
- 18) **STAMPED MAWP:** Enter the maximum allowable working pressure shown on the nameplate or stamping.
- 19) **HEATING SURFACE SQ. FT.:** Enter the boiler heating surface shown on the stamping or nameplate.
Note:
This entry is not required for electric boilers.

EXHIBIT 3 Continued

- 20) CAST BOILER: Enter the total number of sections for cast boilers.
Note:
Not all cast boilers are sectional. Mono-block cast boilers should be described as having one (1) section.
- 21) MANHOLE: Indicate whether the boiler has a manway.
- 22) SPECIFIC ON-SITE LOCATION: Enter the on-site location of the boiler in sufficient detail to allow location of that boiler.
- 23) PRESSURE RELIEF VALVE SIZE: Enter the inlet and outlet size of all installed boiler safety or safety relief valves.
- 24) PRESSURE RELIEF VALVE SET PRESSURE: Enter the set pressure of all installed boiler safety or safety relief valves.
- 25) PRESSURE RELIEF VALVE CAPACITY: Enter the capacity in either lbs. of steam per hour or Btu/hr for each installed boiler safety or safety relief valve.
- 26) MANUFACTURER: Enter the manufacturer of each installed boiler safety and safety relief valve.
- 27) LOW-WATER FUEL CUTOFF: Enter the manufacturer's name, type, number, and maximum allowable working pressure of all installed low-water fuel cutoff devices.
- 28) PRESSURE/ALTITUDE GAGE: Enter the dial range of the installed pressure or altitude gage, cutout valve or cock size, a maximum allowable working pressure, and gage pipe connection size. For steam boilers, indicate gage siphon or equivalent device installed.
- 29) EXPANSION TANK: Indicate code of construction of installed expansion tank, tank maximum allowable working pressure, and tank capacity in gallons.
- 30) VENTILATION AND COMBUSTION AIR: Indicate total square inches of unobstructed opening or total cubic feet per minute of power ventilator fan(s) available for ventilation and combustion air.
- 31) WATER LEVEL INDICATORS: Enter the number of gage glasses and/or remote indicators and connecting pipe size.
- 32) FEEDWATER SUPPLY: Enter the total number of feeding means, connecting pipe size, stop and check valve size, and maximum allowable working pressure.
- 33) STOP VALVE(S): Enter the number of stop valves installed, valve size, and maximum allowable working pressure.
- 34) POTABLE WATER HEATER UNIQUE REQUIREMENTS: Indicate if stop valves are installed and, if so, enter size and maximum allowable working pressure. Enter drain valve size and indicate installation of thermometer at or near boiler outlet.
- 35) MANUFACTURER'S CERTIFICATION ATTACHED: Indicate if manufacturer's certificate is attached (mandatory for new installations).
- 36) CLEARANCE REQUIREMENTS AND REPLACEMENT OF EXISTING BOILER: Indicate clearances and whether the installation replaced an existing boiler.
- 37) ADDITIONAL REMARKS: Enter any remarks or comments you deem appropriate.
- 38) INSTALLER'S NAME AND SIGNATURE: Print installer's name and registration number and sign completed report.

MANUFACTURER'S/INSTALLING CONTRACTOR'S REPORT FOR ASME CSD-1

Certification and Reporting (CG-500) for Controls and Safety Devices
(This form is a guideline and not part of ASME CSD-1-2021.)

Unit Manufacturer

Name _____
Address _____ Zip _____
Telephone _____ Fax _____

Unit Identification (Boiler)

Manufacturer's Model # _____ Year Built _____
ASME Section I _____ Section IV _____ Nat. Bd. # _____
UL # _____ CSA # _____
Jurisdiction _____

Steam

Maximum W.P. _____ psig
Minimum Safety Valve Cap. _____ lb/hr

Hot Water

Maximum W.P. _____ psig
Maximum Temp. _____ °F
Minimum Safety Relief Valve Cap. _____ lb/hr or Btu/hr

Boiler Unit Description (type) _____

If Modular (no. of modules) _____

Boiler Unit Capacity (output) _____

Burner

Manufacturer _____ Model _____
UL or CSA # _____ Serial # _____

Fuels (as shipped) _____

Indicate Units (where not applicable, indicate "N/A")

Gas Manifold Pressure _____
Oil Nozzle/Delivery Pressure (at maximum input) _____
High Gas Pressure Switch Setting _____
Low Oil Pressure Switch Setting _____

Installation Location (if known)

Customer Name _____
Address _____
City _____ State _____ Zip _____
Telephone _____ Fax _____

EXHIBIT 4 Continued

Certification and Reporting (CG-500) for Controls and Safety Devices (Cont'd) (This form is a guideline and not part of ASME CSD-1-2021.)

| Control/Device | Manufacturer | Model # | Operational Test Performed, Date |
|--|--------------|---------|----------------------------------|
| Operating Controls | | | |
| Low-Water Fuel Cutoff CW-120(a), CW-140 | | | |
| Forced Circulation CW-210 | | | |
| Steam Pressure CW-310(b) | | | |
| Water Temperature CW-410(b) | | | |
| Safety Controls | | | |
| Low-Water Fuel Cutoff CW-120(a), CW-120(b), CW-130, CW-140 | | | |
| Forced Circulation CW-210(c) | | | |
| High Steam Pressure Limit CW-310(c) | | | |
| High Water Temperature Limit CW-410(b) | | | |
| Fuel Safety Shutoff Valve, Main CF-180(b) | | | |
| Pilot Safety Shutoff Valve CF-180(e) | | | |
| Atomizing Medium Switch CF-450(b) | | | |
| Combustion Air Switch CF-220 | | | |
| High Gas Pressure CF-162 | | | |
| Low Gas Pressure CF-162 | | | |
| Low Oil Pressure CF-450(a) | | | |
| High Oil Temperature CF-450(c) | | | |
| Low Oil Temperature CF-450(d) | | | |
| Purge Air Flow CF-210 | | | |
| Flame Safeguard (Primary) CF-310, CF-320 | | | |
| Flame Detector CF-310, CF-320 | | | |
| Low Fire Start | | | |
| Low Fire Start Switch CF-610 | | | |
| Safety or Safety Relief Valve(s) | | | |
| CW-510, CW-520 | | | |

EXHIBIT 4 Continued

Certification and Reporting (CG-500) for Controls and Safety Devices (Cont'd)
(This form is a guideline and not part of ASME CSD-1-2021.)

Manufacturer _____ Operational Test Performed, Date _____ / _____ / _____

Model _____

Size _____

Capacity _____ lb/hr or Btu/hr

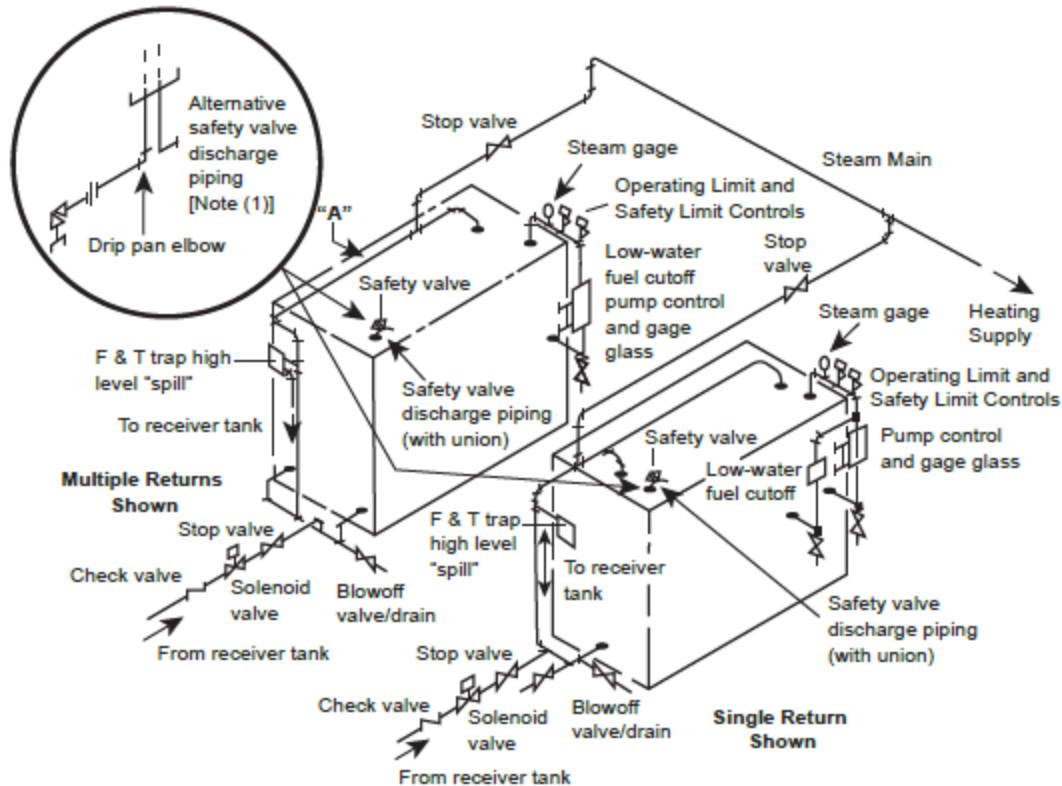
Representing Equipment Manufacturer, Name _____

Signature _____ Date _____

Representing Installing Contractor, Name _____

Signature _____ Date _____

**Steam Boilers in Battery - Pumped Return
Acceptable Piping Installation**



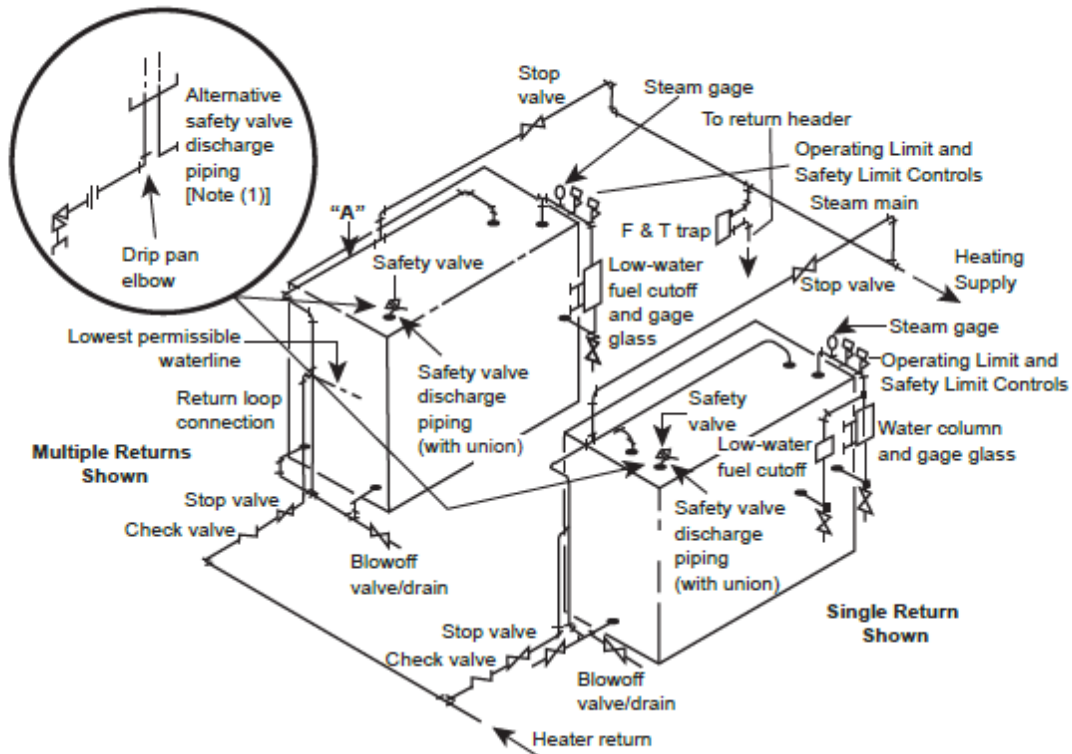
General Note:

Return connections shown for multiple boiler installation may not always ensure that the system will operate properly. In order to maintain proper water levels in multiple boiler installations, it may be necessary to install supplementary controls or suitable devices.

Note:

(1) Recommended for 1 in. (25mm) and larger safety valve discharge.

**Steam Boilers in Battery - Gravity Return
Acceptable Piping Installation**



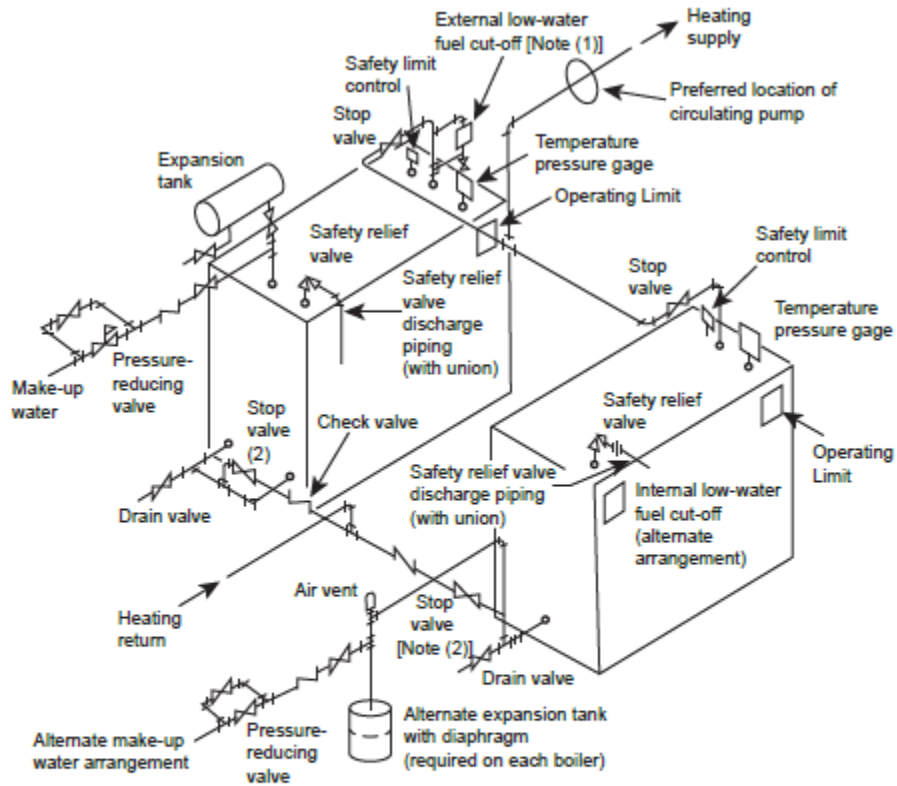
General Note:

Return connections shown for multiple boiler installation may not always ensure that the system will operate properly. In order to maintain proper water levels in multiple boiler installations, it may be necessary to install supplementary controls or suitable devices.

Note:

(1) Recommended for 1 in. (25mm) and larger safety valve discharge.

**Hot Water Boilers in Battery
Acceptable Piping Installation**



General Notes:

(1) Recommended control. See ASME Section IV, HG-614. Acceptable shutoff valve or cocks in the connecting piping may be installed for convenience or control testing and/or service.

(2) The common return header stop valves may be located on either side of the check valves.

EXHIBIT 8 October 1, 2023

EXPANSION TANK CAPACITIES FOR GRAVITY HOT-WATER SYSTEMS

| Based on two-pipe system with average operating water temperature 170°F (77°C), using cast-iron column radiation with heat emission rate 150 Btu/hr/ft ² (473 W/m ²) equivalent direct radiation. | | |
|--|-----|---------------------------|
| Installed Equivalent Direct Radiation, ft ² (m ²) (Note) | No. | Tank Capacity, gallon (l) |
| up to 350 (33) | 1 | 18 (68) |
| up to 450 (42) | 1 | 21 (79) |
| up to 650 (60) | 1 | 24 (91) |
| up to 900 (84) | 1 | 30 (114) |
| up to 1,100 (102) | 1 | 35 (132) |
| up to 1,400 (130) | 1 | 40 (151) |
| up to 1,600 (149) | 2 | 60 (227) |
| up to 1,800 (167) | 2 | 60 (227) |
| up to 2,000 (186) | 2 | 70 (265) |
| up to 2,400 (223) | 2 | 80 (303) |

Note:

For systems with more than 2,400 ft² (223 m²) of installed equivalent direct water radiation, the required capacity of the cushion tank shall be increased on the basis of 1 gallon (3.79 l) tank capacity/33 ft² (3.1 m²) of additional equivalent direct radiation.

EXHIBIT 9 October 1, 2023

MINIMUM POUNDS OF STEAM PER HOUR PER SQUARE FOOT OF HEATING SURFACE
lb steam/hr ft² (kg steam/hr m²)

| | Firetube Boiler | Watertube Boiler |
|------------------------------|-----------------|------------------|
| Boiler Heating Surface | | |
| Hand-fired | 5 (24) | 6 (29) |
| Stoker-fired | 7 (34) | 8 (39) |
| Oil, gas, or pulverized coal | 8 (39) | 10 (49) |
| Waterwall Heating Surface | | |
| Hand-fired | 8 (39) | 8 (39) |
| Stoker-fired | 10 (49) | 12 (59) |
| Oil, gas, or pulverized coal | 14 (68) | 16 (78) |
| Copper-finned Watertubes | | |
| Hand-fired | | 4 (20) |
| Stoker-fired | | 5 (24) |
| Oil, gas, or pulverized coal | | 6 (29) |

Notes:

- When a boiler is fired only by a gas having a heat value not in excess of 200 Btu/ft.³ (7.5MJ/m³), the minimum relieving capacity should be based on the values given for hand-fired boilers above.
- The heating surface shall be computed for that side of the boiler surface exposed to the products of combustion, exclusive of the superheating surface. In computing the heating surface for this purpose only the tubes, fireboxes, shells, tubesheets, and the projected area of headers need to be considered, except that for vertical firetube steam boilers, only that portion of the tube surface up to the middle gage cock is to be computed.
- For firetube boiler units exceeding 8,000 Btu/ft.² (9,085 J/cm.²) (total fuel Btu (J) Input divided by total heating surface), the factor from the table will be increased by 1 (4.88) for every 1,000 Btu/ft.² (1,136 J/cm.²) above 8,000 Btu/ft.² (9,085 J/cm.²). For units less than 7,000 Btu/ft.² (7,950 J/cm.²), the factor from the table will be decreased by 1 (4.88).
- For watertube boiler units exceeding 16,000 Btu/ft.² (18,170 J/cm.²) (total fuel Btu input divided by the total heating surface) the factor from the table will be increased by 1 (4.88) for every 1,000 Btu/ft.² (1,136 J/cm.²) above 16,000 Btu/ft.² (18,170 J/cm.²). For units with less than 15,000 Btu/ft.² (17,034 J/cm.²), the factor in the table will be decreased by 1 (4.88) for every 1,000 Btu/ft.² (1,136 J/cm.²) below 15,000 Btu/ft.² (17,034 J/cm.²).

4. Chapter 12-224.1, Hawaii Administrative Rules, entitled "Pressure Vessels", is amended and compiled to read as follows:

"HAWAII ADMINISTRATIVE RULES

TITLE 12

DEPARTMENT OF LABOR AND INDUSTRIAL RELATIONS

SUBTITLE 8

HAWAII OCCUPATIONAL SAFETY AND HEALTH DIVISION

PART 10

BOILER AND PRESSURE VESSELS

CHAPTER 224.1

PRESSURE VESSELS

| | |
|-------------|--|
| §12-224.1-1 | Scope |
| §12-224.1-2 | General requirements |
| §12-224.1-3 | Responsibilities of owners and users |
| §12-224.1-4 | Inspections |
| §12-224.1-5 | Technical installation requirements |
| §12-224.1-6 | Installation of pressure vessels for human occupancy (PVHOs) |

Historical Note: This chapter is based substantially upon chapter 224. [Eff 12/6/82; am 12/19/83; am 12/8/86; am and comp 12/6/90; am 11/18/12; R 12/21/19]

§12-224.1-1 Scope. The requirements in this section shall apply to pressure vessels, except for the exemptions in section 12-220-2.1 (c) (3) and (4), and is not limited to the following:

- (1) All unfired pressure vessels with design pressure exceeding fifteen (15) psi or five (5) cubic feet in volume;
- (2) Hot water storage tanks with a nominal water containing capacity greater than [~~120~~] one hundred-twenty (120) gallons;
- (3) Unfired autoclaves greater than five (5) cubic feet in volume regardless of operating pressure;
- (4) Fired or self-contained sterilizers, jacketed kettles, steam cookers, and autoclaves exceeding a heat input of three (3.0) kw or a volume of one and a half (1.5) cubic feet;
- (5) Unfired jacketed kettles with a cooking capacity of forty (40) gallons or more;
- (6) Heat exchangers with a heat input exceeding 200,000 Btu/H or five (5) cubic feet in volume;
- (7) Hydro pneumatic tanks exceeding one hundred twenty (120) gallons in volume;
- (8) Expansion tanks exceeding five (5) cubic feet in volume for hot water heating system; and
- (9) Pressure Vessels for Human Occupancy (PVHOs). [Eff and comp; 12/21/19; comp] (Auth: HRS §397-4)
(Imp: HRS §397-4)

§12-224.1-2 General requirements. (a) All pressure vessels in operation in this jurisdiction

shall have a current and valid operating permit issued to a specific location by the department. Changes in ownership shall require notifying the department and may require reinspection.

(b) All pressure vessels shall bear the ASME Code Symbol Stamp "HLW", "U", "U2", "U3", "RP" or ASME certification mark with the appropriate designator and the NB registration number. The ASME/NB stamping shall be legible, and insulation and paint shall not conceal the stamping.

(c) Upon completion of the installation of a new pressure vessel, it shall be marked by an inspector employed by the department with a state serial number, consisting of letters and figures not less than 5/16 inch in height and arranged as HPV####-Year.

(d) Replacement of an existing pressure vessel shall be in accordance with the requirements for new installations. [Eff and comp 12/21/19;
comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-224.1-3 Responsibilities of owners and users. (a) The owner or user of the pressure vessel is responsible for ensuring that all equipment meet the requirements of the jurisdiction at the point of installation including licensing, registration, and certification of those performing installations.

(b) Owners or users shall ensure operating permit renewal inspections are completed prior to the permit expiration date. It is the responsibility of the owner or user to schedule pressure vessel permit renewal inspections.

(c) Operation of pressure vessels with expired operating permits is not allowed and may be subject to penalties as described in this part. Requests for the extension of operating permits may be considered for valid reasons by submitting a written request to the chief boiler inspector. The unavailability of special inspectors to conduct inspections is not a valid reason for requesting permit extensions;

inspectors employed by the department may perform the inspections in the absence of special inspectors.

[Eff and comp 12/21/19; comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-224.1-4 Inspections. (a) Initial acceptance inspections shall be conducted and witnessed by the chief boiler inspector or deputy inspector designee. These inspections may include internal inspection where construction permits, post installation pressure test at the inspector's discretion, and operational testing of controls and safety devices by the installer, contractor, or owner. Tests shall be made in conformance with the procedures set forth in ASME BPVC, NBIC, and this part.

(b) Permit renewal inspections. Pressure vessels shall receive a permit renewal inspection every two years. Pressure vessels that are under the ownership, inspection, and supervision of an OUIO may be inspected on a different inspection frequency upon approval by the chief boiler inspector.

(c) Additional inspection requirements include the following:

- (1) Internal inspections, where construction permits and hydrostatic testing, which may be required at the inspector's discretion, shall occur when deemed necessary for continued safe operation of the pressure vessel;
- (2) The owner shall develop safety policies and procedures for entering pressure vessels and confined spaces; ~~and~~
- (3) Pressure vessels used for the treatment of wood shall be scrubbed clean for close visual inspection every ten years~~[-]~~;
- (4) The installer shall exercise care during installation to prevent loose weld material, welding rods, small tools, and miscellaneous scrap metal from getting into the vessel. Prior to making the final closure, the installer shall inspect the interior of the

vessel and its appurtenances for the presence of foreign debris, and if present the debris shall be removed;

- (5) Subject to the department's requirements, a leak test may be performed on any components whose pressure test is not documented under the items' manufacturer's data report. This leak test should not exceed ninety percent (90%) of the lowest pressure relief device setpoint. The test data shall be recorded, and the data made available as required; and
- (6) Prior to final acceptance, an operational test shall be performed on the completed installation. The test shall include operating controls, limit controls and safety devices, and witnessed as required by the department. The test data shall be recorded, and the data made available to the department as evidence that the installation complies with provisions of the governing code(s) of construction. [Eff and comp 12/21/19; am and comp] (Auth: HRS §397-4) (Imp: HRS §397-4)

§12-224.1-5 Technical installation requirements.

(a) All pressure vessels shall be installed as required in section 12-220-2.1 and this chapter. An application for installation permit shall be submitted to the department prior to the commencement of work. Pressure vessels installed without an installation permit may be subject to citations with penalties up to \$10,000 per day pursuant to section 12-220-22.

(b) First acceptance inspection and certification. The following shall apply to first acceptance inspections and certifications:

- (1) Upon completion of the installation, the contractor or owner shall arrange for acceptance inspection with the department;
- (2) The installing contractor shall operationally test the pressure vessel controls and safety

devices prior to scheduling first acceptance inspection with the department;

- (3) The chief boiler inspector or designated deputy inspector shall conduct the first data inspection, acceptance inspection, and apply the required state pressure vessel identification marking; and
- (4) The installing contractor shall test the pressure vessel as directed and witnessed by the chief boiler inspector or designated deputy inspector.

(c) Clearances. All pressure vessel installations must allow sufficient clearance for normal operation, maintenance, and inspection (internal and external). Except as otherwise authorized by the department, clearances for pressure vessels shall not be less than three (3) feet where inspection openings are provided. Vessels having manholes shall have five (5) feet clearance from the manhole opening and any wall, ceiling, or piping that may prevent a person from entering. All other sides shall not be less than eighteen (18) inches between the vessel and adjacent walls or other structures. Alternative clearances in accordance with the manufacturer's recommendations are subject to acceptance by the department.

(d) Pressure relief devices. All pressure vessels shall be protected by pressure relief devices in accordance with the following requirements:

- (1) Device requirements:
 - (A) Each pressure vessel shall be provided with pressure relief devices, to protect against overpressure. These pressure relief devices shall bear the National Board "NB" symbols, the ASME certification mark, and the appropriate designator, as required by the ASME BPVC;
 - (B) Deadweight or weighted lever pressure relief valves shall not be used;
 - (C) An unfired steam boiler shall be equipped with pressure relief valves as required in NBIC Part 1, 2.9;

- (D) Pressure relief devices shall be selected (e.g., material, pressure, etc.) and installed such that their proper functioning will not be hindered by the nature of the vessel's contents; and
 - (E) Relief valves, safety valves, or safety relief valves shall be of the hand lift lever type whenever possible to facilitate actuating and testing the device for free operation;
- (2) Number of devices. At least one device shall be provided for protection of a pressure vessel. Pressure vessels with multiple chambers with different maximum allowable working pressures shall have a pressure relief device to protect each chamber under the most severe coincident conditions;
- (3) Location. The following shall apply to location of devices:
 - (A) The pressure relief device shall be installed directly on the pressure vessel, unless the source of pressure is external to the vessel and is under such positive control that the pressure cannot exceed the maximum overpressure permitted by the original code of construction and the pressure relief device cannot be isolated from the vessel, except as permitted by NBIC Part 1, 4.5.6(e) (2);
 - (B) Pressure relief devices intended for use in compressible fluid service shall be connected to the vessel in the vapor space above any contained liquid or in the piping system connected to the vapor space; and
 - (C) Pressure relief devices intended for use in liquid service shall be connected below the normal liquid line. The liquid level during upset conditions shall be considered;

- (4) Capacity. The following shall apply to the capacity of pressure relief devices:
 - (A) The pressure relief device(s) shall have sufficient capacity to ensure that the pressure vessel is not exposed to pressure greater than that specified in the original code of construction;
 - (B) Vessels connected by a system of piping not containing valves that can isolate any pressure vessel shall be considered as one unit when determining capacity requirements;
 - (C) Heat exchangers and similar vessels shall be protected with a pressure relief device of sufficient capacity to avoid overpressure in case of internal failure; and
 - (D) The owner shall make information regarding the basis of pressure relief device selection, including required capacity, available to the jurisdiction;
- (5) Set pressure. The following shall apply to the set pressure of pressure relief devices:
 - (A) When a single pressure relief device is used, the set pressure marked on the device shall not exceed the maximum allowable working pressure; and
 - (B) When more than one pressure relief device is provided to obtain the required capacity, only one pressure relief device set pressure needs to be at the maximum allowable working pressure. The set pressures of the additional pressure relief devices shall be such that the pressure cannot exceed the overpressure permitted by the code of construction; and
- (6) Installation and discharge piping requirements. The following shall apply to the installation and discharge piping of pressure relief devices:

- (A) The opening through all pipe and fittings between a pressure vessel and its pressure relief device shall have at least the area of the pressure relief device inlet. The characteristics of this upstream system shall be such that the pressure drop will not reduce the relieving capacity below that required or adversely affect the proper operation of the pressure relief device. When a discharge pipe is used, the size shall be such that any pressure that may exist or develop will not reduce the relieving capacity below that required or adversely affect the proper operation of the pressure relief device. It shall be as short and straight as possible and arranged to avoid undue stress on the pressure relief device;
- (B) A non-reclosing device installed between a pressure vessel and a pressure relief valve shall meet the requirements of subparagraph (A);
- ~~[B]~~ (C) The opening in the pressure vessel wall shall be designed to provide unobstructed flow between the vessel and its pressure relief device;
- ~~[C]~~ (D) When two or more required pressure relief devices are placed on one connection, the inlet cross-sectional area of this connection shall be sized either to avoid restricting flow to the pressure relief devices or made at least equal to the combined inlet areas of the pressure relief devices connected to it. The flow characteristics of the upstream system shall satisfy the requirements of NBIC Part 1, 4.5.6(e); and
- ~~[D]~~ (E) There shall be no intervening stop valves between the vessel and its pressure relief device(s), or between the pressure relief device(s) and the point of

discharge, except under the following conditions:

- (i) When these stop valves are so constructed or positively controlled that the closing of the maximum number of block valves at one time will not reduce the pressure relieving capacity below the required relieving capacity;
- (ii) Upon specific acceptance of the jurisdiction, when necessary for the continuous operation of processing equipment of such a complex nature that shutdown of any part is not feasible, a full area stop valve between a pressure vessel and its pressure relief device shall be provided for inspection and repair purposes only. This stop valve shall be arranged so that it can be locked or sealed open, and it shall not be closed except by an authorized person who shall remain stationed there during that period of operation while the valve remains closed. The valve shall be locked or sealed in the open position before the authorized person leaves the station;
- (iii) A full area stop valve shall also be placed on the discharge side of a pressure relief device when its discharge is connected to a common header for pressure relief devices to prevent discharges from these other devices from flowing back to the first device during inspection and repair. This stop valve shall be arranged so that it can be locked or sealed open, and it shall not be closed except by an

authorized person who shall remain stationed there during that period of operation while the valve remains closed. The valve shall be locked and sealed in the open position before the authorized person leaves the station. This valve shall only be used when a stop valve on the inlet side of the pressure relief device is first closed;

(iv) A pressure vessel in a system where the pressure originates from an outside source shall have a stop valve between the vessel and the pressure relief device, and this valve need not be sealed open, provided it also closes off that vessel from the source of the pressure;

(v) ~~[Pressure relief device discharges shall be arranged such that they are not a hazard to personnel or other equipment and, when necessary, lead to a safe location for disposal of fluids being relieved.]~~ All pressure relief devices shall relieve to a safe point of discharge;

(vi) Discharge lines from pressure relief devices shall be designed to facilitate drainage or be fitted with drains to prevent liquid from collecting in the discharge side of a pressure relief device. The size of discharge lines shall be such that any pressure that may exist or develop will not reduce the relieving capacity of the pressure relief device or adversely affect the operation of the pressure relief device. It shall be as short

- and straight as possible and arranged to avoid undue stress on the pressure relief device; ~~[and]~~
- (vii) Pressure vessel pressure relief devices and discharge piping shall be safely supported. The reaction forces due to discharge of pressure relief devices shall be considered in the design of the inlet and discharge piping. Design of supports, foundations, and settings shall consider vibration (including seismic when necessary), movement (including thermal movement), and loadings (including reaction forces during device operation) in accordance with jurisdictional requirements, manufacturer's recommendations, and/or other industry standards, as applicable~~[-]~~; and
- (viii) Pressure relief devices shall be installed so they are readily accessible for inspection, repair, or replacement.

(e) Supports. ~~[Each pressure vessel]~~ Pressure vessels and associated piping shall be safely supported. The potential for future pressure tests of the vessel after installation shall be considered when designing vessel supports. Design of supports, foundations, and settings shall consider vibration (including seismic and wind loads where necessary), movement (including thermal ~~[movement]~~), expansion and contraction, grounding/bonding to minimize electrolytic corrosion, and loadings (including the weight of water during a ~~[hydrostatic]~~ pressure test) in accordance with ~~[jurisdictional]~~ department requirements, manufacturer's recommendations, and other industry standards, as applicable.

(f) Piping. Piping loads on the vessel nozzles shall be considered. Piping loads include weight of the pipe, weight of the contents of the pipe, and expansion

of the pipe from temperature and pressure changes (wind and seismic loads). The effects of piping vibration on the vessel nozzles shall also be considered.

(g) Bolting. All mechanical joints and connections shall conform to the manufacturers' installation instructions and recognized standards acceptable to the jurisdiction.

(h) Instruments and controls. The following shall apply to the instruments and controls of pressure vessels:

- (1) Level indicating devices of steam drums of unfired steam boilers shall be provided with two level indicating devices. Direct level indicating devices shall be connected to a single water column or connected directly to the drum, and the connections and pipe shall be not less than NPS 1/2 (DN 15). Indirect level indicating devices acceptable to the jurisdiction may be used; and
- (2) The pressure indicating devices of each pressure vessel, or system of pressure vessels with no intervening valves, shall be equipped with a pressure gage graduated to not less than one and a half (1-1/2) times nor more than three (3) times the pressure which the safety or safety relief valve is set.

(i) Isolating valves. Each pressure vessel or multiple pressure vessels connected in series shall have isolating valves which isolate the vessel or vessels from the system in which it or they are installed.

(j) Additional requirements for compressed air vessels. The following shall apply to compressed air vessels:

- (1) Under no circumstances shall an air receiver be buried underground or located in an inaccessible place;
- (2) Belt guards shall be installed on air compressor units fitted with drive belts;
- (3) Drain pipe and valve shall be installed at the lowest point of every pressure vessel

subject to internal corrosion to provide for draining or the removal of accumulated oil and water from an air receiver. Adequate automatic traps may be installed in addition to drain valves. The drain valve on an air receiver shall be opened and drained frequently at such intervals as to prevent the accumulation of excessive amounts of liquids in the receiver; and

- (4) The use of thermoplastic piping, known as PVC piping, to transport compressed air or other compressed gases, or the testing of this piping with compressed air or other compressed gases, in exposed above ground locations is prohibited. All thermoplastic piping used to transport compressed air or other compressed gases shall be buried underground or encased in shatter-resistant materials. In designing a thermoplastic piping system to transport compressed air or other compressed gases, the strength at the operating temperature, the pressure, the energetics, and specific failure mechanisms shall be evaluated.

(k) Additional requirements for hot water storage tanks. The following shall apply to hot water storage tanks:

- (1) ~~[Safety relief devices.]~~ Temperature and pressure relief devices. Each potable hot water storage tank shall be equipped with an ASME/NB certified temperature and pressure ~~[relieving device]~~ relief valve set at a pressure not to exceed the maximum allowable working pressure and 210 degrees Fahrenheit or the maximum allowable working temperature of the vessel as designed. The temperature and pressure ~~[relieving device]~~ relief valve shall meet the requirements of NBIC Part 1 4.5;
- (2) ~~[Hot water storage tanks greater than 160 Psi maximum allowable working pressure shall be equipped with an ASME/NB certified~~

~~temperature and pressure relieving device set at a pressure not to exceed the maximum allowable working pressure and 210 degrees Fahrenheit. In lieu of this requirement, such tanks may be equipped with incompressible fluid pressure rated relief valves with appropriate relieving capacity provided the hot water system is installed with an over-temperature protection that adequately prevent the generation of hot water in excess of 210 degrees Fahrenheit; and acceptable to the jurisdiction;]~~ Potable hot water storage tanks exceeding the pressure limit of ASME Code Section IV shall meet the original code of construction and shall be protected by a pressure relief valve set not to exceed the vessel's maximum allowable working pressure. A temperature limiting device shall be installed so that the water inside the storage tank does not exceed 210 degrees Fahrenheit (99 Celsius).

Examples of ~~[system over-temperature protection;]~~ temperature limiting devices:

- (A) Operating temperature control and high temperature limit switch with manual reset installed at the potential source;
- (B) Automatic self-adjusting over-temperature protection;
- (C) Tempering and mixing valves; and
- (D) Solenoid operated dump valves with thermostat probe rated for 210 degrees Fahrenheit maximum scale range setting[~~+~~ and];

~~[(E) Any other system of over-temperature protection controls to be demonstrated to function as designed and approved by the jurisdiction;]~~

- (3) ~~[Clearances.]~~ Clearances and accessibility.
In addition to the clearance requirements under section 12-224.1-5(c), each hot water storage tank shall have at least twelve (12) inches bottom clearance; and:

- (A) The required nameplate (marking or stamping) shall be exposed and accessible;
 - (B) The openings when required shall be accessible to allow for entry for inspection and maintenance; and
 - (C) Each hot water storage tank shall meet the requirements of NBIC Part 1, 4.3.2;
- (4) Each hot water storage and potable hot water storage tank shall have a thermometer so located that it shall be easily readable at or near the outlet. The thermometer shall be so located that it shall at all times indicate the temperature of the water in the storage tank; and
- (5) Shut off valves. Each hot water storage and potable hot water storage tank shall be equipped with stop valves in the water inlet piping and the outlet piping for the [hot water storage] tank to be removed from service without having to drain the complete system. Each [hot water storage] tank also shall be equipped with a bottom drain valve to provide for flushing and draining of the vessel.

~~(1) Additional requirements for [pressure relief valves for steam to hot water supply heat exchangers. When a hot water supply is heated indirectly by steam in a coil or pipe within the service limitations set forth in the NBIC, the pressure of the steam used shall not exceed the safe working pressure of the hot water tank, and a safety relief valve of at least NPS 1 set to relieve at or below the maximum allowable working pressure of the tank, shall be applied on the tank.] tanks and heat exchangers include the following:~~

- (1) Steam to hot water supply. When a hot-water supply is heated indirectly by steam in a coil or pipe within the service limitations set forth in NBIC Part 1, 3.2, Definitions, the pressure of the steam used shall not exceed the safe working pressure of the hot water tank, and a pressure relief valve at

- least NPS 1 (DN 25), set to relieve at or below the maximum allowable working pressure of the tank, shall be applied on the tank;
- (2) High-temperature water to water heat exchanger. When high-temperature water is circulated through the coils or tubes of a heat exchanger to warm water for space heating or hot-water supply, within the service limitations set forth in NBIC Part 1, 3.2, Definitions, the heat exchanger shall be equipped with one or more NB capacity certified pressure relief valves set to relieve at or below the maximum allowable working pressure of the heat exchanger, and of sufficient rated capacity to prevent the heat exchanger pressure from rising more than ten percent (10%) above the maximum allowable working pressure of the vessel; and
- (3) High-temperature water to steam heat exchanger. When high-temperature water is circulated through the coils or tubes of a heat exchanger to generate low pressure steam, within the service limitations set forth in NBIC Part 1, 3.2, Definitions, the heat exchanger shall be equipped with one or more National Board capacity certified pressure relief valves set to relieve at a pressure not to exceed fifteen (15) psig (100 kPa), and of sufficient rated capacity to prevent the heat exchanger pressure from rising more than five (5) psig (34 kPa) above the maximum allowable working pressure of the vessel. For heat exchangers requiring steam pressures greater than fifteen (15) psig (100 kPa), refer to NBIC Part 1, Section 2 or Section 4.
- (m) Description and concerns of specific types of pressure vessels.
- (1) Compressed air vessels[-], including receivers, separators, filters, and coolers. [The following applies to compressed air vessels:-

- ~~(A) Considerations of concern include temperature variances, pressure limitations, vibration, and condensation. Drain connections shall be verified to be free of any foreign material that may cause plugging; and~~
- ~~(B) Inspections of compressed air vessels shall consist of the following:~~
 - ~~(i) Welds. Inspect all welds for cracking or gouging, corrosion, and erosion. Particular attention shall be given to the welds that attach brackets supporting the compressor. These welds may fail due to vibration;~~
 - ~~(ii) Shells and heads: externally, inspect the base material for environmental deterioration and impacts from objects. Hot spots and bulges are signs of overheating and shall be noted and evaluated for acceptability. Particular attention shall be paid to the lower half of the vessel for corrosion and leakage. For vessels with manways or inspection openings, an internal inspection shall be performed for corrosion, erosion, pitting, excessive deposit buildup, and leakage around inspection openings. Ultrasonic thickness testing (UT) may be used where internal inspection access is limited or to determine actual thickness when corrosion is suspected;~~
 - ~~(iii) Fittings and attachments. Inspect all fittings and attachments for alignment, support, deterioration, damage, and leakage around threaded joints. Any internal attachments such as supports, brackets, or rings shall be visually examined~~

- ~~for wear, corrosion, erosion, and cracks;~~
- ~~(iv) Operation. Check the vessel nameplate to determine the maximum allowed working pressure and temperature of the vessel. Ensure the set pressure of the safety valve does not exceed that allowed on the vessel nameplate and determine that the capacity of the safety valve is greater than the capacity of the compressor. Ensure there is a functioning manual or automatic condensate drain; and~~
- ~~(iv) Quick closure attachments. Filter-type vessels usually have one quick-type closure head for making filter changes, see NBIC Part 2, 2.3.6.5;]~~

Considerations of concern include temperature variances, pressure limitations, vibration, and condensation. Drain connections shall be verified to be free of any foreign material that may cause plugging;

- ~~[(2) The following shall apply to pressure vessels with quick-actuating closures:~~
- ~~(A) Due to the many different designs of quick-actuating closures, potential failures of components that are not specifically covered shall be considered. The scope of inspection shall include areas affected by abuse or lack of maintenance and a check for inoperable or bypassed safety and warning devices;~~
- ~~(B) Temperatures above that for which the quick-actuating closure was designed can have an adverse effect on the safe operation of the device. If parts are found damaged and excessive temperatures are suspected as the cause, the operating temperatures may have exceeded~~

- ~~those temperatures recommended by the manufacturer. Rapid fluctuations in temperatures due to rapid start-up and shutdown may lead to cracks or yielding caused by excessive warping and high thermal stress. A careful observation shall be made of the condition of the complete installation, including maintenance and operation, as a guide in forming an opinion of the care the equipment receives. The history of the vessel shall be established, including: year built, materials of construction, extent of post weld heat treatment, previous inspection results, and repairs or alterations performed. Any leak shall be thoroughly investigated and the necessary corrective action initiated;~~
- ~~(C) Inspection of parts and appurtenances. Seating surfaces of the closure device, including but not limited to the gaskets, O-rings, or any mechanical appurtenance to ensure proper alignment of the closure to the seating surface, shall be inspected. This inspection can be made by using powdered chalk or any substance that will indicate that the closure is properly striking the seating surface of the vessel flange. If this method is used, a check shall be made to ensure that:~~
- ~~(i) Material used shall not contaminate the gasket or material with which it comes into contact; and~~
 - ~~(ii) The substance used shall be completely removed after the examination;~~
- ~~(D) The closure mechanism of the device shall be inspected for freedom of movement and proper contact with the locking elements. This inspection shall indicate that the movable portions of~~

~~the locking mechanism are striking the locking element in such a manner that full stroke can be obtained. Inspection shall be made to ensure that the seating surface of the locking mechanism is free of metal burrs and deep scars, which would indicate misalignment or improper operation. A check shall be made for proper alignment of the door hinge mechanisms to ensure that adjustment screws and locking nuts are properly secured. When deficiencies are noted, the following corrective actions shall be initiated:~~

- ~~(i) If any deterioration of the gasket, O-ring, etc., is found, the gasket, O-ring, etc., shall be replaced immediately. Replacements shall be in accordance with the vessel manufacturer's specifications;~~
- ~~(ii) If any cracking or excessive wear is discovered on the closing mechanism, the owner or user shall contact the original manufacturer of the device for spare parts or repair information. If this cannot be accomplished, the owner or user shall contact an organization competent in quick-actuating closure design and construction prior to implementing any repairs;~~
- ~~(iii) Defective safety or warning devices shall be repaired or replaced prior to further operation of the vessel;~~
- ~~(iv) Deflections, wear, or warping of the sealing surfaces may cause out-of-roundness and misalignment. The manufacturer of the closure shall be contacted for acceptable tolerances for out-of-roundness and deflection; and~~

- ~~(v) The operation of the closure device through its normal operating cycle shall be observed while under control of the operator. This shall indicate if the operator is following posted procedures and if the operating procedures for the vessel are adequate;~~
- ~~(E) Gages, safety devices, and controls. The required pressure gage shall be installed so that it is visible from the operating area and located in such a way that the operator can accurately determine the pressure in the vessel while it is in operation. The gage dial size shall be of such a diameter that it can be easily read by the operator. This gage shall have a pressure range of at least one and a half (1.5) times, but not more than four (4) times, the operating pressure of the vessel. There shall be no intervening valve between the vessel and gage;~~
- ~~(F) The pressure gage shall be of a type that will give accurate readings, especially when there is a rapid change in pressure. It shall be of rugged construction and capable of withstanding severe service conditions. Where necessary, the gage shall be protected by a siphon or trap;~~
- ~~(G) Pressure gages intended to measure the operating pressure in the vessel are not usually sensitive or easily read at low pressures approaching atmospheric. It may be advisable to install an auxiliary gage that reads inches of water and is intended to measure pressure from atmospheric through low pressures. This ensures that there is zero pressure in the vessel before opening. It would be necessary to protect the auxiliary low-~~

~~pressure gage from the higher operating pressures;~~

~~(H) Provisions shall be made to calibrate pressure gages or to have them checked against a master gage as frequently as necessary;~~

~~(I) A check shall be made to ensure that the closure and its holding elements must be fully engaged in their intended operating position before pressure can be applied to the vessel. A safety interlock device shall be provided that prevents the opening mechanism from operating unless the vessel is completely depressurized; and~~

~~(J) Quick-actuating closures held in position by manually operated locking devices or mechanisms, and which are subject to leakage of the vessel contents prior to disengagement of the locking elements and release of the closure, shall be provided with an audible and/or visible warning device to warn the operator if pressure is applied to the vessel before the closure and its holding elements are fully engaged, and to warn the operator if an attempt is made to operate the locking device before the pressure within the vessel is released. Pressure tending to force the closure clear of the vessel must be released before the closure can be opened for access; and~~

~~(3)]~~ (2) ~~[Inspection of]~~ Pressure Vessels for Human Occupancy (PVHOs). The following shall apply to the inspection of PVHOs:

(A) General and operational. PVHOs shall be constructed in accordance with ASME PVHO-1~~[- This code]~~, which adopts ASME BPV Section VIII, ~~[and]~~ therefore, the vessels shall bear a "U" or "U2" ASME designator. Inspections ~~[should]~~ shall

be conducted using ASME PVHO-2 for reference[7]. FOR PVHOs manufactured from non-traditional materials, such as fabrics, PVHO-1 Code Cases shall apply and have all the documentation required by the code case, but not necessarily have any related section ASME BPV Section VIII forms;

- (B) Cast and ductile iron fittings are not allowed;
- (C) Due to the human occupancy element, a person shall be in attendance to monitor the PVHO when in operation, in the event there is an accident;
- (D) The installation shall be such that there is adequate clearance to inspect it properly. In some applications, such as underground tunneling, it may be impossible to perform a complete external inspection;
- (E) Internal inspection. Where existing openings permit, perform a visual internal inspection of the vessel. Look for any obvious cracks and note areas that are subject to high stress such as welds, welded repairs, head-to-shell transitions, sharp interior corners, and interior surfaces opposite external attachments or supports. The vessel shall be free of corrosion, damage, dents, gouges, or other damage. All openings leading to external fittings or controls shall be free from obstruction. All exhaust inlets shall be checked to prevent a chamber occupant from inadvertently blocking the opening;
- (F) External inspection. The inspector shall closely examine the external condition of the pressure vessel for corrosion, damage, dents, gouges, or other damage. The lower half and the bottom portions of insulated vessels shall receive

special focus, as condensation or moisture may gravitate down the vessel shell and soak into the insulation, keeping it moist for long periods of time. Penetration locations in the insulation or fireproofing such as saddle supports, sphere support legs, nozzles, or fittings shall be examined closely for potential moisture ingress paths. When moisture penetrates the insulation, the insulation may actually work in reverse, holding moisture in the insulation or near the vessel shell. Insulated vessels that are run on an intermittent basis or that have been out of service require close scrutiny. In general, a visual inspection of the vessel's insulated surfaces shall be conducted once per year. The most common and superior method to inspect for suspected corrosion under insulation (CUI) damage is to completely or partially remove the insulation for visual inspection. The method most commonly utilized to inspect for CUI without insulation removal is by X-ray and isotope radiography (film or digital), or by real time radiography, utilizing imaging scopes and surface profilers. The real-time imaging tools will work well if the vessel geometry and insulation thickness allows. Other less common methods to detect CUI include specialized electromagnetic methods (pulsed eddy current and electromagnetic waves) and long-range ultrasonic techniques (guided waves). There are also several methods to detect moisture soaked insulation, which is often the beginning for potential CUI damage. Moisture probe detectors, neutron backscatter, and thermography

are tools that can be used for CUI moisture screening. Proper surface treatment (coating) of the vessel external shell and maintaining weather-tight external insulation are the keys to prevention of CUI damage;

- (G) Inspection of parts and appurtenances (e.g., piping systems, pressure gage, bottom drain). As stated above, cast iron is not allowed on PVHOs and shall be replaced with parts fabricated with other suitable materials, in accordance with ASME BPVC Section II. If valves or fittings are in place, check to ensure that these are complete and functional. The inspector shall note the pressure indicated by the gage and compare it with other gages on the same system. If the pressure gage is not mounted on the vessel itself, it shall be ascertained that the gage is installed on the system in such a manner that it correctly indicates actual pressure in the vessel. The inspector shall verify that the vessel is provided with a drain opening. The system shall have a pressure gage designed for at least the most severe condition of coincident pressure in normal operation. This gage shall be clearly visible to the person adjusting the setting of the pressure control valve. The graduation on the pressure gage shall be graduated to not less than one and a half (1.5) times the maximum allowable working pressure (MAWP) of the vessel. Provisions shall be made to calibrate pressure gages or to have them checked against a standard test gage. Any vents and exhausts shall be piped at least ten (10) feet from any air intake. Venting shall be provided at all high points of the piping system;

inspectors understand PVHO systems and their unique characteristics. The PVHO systems covered in this section include only monoplace (single human occupancy) medical systems used for Hyperbaric Oxygen Therapy (HBO). The PVHO system is comprised of one or more monoplace PVHOs each with pressurization and vent controls, monitoring, and communication supplied by facility medical gas systems or dedicated breathing gas systems, gas distribution, controls, and gas storage.

(b) General. A pressure vessel for human occupancy, as defined by ASME PVHO-1, is a pressure vessel that encloses one or more human beings within its pressure boundary while it is subject to internal or external pressure that exceeds a two (2) psi (15 kPa) differential pressure. PVHOs include, but are not limited to, submersibles, diving bells, personal transfer capsules, decompression chambers, recompression chambers, hyperbaric chambers, high-altitude chambers, and medical hyperbaric oxygenation facilities. Unique characteristics of PVHOs include:

- (1) Fire hazard due to oxygen enrich environment;
- (2) Fire hazard due to in-service hydrocarbon contamination;
- (3) Rapid decompression hazard;
- (4) Pressure boundary valves at PVHO penetrators;
- (5) Cleanliness of gases inside the PVHO system;
- (6) In-service life expectancy of flat disc acrylic windows in protected environments, including cylindrical windows, can be up to twenty years with periodic inspections;
- (7) Manual or pneumatic control systems; and
- (8) Heat, ultraviolet light, and solvents are harmful to acrylic windows.

(c) Documentation, registration, and regulatory requirements. The following shall apply:

- (1) PVHO systems shall be designed and constructed in accordance with ASME PVHO-1. This code requires Section VIII for steel and other allowed vessel materials and therefore shall bear a "U" or "U2" ASME designator and forms. PVHO-1 also has several Code Cases that address PVHOs manufactured from non-

- Section VIII materials such as reinforced fabrics. PVHO Code Cases are subject to jurisdictional authority and shall have all the documentation required by the Code Case, but not necessarily Section VIII forms;
- (2) Viewport acrylic windows shall be designed and constructed in accordance with PVHO-1 and maintained following the rules of PVHO-2. The owner and user should follow PVHO-2 and manufacturer manuals for in-service guidance;
 - (3) The manufacturer shall retain PVHO system documentation or submit and register with the NB; and
 - (4) The PVHO system owner shall have copies of the following documents on site:
 - (A) Manufacturer data report for a Section VIII vessel (FORM U1-A or U2-A);
 - (B) Manufacturer data report for PVHO-1 (Form GR-1);
 - (C) PVHO-1 Forms VP-1 to VP-5;
 - (D) PVHO system installation instructions; and
 - (E) PVHO system operation and maintenance manuals.
- (d) Pressure vessels for human occupancy system configuration and installation. The following shall apply:
- (1) PVHOs include the following pressure boundary components:
 - (A) Shells and heads of revolution;
 - (B) Openings and their reinforcements;
 - (C) Nozzles and other connections;
 - (D) Door seals and quick actuating closures; and
 - (E) Viewports including acrylic windows;
 - (2) Pressure vessels designed for human occupancy (such as decompression or hyperbaric chambers) shall be provided with a quick opening stop valve between the pressure vessel and its pressure relief valve. The stop valve shall be

- normally sealed open with a frangible seal and be readily accessible to the pressure relief attendant;
- (3) A PVHO system, comprised of one or more monoplace PVHOs each with operational controls, should be supplied by a hospital or clinic medical gas system. Installers of medical gas systems that meet NFPA 99 Chapter 5 requirements should be qualified to, and hold third-party certification, in accordance with American Society of Safety Engineers 6010;
- (4) Facility installation. The following shall apply to facility installation:
- (A) PVHO systems installed and operated within buildings are subject to local building codes, NFPA 99, and the requirements of the department;
- (B) The rooms designated for PVHO systems shall be adequately sized, allowing operation and inspection access to all sides of the PVHO system, and dedicated to only hyperbaric system operation;
- (C) PVHO system oxygen exhaust and ventilation lines shall be independently piped to the building exterior; and
- (D) Temperature in the PVHO room should be maintained for patient comfort;
- (5) Electrical. The following shall apply to electrical components of PVHOs:
- (A) All electrical controls should be located externally;
- (B) Electrically powered control equipment should be connected to grounded facility outlets matching the equipment power specifications;
- (C) Electrical penetration connectors should be as specified by the

- manufacturer and checked for leak tightness;
- (D) Electrical wiring should be supported to prevent obstruction or tripping hazard; and
 - (E) Electrical systems within the PVHO should protect low-voltage communication and monitoring equipment from being exposed to voltages greater than twenty-eight (28) volts alternative current and currents greater than 0.5 amps and should be grounded in accordance with NFPA 99 Chapter 14;
- (6) Controls. The following shall apply to PVHO controls:
- (A) Medical PVHO controls, piping, hoses, connections, pressure gages, control valves, gas system should meet PVHO-1 Section 4-Piping Systems, and Section 5-Medical Hyperbaric Systems;
 - (B) Pressurization, ventilation, and depressurization controls should be manual or pneumatic;
 - (C) The operator at the PVHO control station should be present and have visual sight and audio communication with PVHO occupant during operation;
 - (D) Separate oxygen and air supply to the PVHO and occupant should be from the facility medical gas systems or a standalone medical gas system;
 - (E) The gas system should be sized (both flow and volume) for normal and emergency PVHO operations in accordance with manufacturer's specification or manual. The owner shall have this information available on-site; and

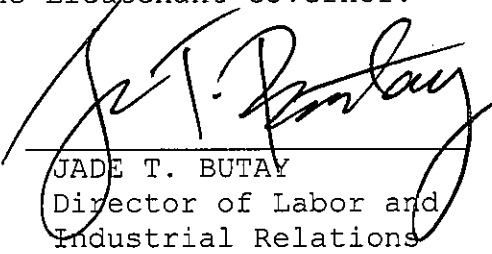
- (F) The facility gas system piping or tubing and controls shall be secured to the facility structure up to the adjacent PVHO wall connects. Hoses or tubing shall connect to these wall connections and supply the gases to the PVHO operational controls. Hoses or tubing shall be secured to prevent obstruction or tripping hazards;
- (7) Internal system cleanliness and toxicity. The following shall apply:
 - (A) PVHO systems that include breathing gas systems with air and oxygen enriched gases (greater than 25 per cent oxygen) shall be cleaned and maintained to NFPA 99 Chapter 5; and national consensus standards (e.g., Compressed Gas Association);
 - (B) Manufacturer maintenance manuals shall be available on site and provide guidance for the owner or user to maintain system cleanliness, and prevent contamination during operation and maintenance; and
 - (C) Hoses shall be off-gas toxicity tested prior to installation;
- (8) Maintenance. The following shall apply to maintenance:
 - (A) PVHO systems shall be maintained in accordance with PVHO-2 and the manufacturer's maintenance manual;
 - (B) Periodic window inspections shall be performed in accordance with PVHO-2; and
 - (C) Replacement windows shall meet PVHO manufacturer specifications (with new PVHO-1 VP-1 to VP-5 forms), and once installed checked for leak tightness." [Eff
(Auth: HRS §397-4) (Imp: HRS §397-4)

5. Material, except source notes and other notes, to be repealed is bracketed and stricken. New material is underscored.

6. Additions to update source notes and other notes to reflect these amendments and compilation are not underscored.

7. These amendments to and compilation of chapters 12-220, 12-222.1, 12-223.1, and 12-224.1, Hawaii Administrative Rules, shall take effect ten days after filing with the Office of the Lieutenant Governor.

I certify that the foregoing are copies of the rules, drafted in the Ramseyer format pursuant to the requirements of section 91-4.1, Hawaii Revised Statutes, which were adopted on January 1, 2024, and filed with the Office of the Lieutenant Governor.



JADE T. BUTAY
Director of Labor and
Industrial Relations

APPROVED AS TO FORM:



Deputy Attorney General

V. ADMINISTRATIVE MATTERS

A. Update on the Board's Upcoming Advocacy Activities and Programs in accordance with the Board's Powers under Section 201M-5, Hawaii Revised Statutes – *no attachments*

1. Discussion with Becker Communications' Representative about creating a YouTube Video for the Board's outreach purposes
2. Discussion and Action on the Board's Draft *2023 Annual Report Summary* for Submission to the Hawaii State Legislature, under Section 201M-5(f), HRS
3. Presentations to Industry Associations
4. Staff's Small Business Outreach



HAWAII SMALL BUSINESS REGULATORY REVIEW BOARD ANNUAL REPORT SUMMARY

Results for Calendar Year 2023

DRAFT

**Recommendations and Review of
Hawaii Administrative Rules, Legislation
and
Requests from Small Business Owners for Review
of Any Rule Adopted by a State Agency**

**In Compliance with
Chapter 201M, Hawaii Revised Statutes**

HAWAII SMALL BUSINESS REGULATORY REVIEW BOARD

ANNUAL REPORT SUMMARY 2023

TABLE OF CONTENTS

| | |
|--|-------|
| SECTION I | 2 |
| Message from the Chair | 3 |
| Overview | 4 |
| Annual Summary / Small Business Regulatory Flexibility Act | 5-6 |
| Administrative Rule Review | 6-10 |
| Legislative Activity | 10 |
| Small Business Impact Statement <i>and</i> Governor’s Administrative Directive No. 18-02 | 10-11 |
| Chairperson / Board Members | 11-13 |
| Activities and Projects | 13 |
| Requests from Small Business for Review of Any Rule Adopted by a State Agency | 14 |
| SECTION II | 16 |
| Legislative Review | 17 |
| Appendix | 17 |
| Appendix 1 - Chapter 201M, Hawaii Revised Statutes | 18-28 |
| Appendix 2 - Administrative Rule Review | 29-31 |
| Appendix 3 - Administrative Directive No. 18-02 | 33-35 |

SECTION I



SMALL BUSINESS REGULATORY REVIEW BOARD

Department of Business, Economic Development & Tourism (DBEDT)
No. 1 Capitol District Building, 250 S. Hotel Street, Fifth Floor, Honolulu, HI 96813
Mailing Address: P.O. Box 2359, Honolulu, HI 96804
Email: dbedt.SBRRB.info@hawaii.gov
Website: sbrrb.hawaii.gov

Tel: (808) 798-0737

MESSAGE FROM THE CHAIR

Josh Green, M.D.
Governor

Sylvia Luke
Lt. Governor

James K. Tokioka
DBEDT Director

Dane K. Wicker
DBEDT Deputy Director

Members

Mary Albitz
Chairperson
Maui



Mary Albitz, Chair, 2023

Robert Cundiff
Vice Chairperson
O'ahu

Jonathan Shick
2nd Vice Chairperson
O'ahu

Dr. Nancy
Atmospera-Walch
O'ahu

Garth Yamanaka
Hawai'i

William Lydgate
Hawai'i

James (Kimo) Lee
Hawai'i

Sanford Morioka
O'ahu

Mark Ritchie
Director, DBEDT
Voting Ex Officio

I am delighted to be the SBRRB's Chair this year. The year started out very hopeful with the pandemic somewhat behind us. We have reviewed more Hawaii Administrative Rules each month compared to the past few years when the pandemic was at its peak.

In June, the SBRRB bid a fond farewell to Kauai-representative board member Ms. Taryn Rodighero. I want to personally thank her for her participation and hard work over the past three years particularly in the areas of land and natural resources and the County of Kauai.

In August, Hawaii hit another stumbling block with the devastating Maui fires. It is clear that there is a lot of work that needs to be done to make sure our islands can prevent and be more prepared for emergencies. Navigating the various government agencies at various levels, Federal, State, County, and City is very difficult for our small businesses. During my time on this board, I have been so very much inspired when we all work together on the rules, that we can almost always get to a place where everyone agrees. My hope is that this will happen more often than not in the rebuilding of Lahaina and Upcountry Maui.

On behalf of all the board members, I extend a big Aloha to the State's new Governor, Josh Green, M.D., and Deputy Director, Sylvia Luke. Aloha also goes out to DBEDT Director Jimmie Tokioka and Deputy Director Dane Wicker for their support of our Board. In addition, Mahalo to the State Legislators for their continued support, and to the State and County agencies that come before us discussing both proposed and amended regulations, before and after public hearing, that have a potential to negatively impact small business.

OVERVIEW

The Small Business Regulatory Review Board is pleased to provide the Annual Report Summary for the period covering January through December 2023. Pursuant to the Hawaii Small Business Regulatory Flexibility Act, Chapter 201M, Hawaii Revised Statutes, the annual summary is based on the following:

201M-5 Small business regulatory review board; powers.

(f) The board shall submit an annual report to the legislature twenty days prior to each regular session detailing any requests from small business owners for review of any rule adopted by a state agency, and any recommendations made by the board to an agency or the legislature regarding the need for a rule change or legislation. The report shall also contain a summary of the comments made by the board to agencies or the legislature regarding its review of any proposed new or amended rules.

ANNUAL SUMMARY

SMALL BUSINESS REGULATORY FLEXIBILITY ACT

The Small Business Regulatory Review Board was established on July 1, 1998, with the passage of the Small Business Regulatory Flexibility Act, pursuant to Act 168; subsequently the role of the Board was codified in Chapter 201M, Hawaii Revised Statutes (HRS), as amended.

(Appendix 1)

Statutorily, the Board is comprised of eleven members, ten current or former owners or officers of businesses from across the State, and the Director of Business, Economic Development, and Tourism (DBEDT), or the Director's designated representative who serves as an "ex officio" voting member. The Board is administratively attached to DBEDT and has responsibility for providing recommendations to State agencies on new and amended administrative rules that directly impact small business. The Board may also consider any request from small business owners for review of any rule proposed, amended, or adopted by a state agency and to make recommendations to the agency or the legislature regarding the need for a rule change or legislation. For requests regarding county rules, the board may make recommendations to the county council or the mayor for appropriate action.

Members volunteer their time performing outreach activities to small business organizations, such as the local Chambers of Commerce, and testifying on legislation. Statutorily, the Board may also solicit testimony from the public regarding any reports submitted to the Board by State departments.

As an effective means of administrative rule review, each board member is assigned to one or more State departments as a "discussion leader" and each neighbor island member is assigned to his or her own respective island. Members are responsible for the initial review of the

administrative rules of these departments and counties prior to consideration by the full Board.

As of December 2023, the Board is operating at near full capacity with 10 members.

ADMINISTRATIVE RULE REVIEW

Over the past few years, although the Board has reviewed a lower than usual number of Hawaii Administrative Rules, largely because of COVID-19, this year has shown an improvement in the numbers. From January through December 2023, a total of 25 rules, before and after public hearing, were reviewed from State and County Agencies.

Since its inception, the Board reviewed a total of sets of 1,008 proposed new and amended HAR. (Appendix 2)

| Department / County | Chapter / Section Number | Title | Proceed to Public Hearing (Pre-Public Hearing) | Proceed to Adoption (Post Public Hearing) | Other Recommendation(s) |
|--------------------------------------|--------------------------------|---|--|--|----------------------------|
| <i>Department of Agriculture</i> | 71 | a. Placement of the Beetle <i>Syphraea uberabensis</i> onto the List of Restricted Animals (Part A) | X | | |
| | | b. Placemen of the Southern House Mosquito <i>Culex quinquefasciatus</i> onto the List of Restricted Animals (Part A) | X | | |
| | | c. Placement of the Butterfly <i>Euselasia chrysippe</i> onto the List of | X | | |

| | | | | | |
|---|-------------|---|-------|---|--|
| | | Restricted Animals (Part A) | | | |
| | Chapter 72 | Plant and Non-Domestic Animal Quarantine Plant Intrastate Rules | X | | |
| | Chapter 71A | Plant and Non-Domestic Animal Quarantine, Microorganism Import Rules | X | | |
| | Chapter 71 | Plant and Non-Domestic Animal Quarantine Non-Domestic Animal Import Rules | X | | |
| <i>Department of Business, Economic Development and Tourism</i> | Chapter 23 | Makai Area Rules | X | | |
| | Chapter 217 | Mauka Area Rules | X | | |
| | Chapter ? | Land Use Commission | X - ? | | |
| <i>Department of Commerce and Consumer Affairs – Title 16</i> | Chapter 115 | Professional Engineers, Architects, Surveyors and Landscape Architects | | X | |
| | Chapter 39 | Securities | X | X | |
| <i>Department of Health – Title 11</i> | Chapter 55 | Water Pollution Control <ul style="list-style-type: none"> a. Appendix A – Standard General Permit Conditions b. Appendix D – NPDES General Permit Authorizing Discharges of Treated Effluent from Leaking Underground Storage Tank | | X | |
| | | | | X | |

| | | | | | |
|--|------------|---|---|---|--|
| | | Remedial Activities | | | |
| | | c. Appendix H – NPDES General Permit Authorizing Discharges of Treated Process Wastewater Associated with Petroleum Bulk Stations and Terminals | | X | |
| | | d. Appendix I – NPDES General Permit Authorizing Discharges of Treated Process Water Associated with Well Drilling Activities | | X | |
| | | e. Appendix M – NPDES General Permit Authorizing Point Source Discharges from the Application of Pesticides | | X | |
| | Chapter 55 | Air Pollution Control | X | X | |
| | | a. Appendix C – Discharges of Storm Water Associated with Construction Activities | | | |
| | | b. Appendix J – Occasional or Unintentional | X | X | |

| | | | | | |
|--|---------------------|---|-------|---|--|
| | | Discharges from Decorative Ponds or Tanks c. Appendix L – Discharges of Circulation Water from Decorative Ponds or Tanks | X | X | |
| <i>Department of Labor & Industrial Relations – Title 12</i> | Chapter 46 | Civil Rights Commission | X | | |
| | Subtitle 8, Part 10 | Chapter 22 General Administrative and Legal Provisions | X - ? | | |
| | | Chapter 222.1 Power Boilers | X - ? | | |
| | | Chapter 223.1 Heating Boilers – Steam Heating Boilers, Hot Water Heating Boilers, Hot Water Supply Boilers, and Potable Water Heaters | X - ? | | |
| <i>Department of Land & Natural Resources – Title 13</i> | | Chapter 224.1 Pressure Vessels | X - ? | | |
| | Chapter 95 | Rules Regulating the Taking and Selling of Certain Marine Resources | X | | |
| | Chapter 74 | License and Permit Provisions and Fees for Fishing, Fish, and Fish Products | X | | |
| | Chapter 60.11 | Kipahulu Community-Based Subsistence Fishing Area, Maui | X | | |
| | | | | X | |

| | | | | | |
|--|--------------------------------|---|---|-----|--|
| | Chapter 31 | Molokini Shoal Marine Life Conservation District, Maui | X | | |
| | Chapter 230 | General Provisions | X | X | |
| | Chapter 257 | Day-Use Mooring Rules | X | X | |
| | Chapter 109 | Rules for Establishing Forest Stewardship | X | | |
| <i>Department of Human Services – Title 17</i> | Chapter 799 | Preschool Open Doors Program | X | | |
| <i>Department of Transportation – Title 19</i> | Subtitle 5 Chapter 152 | State Highway Enforcement Program | X | | |
| <i>City and County of Honolulu</i> | Title 19 Chapter 25 | Rules and Regulations Governing Shore Water Events | X | X-? | |
| | Chapter I – V, Section 54 - 26 | BWS Rules and Regulations – Adoption of New Water Rates and Charges | X | | |

LEGISLATIVE ACTIVITY

Since its inception, the Board has supported legislation by submitting testimony on bills of interest to small business. During 2023, the Governor’s Legislative team approved the Board’s proposal to amend its statute during the 2024 legislative session to clarify that, in addition to considering any request from small business owners for review of any rule, proposed, amended, or adopted by a state agency, the Small Business Regulatory Review Board has the authority to review legislation affecting small businesses in response to requests from small business owners.

See “Legislative Review” at the end of the report for legislation the Board followed in 2023.

SMALL BUSINESS IMPACT STATEMENT *and* GOVERNOR’S ADMINISTRATIVE DIRECTIVE (AD) NO. 18-02

AD 18-02 was issued in 2018 to update the policy and procedures by which State departments and agencies request Governor’s approval for a public hearing of any proposed adoption, amendment, or repeal of administrative rules developed under Chapter 91, HRS. (Appendix 3).

Under Section 201M-2, HRS, State agencies wanting to adopt new or modified administrative rules that have an impact on small business are required to submit to the Board a small business impact statement showing the economic impact on those businesses.

CHAIRPERSON / BOARD MEMBERS

Under Section 201M-5 (c), “a majority of the board shall elect the chairperson. The chairperson shall serve a term of not more than one year, unless removed earlier by a two-thirds vote of all members to which the board is entitled.” The following elections were held at the June 2023 meeting:

- Chair – Mary Albitz
- Vice Chair – Robert Cundiff
- Second Vice Chair – Jonathan Shick

The Board member nomination process, under Section 201M-5, HRS, states, “the Board shall consist of eleven members, who shall be appointed by the governor pursuant to section 26-34; provided that:

(1) Three members shall be appointed from a list of nominees submitted by the president of the senate;

(2) Three members shall be appointed from a list of nominees submitted by the speaker of the house of representatives;

(3) Two members shall be appointed from a list of nominees submitted by the board;

(4) Two members shall be appointed by the governor;

(5) The director of business, economic development, and tourism, or the director's designated representative, shall serve as an ex officio voting member of the board;

(6) The appointments shall reflect representation of a variety of businesses in the State;

(7) No more than two members shall be representatives from the same type of business; and

(8) There shall be at least one representative from each county.”

In addition, nominations shall be solicited from small business organizations, state and county chambers of commerce and other interested business and trade organizations. Except for the ex officio member, all members are either a current or former owner or officer of a business and shall not be an officer or employee of the federal, state, or county government.”

In June 2023, the Board said “Aloha” to board member Ms. Taryn Rodighiero. At the end of December 2023, the Board was comprised of the following ten members:

1) Mary Albitz, Island Art Party, County of Maui

2) Dr. Nancy Atmospera-Walch, Advantage Health Care Provider, Inc., and AIM Health Institute, City and County of Honolulu

3) Robert Cundiff, Business/Management Consultant with Lokama Group, City and County of Honolulu

- 4) James (Kimo) Lee, W. H. Shipman, Ltd., Hawaii County
- 5) William Lydgate, Steelgrass Farm, County of Kauai
- 6) Jonathan Shick, Pono Consulting Group, LLD., City and County of Honolulu
- 7) Garth Yamanaka, Yamanaka Enterprises, Inc., Hawaii County
- 8) Sanford Morioka, Edward Enterprises, Inc., City and County of Honolulu
- 9) Tessa Gomes, Fred and Kate Events, City and County of Honolulu
- 10) Mark Ritchie, Business Support Program Manager, Business Development & Support Division, DBEDT, Voting Ex Officio Member

ACTIVITIES AND PROJECTS

The following activities and projects were accomplished in 2023:

- **Hawaii Small Business Fair** – On September 16th, DBEDT staff attended Hawaii Small Business Fair at Leeward Community College for outreach purposes.
- **Newsletter** – The Board continues to send out monthly e-Newsletters to small business organizations, chambers of commerce, trade organizations and State legislators;
- **Facebook, Twitter, Instagram** – In 2023, the Board regularly sent out notices on Facebook, Twitter, and Instagram to enhance its outreach efforts. As of the end of 2023, the Board can proudly boast ? Friends on Facebook, has ? followings on Twitter, and ? followers on Instagram.
- **Articles, Press Releases**
 - 1) In June 2023, DBEDT submitted a press release announcing the recent election of new board officers, Mary Albitz, Chair; Robert Cundiff, Vice Chair; and Jonathan Shick, Second Vice Chair.

- 2) In June 2023, *Hawaii Free Press* published DBEDT's press release announcing the election of new board officers.

REQUESTS FROM SMALL BUSINESS FOR REVIEW OF ANY RULE ADOPTED BY A STATE AGENCY

Under Section 201M-5, HRS, in 2023, the following requests from business owners were received.

- 1) After the 2023 Legislative session, several small businesses approached the Board posing concerns over House Bill 1090 HD1 SD1 CD1, Relating to Ocean Recreation Commercial Permits. The Board did not review these concerns at a monthly meeting because this measure was placed on the Governor's Veto list. Effective July 7, 2023, House Bill 1090 HD1 SD1 CD1 was vetoed.

SECTION II

LEGISLATIVE REVIEW

The following measures were introduced during the 2023 legislative session.

1. HB 511 – Related to the Small Business Regulatory Review Board

Background: This measure appropriates funds for staffing, commissioner inter-island travel, and other related operating expenses associated with the small business regulatory review board under the Department of Business, Economic Development and Tourism.

Recommendation: The Board did not have an opportunity to hear this bill, so no recommendation was made.

Result: The bill was introduced and passed first reading but was not scheduled for a hearing.

2. GM 654 – Submitting for consideration and confirmation to the Small Business

Regulatory Review Board Gubernatorial Nominee, Sanford Morioka, for a term to expire 6-30-2027

Background: This measure was submitted for consideration of Mr. Sanford Morioka to the Small Business Regulatory Review Board for a term to expire June 30, 2027.

Recommendation: The Board supported the measure.

Result: On April 21, 2023, the Senate’s “advise and consent” was confirmed.

Appendix

1. Chapter 201M, Hawaii Revised Statutes
2. Administrative Rules Reviewed Matrix
3. Administrative Directive No. 18-02

1. Chapter 201M, Hawaii Revised Statutes

CHAPTER 201M
SMALL BUSINESS REGULATORY FLEXIBILITY ACT

Section

- 201M-1 Definitions
- 201M-2 Determination of small business impact; small business impact statement
- 201M-3 Small business statement after public hearing
- 201M-4 Advisory committee on small business; consultation process for proposed rules
- 201M-5 Small business regulatory review board; powers
- 201M-6 Petition for regulatory review
- 201M-7 Periodic review; evaluation report
- 201M-8 Waiver or reduction of penalties
- 201M-9 Executive order

§201M-1 Definitions. As used in this chapter, unless the context clearly requires otherwise:

"Advisory committee" means an advisory committee on small business as established in section 201M-4.

"Affected small businesses" or "affects small business" means any potential or actual requirement imposed upon a small business through an agency's proposed or adopted rule that will cause a direct and significant economic burden upon a small business, or is directly related to the formation, operation, or expansion of a small business.

"Agency" means each state or county board, commission, department, or officer authorized by law to make rules, except those in the legislative or judicial branches.

"Board" means the small business regulatory review board.

"Rule" shall have the same meaning as in section 91-1.

"Small business" means a for-profit corporation, limited liability company, partnership, limited partnership, sole proprietorship, or other legal entity that:

- (1) Is domiciled and authorized to do business in Hawaii;
- (2) Is independently owned and operated; and
- (3) Employs fewer than one hundred full-time or part-time employees in Hawaii. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §§2, 5; am L 2007, c 217, §2]

§201M-2 Determination of small business impact; small business impact statement. (a) Prior to submitting proposed rules for adoption, amendment, or repeal under section 91-3, the agency shall determine whether the proposed rules affect small business, and if so, the availability and practicability of less

restrictive alternatives that could be implemented. This section shall not apply to emergency rulemaking.

(b) If the proposed rules affect small business, the agency shall consider creative, innovative, or flexible methods of compliance for small businesses and prepare a small business impact statement to be submitted with the proposed rules to the departmental advisory committee on small business and the board when the rules are essentially complete and before the rules are submitted to the governor for approval for public hearing. The statement shall provide a reasonable determination of the following:

- (1) The businesses that will be directly affected by, bear the costs of, or directly benefit from the proposed rules;
- (2) Description of the small businesses that will be required to comply with the proposed rules and how they may be adversely affected;
- (3) In dollar amounts, the increase in the level of direct costs such as fees or fines, and indirect costs such as reporting, recordkeeping, equipment, construction, labor, professional services, revenue loss, or other costs associated with compliance;
- (4) The probable monetary costs and benefits to the implementing agency and other agencies directly affected, including the estimated total amount the agency expects to collect from any additionally imposed fees and the manner in which the moneys will be used;
- (5) The methods the agency considered or used to reduce the impact on small business such as consolidation, simplification, differing compliance or reporting requirements, less stringent deadlines, modification of the fines schedule, performance rather than design standards, exemption, or any other mitigating techniques;
- (6) How the agency involved small business in the development of the proposed rules; and
- (7) Whether the proposed rules include provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, with an explanation of the reason for imposing the more stringent standard.

(c) When a proposed rule includes provisions that are more stringent than those mandated by any comparable or related federal, state, or county standards, the agency shall, in

addition to the information required by subsection (b), include in the small business impact statement information comparing the costs and benefits of the standard set by the proposed rule to the costs and benefits of the standard under the comparable or related federal, state or county law. The agency shall also include an explanation of its decision to impose the higher standard. The agency's comparison and justification shall include:

- (1) A description of the public purposes to be served by imposing the standard under the proposed rule;
- (2) The text of the related federal, state, or county law, including information about the purposes and applicability of the law;
- (3) A comparison between the proposed rule and the related federal, state, or county law, including a comparison of their purposes and of the standards and their application and administration;
- (4) A comparison of the monetary costs and benefits to the implementing agency and other agencies directly affected, of imposing the proposed standard, with the costs and benefits of imposing or deferring to the related federal, state or county standard, as well as a description of the manner in which any additional fees derived from imposition of the proposed standard are to be used; and
- (5) A comparison of the adverse effects on small businesses of the standard imposed by the proposed rule, with the adverse effects on small business of the related federal, state, or county standard.

(d) This chapter shall not apply to proposed rules adopted by an agency to implement a statute or ordinance that does not require an agency to interpret or describe the requirements of the statute or ordinance, such as federally-mandated regulations that afford the agency no discretion to consider less restrictive alternatives. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §5; am L 2007, c 217, §3; am L 2008, c230, §3]

§201M-3 Small business statement after public hearing. (a) For any proposed rule that affects small business, the agency shall also submit a small business statement to the small business regulatory review board and the departmental advisory committee on small business after the public hearing is held. This section shall not apply to emergency rules. The small business statement required by this section shall provide the following information:

- (1) A description of how opinions or comments from affected small business were solicited, a summary of the public and small business comments, and a summary of the agency's response to those comments;
- (2) The number of persons who:
 - (A) Attended the public hearing;
 - (B) Testified at the hearing; and
 - (C) Submitted written comments; and
- (3) If there was a request to change the proposed rule at the hearing in a way that affected small business, a statement of the reasons for adopting the proposed rule, the reason why a requested change was not made, and the problems or negative result the change would provide if adopted.

(b) If the small business regulatory review board finds that a statement provided pursuant to subsection (a) (3):

- (1) Indicates inconsistency with any of the agency's determinations under section 201M-2(b); or
- (2) Does not address the concerns of public input, the board with good cause may request a written response from the agency explaining the rationale used to deny the public concerns within ten working days of receipt of the small business statement after public hearing. The agency shall respond in writing to the board's concerns within ten working days.

(c) The written response from an agency required in subsection (b), at a minimum, shall:

- (1) Specifically address each issue and concern raised in the board's request for a written response; and
- (2) Affirmatively state that the agency has considered all written and oral testimony received at the agency's public hearing and has addressed all issues or concerns raised in the written or oral testimony. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §5; am L 2012, c 241, §2]

[§201M-4] Advisory committee on small business; consultation process for proposed rules. (a) There may be established within and administratively attached to every department of the State or county whose rules affect small business activities, an advisory committee on small business. The advisory committee shall consist of three or more odd number of members appointed by the department and may advise more than one department. The department shall have the authority to appoint members to the advisory committee and to fill any vacancies. The members shall serve on a volunteer basis and have experience or knowledge of the effect of

regulation by those departments on the formation, operation, or expansion of a small business. No person shall serve on the small business regulatory review board and an advisory committee on small business concurrently. The advisory committees shall not be subject to the requirements of chapter 91.

(b) When the agency is proposing rules that affect small business, the agency may consult with the administratively attached departmental advisory committee on small business regarding any matter related to the proposed rules prior to complying with the rulemaking requirements provided in chapter 91. Each agency shall develop its own internal management procedures for soliciting comments during the drafting of proposed rules from affected small businesses. The agency may develop creative procedures for the solicitation of comments from affected small businesses during the drafting or development of proposed rules.

(c) If necessary, any group or members of affected small businesses may also be consulted by the agency to formulate the relevant language, develop criteria, and provide any other expertise to ensure that the proposed rules will be drafted in a manner that will protect the public health, welfare, and safety without placing an undue and significant burden upon small business. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §5]

§201M-5 Small business regulatory review board; powers. (a) There shall be established within the department of business, economic development, and tourism, for administrative purposes, a small business regulatory review board to review any proposed new or amended rule. If the board determines that a proposed rule will not have a significant economic impact on a substantial number of small businesses, the board shall submit a statement to that effect to the agency that sets forth the reason for the board's decision. If the board determines that the proposed rule will have a significant economic impact on a substantial number of small businesses, the board may submit to the agency suggested changes in the proposed rule to minimize the economic impact of the proposed rule, or may recommend the withdrawal of the proposed rule. The board may also consider any request from small business owners for review of any rule proposed, amended or adopted by a state agency and to make recommendations to the agency or the legislature regarding the need for a rule change or legislation. For requests regarding county rules, the board may make recommendations to the county council or the mayor for appropriate action.

(b) The board shall consist of eleven members, who shall be appointed by the governor pursuant to section 26-34; provided that:

- (1) Three members shall be appointed from a list of nominees submitted by the president of the senate;
- (2) Three members shall be appointed from a list of nominees submitted by the speaker of the house of representatives;
- (3) Two members shall be appointed from a list of nominees submitted by the board;
- (4) Two members shall be appointed by the governor;
- (5) The director of business, economic development, and tourism, or the director's designated representative, shall serve as an ex officio voting members of the board;
- (6) The appointments shall reflect representation of a variety of businesses in the State;
- (6) No more than two members shall be representative from the same type of business; and
- (8) There shall be at least one representative from each county. For purposes of paragraphs (1) and (2), nominations shall be solicited from small business organizations, state and county chambers of commerce, and other interested business organizations.

(c) **Except for the ex officio member**, all members of the board shall be either a current or former owner or officer of a business and shall not be an officer or employee of the federal, state, or county government. A majority of the board shall elect the chairperson. The chairperson shall serve a term of not more than one year, unless removed earlier by a two-thirds vote of all members to which the board is entitled.

(d) A majority of all the members to which the board is entitled shall constitute a quorum to do business, and the concurrence of a majority of all the members to which the board is entitled shall be necessary to make any action of the board valid.

(e) In addition to any other powers provided by this chapter, the board may:

- (1) Adopt any rules necessary to implement this chapter;
- (2) Organize and hold conferences on problems affecting small business; and
- (3) Do any and all things necessary to effectuate the purposes of this chapter.

(f) The board shall submit an annual report to the legislature twenty days prior to each regular session detailing any requests from small business owners for review of any rule

adopted by a state agency, and any recommendations made by the board to an agency or the legislature regarding the need for a rule change or legislation. The report shall also contain a summary of the comments made by the board to agencies regarding its review of proposed new or amended rules. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §§3, 5; am L 2007, c 217, §4; am L 2012, c 241, §3]

§201M-6 Petition for regulatory review. (a) In addition to the basis for filing a petition provided in section 91-6, any affected small business may file a written petition with the agency that has adopted the rules objecting to all or part of any rule affecting small business on any of the following grounds:

- (1) The actual effect on small business was not reflected in, or significantly exceeded, the small business impact statement submitted prior to the adoption of the rules;
- (2) The small business impact statement did not consider new or significant economic information that reveals an undue impact on small business;
- (3) These impacts were not previously considered at the public hearing on the rules;
- (4) The rules create an undue barrier to the formation, operation, and expansion of small businesses in a manner that significantly outweighs its benefit to the public;
- (5) The rules duplicate, overlap, or conflict with rules adopted by another agency or violate the substantive authority under which the rules were adopted; or
- (6) The technology, economic conditions, or other relevant factors justifying the purpose for the rules have changed or no longer exist.

(b) Upon submission of the petition, the agency shall forward a copy of the petition to the board, as notification of a petition filed under this chapter. The agency shall promptly consider the petition and may seek advice and counsel regarding the petition from the appropriate departmental advisory committee on small business. Within sixty days after the submission of the petition, the agency shall determine whether the impact statement or the public hearing addressed the actual and significant impact on small business. The agency shall submit a written response of the agency's determination to the small business review board within sixty days after receipt of the petition. If the agency determines that the petition merits

the adoption, amendment, or repeal of a rule, it may initiate proceedings in accordance with section 91-3.

(c) If the agency determines that the petition does not merit the adoption, amendment, or repeal of any rule, any affected small business may seek a review of the decision by the board. The board shall promptly convene a meeting pursuant to chapter 92 for the purpose of soliciting testimony that will assist in its determination whether to recommend that the agency initiate proceedings in accordance with section 91-3. The board may base its recommendation on any of the following reasons:

- (1) The actual effect on small business was not reflected in, or significantly exceeded, the impact statement submitted prior to the adoption of the rules;
- (2) The impact statement did not consider new or significant economic information that reveals an undue impact on small business;
- (3) These impacts were not previously considered at the public hearing on the rules;
- (4) The rules create an undue barrier to the formation, operation, and expansion of small businesses in the State in a manner that significantly outweighs its benefit to the public;
- (5) The rules duplicate, overlap, or conflict with rules adopted by another agency or violate the substantive authority under which the rules were adopted; or
- (6) The technology, economic conditions, or other relevant factors justifying the purpose for the rules have changed or no longer exist.

(d) If the board recommends that an agency initiate rulemaking proceedings for any reason provided in subsection (c), it shall submit to the legislature an evaluation report and the agency's response as provided in subsection (b). The legislature may subsequently take any action in response to the evaluation report and the agency's response as it finds appropriate.

(e) If the board does not recommend that an agency initiate rulemaking proceedings, the board shall notify the small business of its decision and inform the small business that the small business may submit a complaint to the ombudsman pursuant to chapter 96 regarding the decision of the agency or board.

(f) Nothing in this section shall entitle an affected small business to a contested case hearing under chapter 91. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §5; am L 2007, c 217, §5]

§201M-7 Periodic review; evaluation report. (a) Each agency having rules that affect small business shall submit to the board by June 30 of each odd-numbered year, a list of those rules and a report describing the specific public purpose or interest for adopting the respective rules that affect small business and any other reasons to justify continue implementation of the rules; provided that, by June 30 of each year, each agency shall submit to the board a list of any rules to be amended or repealed, based upon any new, amended, or repealed statute that impacts small business.

(b) The board shall provide to the head of each agency a list of any rules adopted by the agency that affect small business and have generated complaints or concerns, including any rules that the board determines may duplicate, overlap, or conflict with other rules, or exceed statutory authority. Within forty-five days after being notified by the board of the list, the agency shall submit a written report to the board in response to the complaints or concerns. The agency shall also state whether the agency has considered the continued need for the rules and the degree to which technology, economic conditions, and other relevant factors may have diminished or eliminated the need for maintaining the rules.

(c) The board may solicit testimony from the public regarding any report submitted by the agency under this section at a public meeting held pursuant to chapter 92. Upon consideration of any report submitted by an agency under this section and any public testimony, the board shall submit an evaluation report to the legislature each even-numbered year. The evaluation report shall include an assessment as to whether the public interest significantly outweighs a rule's effect on small business and any legislative proposal to eliminate or reduce the effect on small business. The legislature may take any action in response to the report as it finds appropriate. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §5; am L 2007, c 217, §6; am L 2012, c 241, §4]

§201M-8 Waiver or reduction of penalties. (a) Except where a penalty or fine is assessed pursuant to a program approved, authorized, or delegated under a federal law, any agency authorized to assess civil penalties or fines upon a small business shall waive or reduce any penalty or fine as allowed by federal or state law for a violation of any statute, ordinance, or rules by a small business under the following conditions:

- (1) The small business corrects the violation within a minimum of thirty days after receipt of a notice of violation or citation; and
 - (2) The violation was unintentional or the result of excusable neglect; or
 - (3) The violation was the result of an excusable misunderstanding of an agency's interpretation of a rule.
- (b) Subsection (a) shall not apply:
- (1) When a small business fails to exercise good faith in complying with the statute or rules;
 - (2) When a violation involves willful or criminal conduct;
 - (3) When a violation results in serious health and safety impacts;
 - (4) To violations of chapters 6E, 180, 180C, 181, 182, 183, 183C, 183D, 186, 187A, 188, 188F, 189, 190, 190D, 195, 195D, 195F, 205, 205A, 340A, 340E, 341, 342B, 342C, 342D, 342E, 342F, 342G, 342H, 342I, 342J, 342L, and 342P;
 - (5) To violations of sections 200-9(b) and (c), 200-24(4), 200-37, and 200-38; or
 - (6) To violations of administrative rules promulgated pursuant to section 200-4(6); except for rules pertaining to matters listed in section 200-4(6)(A), (B), (C), and (D).
- (c) An agency may adopt rules to implement the requirements of this section. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §5; am L 2004, c 206, §1]

[\$201M-9] Executive order. The governor may execute any executive order, memorandum, or directive necessary to implement any provision of this chapter. [L 1998, c 168, pt of §2, §5; am L 2002, c 202, §5]

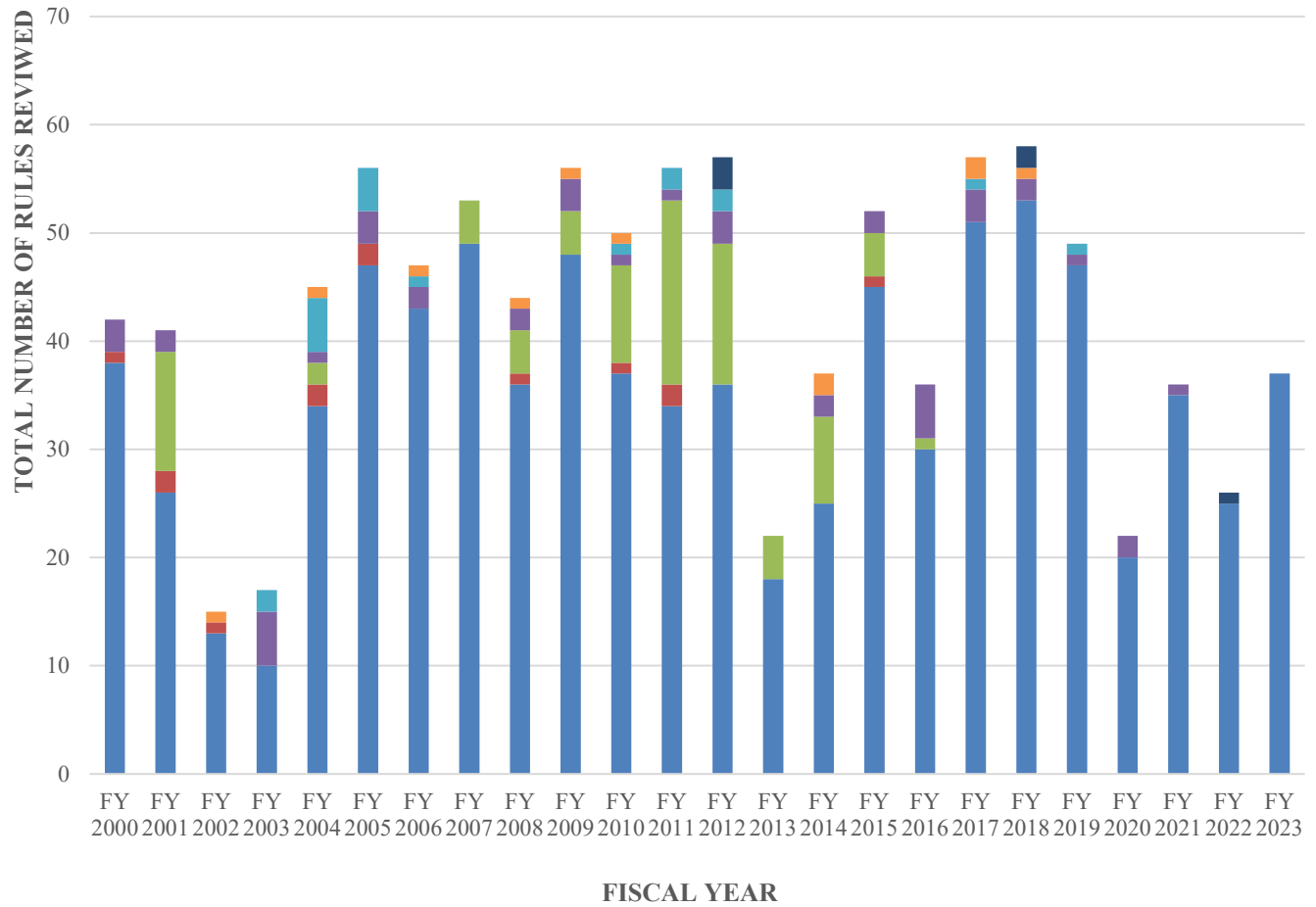
2. Administrative Rule Review

Administrative Rule Review – Annual Report 2023

| Calendar Year 2023 | Month/Year | Supported (1) | Opposed (2) | No Comment/ No Action (3) | Supported W/ Rec. & Comments (4) | Supported w/ Reservations (5) | Supported/ Opposed (6) | Pending/ Deferred (7) |
|-----------------------|--|------------------|-------------|------------------------------------|---|--|---------------------------|--------------------------|
| | Jan-23 | 5 | | | | | | |
| | Feb-23 | NA | | | | | | |
| | Mar-23 | 3 | | | | | | |
| | Apr-23 | 0 | | | | | | |
| | May-23 | 6 | | | | | | |
| | Jun-23 | 2 | | | | | | |
| | Jul-23 | 7 | | | | | | |
| | Aug-23 | 4 | | | | | | |
| | Sep-23 | 4 | | | | | | |
| | Oct-23 | 6 | | | | | | |
| | Nov-23 | | | | | | | |
| | Dec-23 | | | | | | | |
| | Total Calendar Year 2023 | | | | | | | 0 |
| | Total Past Years | 833 | 13 | 81 | 47 | 21 | 12 | 0 |
| | Total | 833 | 13 | 81 | 47 | 21 | 12 | 0 |
| | Total HAR Reviewed Since Inception | 1008 | | | | | | |

- 1) Unanimous support of HAR
- 2) Opposed HAR
- 3) Either no comment or no action taken on HAR
- 4) Supported HAR with recommendations and/or comments
- 5) Supported HAR with Reservations
- 6) Partially opposed but supported HAR
- 7) Deferred action

Administrative Rule Review Matrix



3. Administrative Directive No. 18-02



EXECUTIVE CHAMBERS
HONOLULU

DAVID IGE
GOVERNOR

January 1, 2018

ADMINISTRATIVE DIRECTIVE NO. 18-02

To: Department Directors

Subject: Policy and Procedure for the Adoption, Amendment, or Repeal of
Hawaii Administrative Rules

This administrative directive updates the policy and procedure by which departments or agencies shall request executive approval of any proposed adoption, amendment, or repeal of administrative rules. It replaces Administrative Directive No. 09-01, Policy and Procedure for the Adoption, Amendment, or Repeal of Administrative Rules, dated October 29, 2009.

Legal References:

1. Hawaii Revised Statutes Chapter 91
2. Hawaii Revised Statutes Chapter 201M, the "Hawaii Small Business Regulatory Flexibility Act," requires that if a proposed rule "affects small business," the department or agency shall submit a "small business impact statement" and a "small business statement" to the Small Business Regulatory Review Board. Chapter 201M does not apply to emergency rulemaking or rules adopted to comply with a federal requirement.

Policy:

1. All requests regarding Hawaii Administrative Rules must be submitted through Hawaii Administrative Rules Processing Site (HARPS).

<https://hawaiioint.sharepoint.com/sites/gov/adminrules/>

Prior to all submittals, the department must obtain the Attorney General's approval "as to form".

2. Small Business Regulatory Flexibility Act

In accordance with Chapter 201M, the department must complete the following steps before submitting a request to conduct public hearing if the proposed rule affects small

business:

- a. Complete Small Business Impact Statement
 - i. See HRS Section 201M-2
- b. Submit Small Business Impact Statement and proposed rules to the Small Business Regulatory Review Board

3. Public Hearing Approval

In the request to conduct public hearing, the department will provide response to the following:

- a. Summary of changes
 - i. Why is this section of Hawaii Administrative Rules being amended?
 - ii. What problem is the rule change meant to solve?
 - iii. List all changes that are being made.
- b. Impact of changes
 - i. How does this rule change address the problem?
 - ii. Who are the stakeholders? Positive and negative.
 - iii. What are the potential problems with the rule change?
 - iv. What is the fiscal impact?
 - v. What is the economic impact to the State?
- c. Consequences if changes are not made
 - i. What are the consequences if the rule change does not get adopted, amended or repealed?

4. Public Hearings

Upon approval of public hearing request, the department must enter all public hearing dates, times, and locations into HARPS.

- a. The department must be considerate of all parties being affected and schedule public hearings to allow for adequate feedback.
- b. The department must accept written testimony from all parties who are unable to attend the public hearing.
- c. The department will be responsible for transcribing the testimony from the public hearing into a public hearing summary document that will be required upon submittal of Final Rule.

5. Final Rule

In the request for approval of Final Rule, the department will provide response to the following:

- a. Changes in Final Rule
 - i. What changes were made in the Final Rule?
 - ii. Why were these changes made?
- b. Other
 - i. Describe how the department has worked with stakeholders to gain support for the rule?
 - ii. Have potential problems been addressed? Do the same problems exist with the Final Rule?
 - iii. Does the Office of the Governor staff need to meet with any people/organizations before the Governor signs this Final Rule?

6. Filing of Final Rule

Upon approval of Final Rule through HARPS, the Department will send 3 hard copies to Office of the Governor. When approved, these copies will be filed with the Office of the Lieutenant Governor. Rule will take effect 10 days after filing.

7. Department of Budget and Finance (BUF) and Department of Business, Economic Development and Tourism (BED)

BUF and BED will receive electronic notification upon submittal of public hearing request. Both departments will have the ability to submit comments and concerns through HARPS. Response will be due 10 business days after Final Rule is submitted. Comments will be optional unless the following applies:

- a. BUF will be required to provide response if the proposed rule has fees or other fiscal impacts.
- b. BED will be required to provide response if the proposed rule has economic impact or affects small business.



Department of Business, Economic Development & Tourism
Small Business Regulatory Review Board

***No. 1 Capitol District Building
250 South Hotel Street, 5th Floor
Honolulu, Hawaii 96813***

Telephone: (808) 798-0737

Website: sbrrb.hawaii.gov

Email: DBEDT.sbrrb.info@hawaii.gov

Follow us:

[SBRRBHI Facebook](#)

[SBRRBHI Twitter](#)

[SBRRBHI Instagram](#)