WSR 26-18-075
PERMANENT RULES
DEPARTMENT OF
LABOR AND INDUSTRIES
(Board of Boiler Rules)
[Order 25-27—Filed September 1, 2026, 9:37 a.m., effective October 2, 2026]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The purpose of this rule making is to adopt amendments to the boiler rules under chapter 296-104 WAC. The changes affect the definitions, fees, inspection, operation, and maintenance requirements for boilers and pressure vessels. The amendments are needed to make updates, clarifications, housekeeping, and other changes to the rules.

Adopted amendments to the chapter are as follows:

New Section:

WAC 296-104-450 Operation—What are the requirements for operation of boilers? Adds new requirements for operation, maintenance, and recordkeeping for certain size boilers with a delayed effective date of April 2, 2027.

Amended Sections:

WAC 296-104-010 Administration—What are the definitions of terms used in this chapter?

- Adds numbering to the definitions for easier referencing.
- Adds new definitions to define the meaning of terms for boiler, hot water heating boiler, hot water supply boiler, steam heating boilers, and organic vapor boiler.
- Restructures the existing definitions for better formatting and easier use.
- Amends the definition of "hot water heater" to "water heater" for use of common terminology.
- Amends the definition of indirect water heater to "water heater, indirect" to restructure the definitions.
- Removes the existing definition of "low pressure boiler" to define it under new definitions for the types of low-pressure boilers.
- Amends the definition of "inspection, internal" to clarify inspection requirements on the fireside of the boiler.

WAC 296-104-020 Administration—What are the filing requirements for boilers and unfired pressure vessels before their installation/reinstallation? Removes the word "hot" to make "water heater" the common terminology used throughout the chapter.

WAC 296-104-100 Inspection—How often must boilers and unfired pressure vessels be inspected?

- Amends the inspection frequency of boilers for owner/user organizations to seven years, which aligns with the National Board Inspection Code (NBIC).
- Separates the existing inspection requirements for "low pressure boilers" into separate categories for "steam heating boilers" and "hot water heating boilers."
- Adds a new requirement that "hot water heating boilers" treated with corrosion inhibitor would require internal inspection on the fireside every four years.

- Adds new language for hot water supply boilers to separate the existing inspection requirements for water heaters over 200,000 BTU/hr.
- Removes the word "hot" to make "water heater" the common terminology throughout the chapter.
- Renumbers subsections for formatting.

WAC 296-104-320 Installation—Where should the discharge from safety pressure relief devices, blow offs and drains be directed? Removes the word "hot" to make "water heater" the common terminology throughout the chapter.

WAC 296-104-700 What are the inspection fees—Examination fees—Certificate fees—Expenses? Increases fees by the fiscal growth factor rate of 6.51 percent for fiscal year 2027 to cover operating expenses for the boiler program.

Citation of Rules Affected by this Order: New WAC 296-104-450; and amending WAC 296-104-010, 296-104-020, 296-104-100, 296-104-320, and 296-104-700.

Statutory Authority for Adoption: Chapter 70.79 RCW.

Adopted under notice filed as WSR 26-12-068 on June 2, 2026.

A final cost-benefit analysis is available by contacting Alicia Curry, Department of Labor and Industries, Customer Service, Compliance, and Public Safety Division, P.O. Box 44400, Olympia, WA 98504-4400, phone 360-902-6244, fax 360-704-1980, email Alicia.Curry@Lni.wa.gov, website https://lni.wa.gov/licensing-permits/boilers/laws-rules.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 1, Amended 5, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: September 1, 2026.

Stephanie Gross, Chair
Board of Boiler Rules

RDS-6827.4

AMENDATORY SECTION (Amending WSR 25-09-124, filed 4/22/25, effective 7/1/25)

WAC 296-104-010 Administration—What are the definitions of terms used in this chapter? (1) **"Accident"** shall mean a failure of the boiler or unfired pressure vessel resulting in personal injury or

property loss or an event which renders a boiler or unfired pressure vessel unsafe to return to operation.

(2) **"Agriculture purposes"** shall mean any act performed on a farm in production of crops or livestock, and shall include the storage of such crops and livestock in their natural state, but shall not be construed to include the processing or sale of crops or livestock.

(3) **"Attendant"** shall mean the person in charge of the operation of a boiler or unfired pressure vessel.

(4) **"Automatic operation of a boiler"** shall mean automatic unattended control of feed water and fuel in order to maintain the pressure and temperature within the limits set. Controls must be such that the operation follows the demand without interruption. Manual restart may be required when the burner is off because of low water, flame failure, power failure, high temperatures or pressures.

(5) **"Board of boiler rules"** or **"board"** shall mean the board created by law and empowered under RCW 70.79.010.

(6) **"Boiler and unfired pressure vessel installation/reinstallation permit,"** shall mean a permit approved by the chief inspector before starting installation or reinstallation of any boiler and unfired pressure vessel within the jurisdiction of Washington.

(7) **"Boilers and/or unfired pressure vessels"** - Below are definitions for types of boilers and unfired pressure vessels used in these regulations:

(a) **"Boiler"** shall mean a closed vessel in which water or other liquid is heated, steam or vapor 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 or from electricity or solar energy. The term "boiler" shall include the apparatus used to generate heat and all controls and safety devices associated with such apparatus or the closed vessel. Below are the types of boiler classifications:

(i) **"Hot water heating boiler"** shall mean a boiler in which water is heated in a closed loop and intended for operation at pressures not exceeding 160 psig or temperatures not exceeding 250 degrees F. Boilers open to atmosphere and vacuum boilers are excluded.

(ii) **"Hot water supply boiler"** shall mean a boiler in which water is heated in a potable water supply system and intended for operation at pressures not exceeding 160 psig or temperatures not exceeding 210 degrees F and is provided with a corrosion resistant lining or constructed with corrosion resistant materials.

(iii) **"Power boiler"** shall mean a boiler in which steam or other vapor is generated at a pressure of more than 15 psig for use external to itself or a boiler in which water is heated and intended for operation at pressures in excess of 160 psig and/or temperatures in excess of 250 degrees F.

(iv) **"Steam heating boiler"** shall mean a steam boiler operating at a pressure not exceeding 15 psig.

(b) **"Boiler/unfired pressure vessel status"** shall mean:

(i) Active - Boilers or pressure vessels that are currently in service.

(ii) Inactive - Boilers or pressure vessels still located at the facility but are physically disconnected from the energy input and system.

(iii) Out-of-service - Boilers or pressure vessels that are no longer at the facility.

(iv) Scrapped - Boilers or pressure vessels that have been condemned as defined below.

((~~(b)~~)) (c) **"Condemned boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel that has been inspected and declared unsafe or disqualified for further use by legal requirements. The following procedure shall be utilized:

(i) The inspector will issue and follow the department's "red tag" procedure.

(ii) The object will be immediately removed from service.

(iii) The existing national board and state number shall be obliterated by the inspector.

(iv) The ASME nameplate and/or stamping shall be physically removed by the owner/user and verified by the inspector.

(v) If required by the inspector, a portion of the pressure vessel shall be physically removed by the owner/user. This action will render the object incapable of holding pressure.

(vi) The inspector shall document this procedure on the boiler/pressure vessel inspection report and change the object status to "scrapped."

((~~(c) **"Corrosion"** shall mean the destruction or deterioration of a material, that results from a reaction with its environment.~~))

(d) **"Expansion tank"** shall mean a tank used to absorb excess water pressure. Expansion tanks installed in closed water heating systems and hot water supply systems shall meet the requirements of ASME Section IV, HG-709.

(e) **"Historical boilers and unfired pressure vessel"** shall mean nonstandard boilers and pressure vessels including steam tractors, traction engines, hobby steam boilers, portable steam boilers, and other such boilers or pressure vessels that are preserved, restored, and maintained only for demonstration, viewing, or educational purposes. They do not include miniature hobby boilers as described in RCW 70.79.080.

(f) ((~~**"Hot water heater"** shall mean a closed vessel designed to supply hot water for external use to the system.~~

~~(i) All vessels must be listed by a nationally recognized testing agency.~~

~~(ii) Shall be protected with an approved temperature and pressure safety relief valve with the appropriate pressure and relieving capacity ratings.~~

~~(iii) The hot water heater shall not exceed any of the following limits:~~

~~(A) Pressure of 160 psi (1100 kpa);~~

~~(B) Temperature of 210 degrees F (99°C);~~

~~(C) 120 gallons in capacity;~~

~~(D) 200,000 Btu/hr (58.6 kW).~~

~~(iv) Additional requirements:~~

~~(A) Hot water heaters exceeding 120 gallons (454 liters) must be ASME code stamped;~~

~~(B) Hot water heaters exceeding 200,000 Btu/hr (58.6 kW) input must be ASME code stamped.~~

~~(g) **"Indirect water heater"** shall mean a closed vessel appliance used to heat water for use external to itself, which includes a heat exchanger used to transfer heat to water from an external source. The requirements and limits described above shall apply.~~

~~(h) **"Installer"** shall mean any entity or individual who physically or mechanically installs a boiler, pressure vessel or water heater that meets the in-service inspection requirements of this chapter. The installer is defined as a registered contractor, owner, user or designee.~~

~~(i) **"Low pressure boiler"** shall mean a steam boiler operating at a pressure not exceeding 15 psig or a boiler in which water is heated and intended for operation at pressures not exceeding 160 psig or temperatures not exceeding 250 degrees F by the direct application of energy from the combustion of fuels or from electricity, solar or nuclear energy. Low pressure boilers open to atmosphere and vacuum boilers are excluded.~~

~~(j)~~)) **"Jacketed steam kettle"** shall mean a pressure vessel with inner and outer walls that is subject to steam pressure and is used to boil or heat liquids or to cook food. Jacketed steam kettles with a total volume greater than or equal to one and one-half cubic feet (11.25 gallons) shall be ASME code stamped.

(i) **"Direct fired jacketed steam kettle"** is a jacketed steam kettle having its own source of energy, such as gas or electricity for generating steam within the jacket's walls.

(ii) **"Unfired jacketed steam kettle"** is one where the steam within the jacket's walls is generated external to itself, such as from a boiler or other steam source.

(g) **"Nonstandard boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel that does not bear marking of the codes adopted in WAC 296-104-200.

((~~(k)~~)) (h) **"Organic vapor boiler,"** also known as **"organic fluid vaporizer"** shall mean a device that turns organic fluids into vapor. Organic fluids are volatile organic compounds (VOCs) or synthetic fluids with high molecular weight and low boiling points.

(i) **"Pool heaters"** shall mean a gas, oil, or electric appliance that is used to heat water contained in swimming pools, spas, and hot tubs.

(i) Pool heaters with energy input equivalent to 399,999 Btu/hr (117.2 kW) or less shall be manufactured and certified to ANSI Z21.56, UL1261, CSA 4.7 or equivalent manufacturing standards, as approved by the chief inspector, and are excluded from the limit and control devices requirements of WAC 296-104-300 through 296-104-303.

(ii) Pool heaters with energy input of 400,000 Btu/hr and above shall be stamped with an ASME Section IV Code symbol, and the requirements of WAC 296-104-300 through 296-104-303 shall apply.

(iii) Pool heaters without shut-off valves on the discharge side are considered open to the atmosphere, and therefore are exempt from inspection requirements.

((~~(l) **"Power boiler"** shall mean a boiler in which steam or other vapor is generated at a pressure of more than 15 psig for use external to itself or a boiler in which water is heated and intended for operation at pressures in excess of 160 psig and/or temperatures in excess of 250 degrees F by the direct application of energy from the combustion of fuels or from electricity, solar or nuclear energy.~~

~~(m)~~)) (j) **"Reinstalled boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel removed from its original setting and reset at the same location or at a new location without change of ownership.

((~~(n)~~)) (k) **"Rental boiler"** shall mean any power or low pressure heating boiler that is under a rental contract between owner and user.

((~~(o)~~)) (l) **"Second hand boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel of which both the location and ownership have changed after primary use.

((~~(p)~~)) (m) **"Standard boiler or unfired pressure vessel"** shall mean a boiler or unfired pressure vessel which bears the marking of the codes adopted in WAC 296-104-200.

((~~(q)~~)) (n) **"Unfired pressure vessel"** shall mean a closed vessel under pressure excluding:

(i) Fired process tubular heaters;

(ii) Pressure containers which are integral parts of components of rotating or reciprocating mechanical devices where the primary design considerations and/or stresses are derived from the functional requirements of the device;

(iii) Piping whose primary function is to transport fluids from one location to another;

(iv) Those vessels defined as low pressure heating boilers or power boilers.

((~~(r)~~)) (o) **"Unfired steam boiler"** shall mean a pressure vessel in which steam is generated by an indirect application of heat. It shall not include pressure vessels known as evaporators, heat exchangers, or vessels in which steam is generated by the use of heat resulting from the operation of a processing system containing a number of pressure vessels, such as used in the manufacture of chemical and petroleum products, which will be classed as unfired pressure vessels.

(p) **"Water heater"** means a "hot water heater" per RCW 70.79.080 and 70.79.090. For purposes of this chapter, "water heater" shall mean a closed vessel designed to supply hot water for external use to the system.

(i) All vessels must be listed by a nationally recognized testing agency.

(ii) Vessels shall be protected with an approved temperature and pressure safety relief valve with the appropriate pressure and relieving capacity ratings.

(iii) The water heater shall not exceed any of the following limits:

(A) Pressure of 160 psi (1100 kpa);

(B) Temperature of 210 degrees F (99°C);

(C) 120 gallons in capacity;

(D) 200,000 Btu/hr (58.6 kW).

(iv) Additional requirements:

(A) Water heaters exceeding 120 gallons (454 liters) must be ASME code stamped.

(B) Water heaters exceeding 200,000 Btu/hr (58.6 kW) input must be ASME code stamped and shall be considered a hot water supply boiler.

(q) **"Water heater, indirect"** shall mean a closed vessel appliance used to heat water for use external to itself, which includes a heat exchanger used to transfer heat to water from an external source. The requirements and limits described above shall apply.

(8) **"Certificate of competency"** shall mean a certificate issued by the Washington state board of boiler rules to a person who has passed the tests as set forth in WAC 296-104-050.

(9) **"Certificate of inspection"** shall mean a certificate issued by the chief boiler inspector to the owner/user of a boiler or unfired pressure vessel upon inspection by an inspector. The boiler or unfired pressure vessel must comply with rules, regulations, and appropriate fee payment shall be made directly to the chief boiler inspector.

(10) **"Code, API-510"** shall mean the Pressure Vessel Inspection Code of the American Petroleum Institute with addenda and revisions, thereto made and approved by the institute which have been adopted by the board of boiler rules in accordance with the provisions of RCW 70.79.030.

(11) **"Code, ASME"** shall mean the boiler and pressure vessel code of the American Society of Mechanical Engineers with addenda thereto made and approved by the council of the society which have been adopted by the board of boiler rules in accordance with the provisions of RCW 70.79.030.

(12) **"Code, NBIC"** shall mean the National Board Inspection Code of the National Board of Boiler and Pressure Vessel Inspectors with addenda and revisions, thereto made and approved by the National Board of Boiler and Pressure Vessel Inspectors and adopted by the board of boiler rules in accordance with the provisions of RCW 70.79.030.

(13) **"Commission"** shall mean an annual commission card issued to a person in the employ of Washington state, an insurance company or a company owner/user inspection agency holding a Washington state certificate of competency which authorizes them to perform inspections of boilers and/or unfired pressure vessels.

(14) **"Corrosion"** shall mean the destruction or deterioration of a material that results from a reaction with its environment.

(15) **"Department"** as used herein shall mean the department of labor and industries of the state of Washington.

(16) **"Director"** shall mean the director of the department of labor and industries.

(17) **"Domestic and/or residential purposes"** shall mean serving a private residence or an apartment house of less than six families.

(18) **"Existing installations"** shall mean any boiler or unfired pressure vessel constructed, installed, placed in operation, or contracted for before January 1, 1952.

(19) **"Inspection certificate"** see "certificate of inspection."

(20) **"Inspection, external"** shall mean an inspection made while a boiler or unfired pressure vessel is in operation and includes the inspection and demonstration of controls and safety devices required by these rules.

(21) **"Inspection, internal"** shall mean an inspection made when a boiler ((~~or unfired pressure vessel~~)) is shut down and handholes, manholes, water leg and control manifold, or other inspection openings (including fireside for combustion fuels) are open or removed for examination of the interior. Unfired pressure vessels are depressurized and inspection openings are open or removed for examination of the interior. An external ultrasonic examination of unfired pressure vessels less than 36" inside diameter shall constitute an internal inspection.

(22) **"Inspector"** shall mean the chief boiler inspector, a deputy inspector, or a special inspector.

(a) **"Chief inspector"** shall mean the inspector appointed under RCW 70.79.100 who serves as the secretary to the board without a vote.

(b) **"Deputy inspector"** shall mean an inspector appointed under RCW 70.79.120.

(c) **"Special inspector"** shall mean an inspector holding a Washington commission identified under RCW 70.79.130.

((~~**"Jacketed steam kettle"** shall mean a pressure vessel with inner and outer walls that is subject to steam pressure and is used to boil or heat liquids or to cook food. Jacketed steam kettles with a total volume greater than or equal to one and one-half cubic feet (11.25 gallons) shall be ASME code stamped.~~

~~(a) **"Unfired jacketed steam kettle"** is one where the steam within the jacket's walls is generated external to itself, such as from a boiler or other steam source.~~

~~(b) **"Direct fired jacketed steam kettle"** is a jacketed steam kettle having its own source of energy, such as gas or electricity for~~

~~generating steam within the jacket's walls.~~)) (23) **"Installer"** shall mean any entity or individual who physically or mechanically installs a boiler, pressure vessel, or water heater that meets the in-service inspection requirements of this chapter. The installer is defined as a registered contractor, owner, user, or designee.

(24) **"Nationwide engineering standard"** shall mean a nationally accepted design method, formulae and practice acceptable to the board.

(25) **"Operating permit"** see "certificate of inspection."

(26) **"Owner"** or **"user"** shall mean a person, firm, or corporation owning or operating any boiler or unfired pressure vessel within the state.

(27) **"Owner/user inspection agency"** shall mean an owner or user of boilers and/or pressure vessels that maintains an established inspection department, whose organization and inspection procedures meet the requirements of a nationally recognized standard acceptable to the department.

(28) **"Place of public assembly"** or **"assembly hall"** shall mean a building or portion of a building used for the gathering together of ((~~fifty~~)) 50 or more persons for such purposes as deliberation, education, instruction, worship, entertainment, amusement, drinking, or dining or waiting transportation. This shall also include child care centers (those agencies which operate for the care of ((~~thirteen~~)) 13 or more children), public and private hospitals, nursing homes, and assisted living facilities that provide housing and basic services for seven or more residents.

(29) **"Repair organization"** shall mean an organization in possession of a valid "Certificate of Authorization" from the National Board of Boiler and Pressure Vessel Inspectors, to use the "R" symbol stamp for repair and/or alteration to pressure retaining items within their scope of authority.

(30) **"Special design"** shall mean a design using nationally or internationally recognized engineering standards other than the codes adopted in WAC 296-104-200.

AMENDATORY SECTION (Amending WSR 24-12-068, filed 6/4/24, effective 7/5/24)

WAC 296-104-020 Administration—What are the filing requirements for boilers and unfired pressure vessels before their installation/reinstallation? (1) "Boiler/pressure vessel, water heater installation or reinstallation permit" shall mean a permit approved by the chief inspector and submitted by the installer prior to starting installation or reinstallation of any boiler/pressure vessel or water heater within the jurisdiction of Washington.

(2) The "installer" is any entity or person who physically or mechanically installs a boiler, pressure vessel or water heater that meets the in-service inspection requirements of this chapter. The installer is responsible for the installation/reinstallation permit fee per WAC 296-104-700.

(3) If a nonconformance condition or deficiency is found on the initial permit inspection, the installer will be responsible for implementing immediate corrective action and any subsequent inspection fees after corrections per the fee schedule in WAC 296-104-700.

(4) The following pressure retaining items, as defined in WAC 296-104-010, require a boiler/pressure vessel and water heater installation or reinstallation permit:

- Expansion tanks;
- Historical boilers and unfired pressure vessels;
- ((~~Hot water heaters;~~))
- Indirect water heaters;
- Jacketed steam kettles;
- Low pressure boilers;
- Nonstandard boilers and unfired pressure vessels;
- Pool heaters;
- Power boilers;
- Reinstalled boilers and unfired pressure vessels;
- Secondhand boilers and unfired pressure vessels;
- Standard boilers and unfired pressure vessels;
- Unfired pressure vessels;
- Unfired steam boilers;
- Water heaters.

(5) The installer shall notify the chief inspector utilizing the permit form to request a permit inspection not less than 10 working days prior to placing equipment in operation. Equipment shall not be operated other than for testing, prior to an inspection being conducted which finds the boiler or pressure vessel to be in compliance with this chapter.

(6) If an emergency installation (due to leakage, failure, etc.) situation occurs, the installer will notify the chief inspector within 48 hours after installation, utilizing the permit form to request an immediate inspection of the installation.

(7) The installer may be subject to civil penalties per WAC 296-104-701 for failure to comply with the filing requirements of the installation permit.

AMENDATORY SECTION (Amending WSR 15-14-100, filed 6/30/15, effective 9/1/15)

WAC 296-104-100 Inspection—How often must boilers and unfired pressure vessels be inspected? In accordance with RCW 70.79.080, 70.79.090, and 70.79.240 the following inspection requirements shall apply:

(1) **Power boilers** shall be inspected:

(a) Externally while under pressure - Annually.

(b) Internally and externally while not under pressure - Annually, except as noted in (d) of this subsection.

(c) The required annual "certificate of inspection" will not be issued until both inspections listed in (a) and (b) of this subsection are completed and reported to the jurisdiction.

(d) A power boiler in a national board accredited owner-user inspection program may have the internal inspection intervals extended by the owner-user inspection organization to ((~~five years maximum~~)) seven years or one-half the remaining life, whichever is less, under the following conditions:

(i) The boiler water treatment and specific chemical limits are prescribed and monitored by an individual or company that specializes in the water treatment field;

(ii) Nondestructive examination (NDE) is performed along with the internal inspections;

(iii) The boiler is monitored within a manned operating facility;

(iv) Inspection, maintenance, and water treatment records are maintained;

(v) There is sufficient inspection history for the boiler or a boiler in similar service to justify the increase in the inspection interval; and

(vi) This provision shall not apply to a black liquor recovery boiler or any boiler with an unsuitable corrosion rate, remaining life, and/or repair history.

(2) **Organic vapor boilers** shall be inspected:

(a) Externally while under pressure - Annually.

(b) Internally and externally while not under pressure - Biennially.

(3) ((~~**Low pressure**~~)) **Steam heating boilers** shall be inspected:

(a) Externally while in operation and under pressure - Biennially.

(b) Internally while not under pressure (except where construction does not permit an internal) - Biennially.

(4) **Hot water heating boilers** shall be inspected:

(a) Externally while in operation and under pressure - Biennially.

(b) Internally while not under pressure (except where construction does not permit an internal) - Every fourth year.

(c) ((~~Internally, all steam heating boilers will have as a minimum, an internal of their low water fuel cut off - Biennially.~~

~~(d)~~)) Internally, ((~~none~~)) for the waterside, not required for ((~~nonvapor~~)) boilers using glycol, or adequately treated with corrosion inhibitor.

((~~(4) **Hot**~~)) (5) **Hot water supply boilers** shall be inspected:

(a) Externally while in operation and under pressure - Biennially.

(b) Internally - None required.

(6) **Water heaters** shall be inspected:

(a) Externally - Biennially.

(b) Internally - None required.

((~~(5)~~)) (7) **Unfired pressure vessels** shall be inspected:

(a) Externally - Biennially.

(b) Internally:

(i) When subject to corrosion and construction permits - Biennially, except that expansion tanks, air separators, ammonia storage tanks and hot water storage tanks may have internal inspections at the inspector's discretion. Vessels in an owner-user inspection program may follow intervals established by the NBIC or API-510.

(ii) Pulp or paper dryer rolls may be inspected on a five-year basis in accordance with TAPPI TIP 0402-16 revised 2011, provided the owner has established a written inspection program accepted by the inspector that meets the minimum requirements of TAPPI TIP 0402-16 revised 2011.

(iii) Vessels not subject to corrosion do not require an internal.

AMENDATORY SECTION (Amending WSR 18-23-092, filed 11/20/18, effective 1/1/19)

WAC 296-104-320 Installation—Where should the discharge from safety pressure relief devices, blow offs and drains be directed? Discharge from safety pressure relief devices, blow offs and drains shall be directed to a safe point of discharge to prevent injury to personnel and property. Discharge lines from boilers, accumulators, or headers, with a capacity of 1,000 pounds of steam per hour or more, shall be directed outside of the building.

For ((~~hot~~)) water heater discharge lines as defined in WAC 296-104-010 that do not exceed 120 gallons or 200,000 Btu/hr input the following requirements shall be followed:

The discharge piping serving a temperature relief valve, pressure relief valve, or combination of both shall have no valves, or obstructions, or means of isolation and be provided with the following:

(1) Equal to the size of the valve outlet and shall discharge full size to the flood level of the area receiving the discharge and pointing down.

(2) Materials shall be rated at not less than the operating temperature of the system and approved for such use.

(3) Discharge pipe shall discharge independently by gravity through an air gap into the drainage system or outside of the building with the end of the pipe not exceeding 2 feet (610 mm) and not less than 6 inches (152 mm) above the ground and pointing downwards.

(4) Discharge in such a manner that does not cause personal injury or structural damage.

(5) No part of such discharge pipe shall be trapped or subject to freezing.

(6) The terminal end of the pipe shall not be threaded.

(7) Discharge from a relief valve into a water heater pan shall be prohibited.

Exception: Where no drainage was provided, replacement water heating equipment shall only be required to provide a drain pointing downward from the relief valve to extend between 2 feet (610 mm) and 6 inches (152 mm) from the floor. No additional floor drain need be provided.

NEW SECTION

WAC 296-104-450 Operation—What are the requirements for operation of boilers? (1) Designation of operators: Owners of boilers as defined in this chapter shall designate an operator to discharge the duties of operation and maintenance of such boilers.

(2) Maintenance requirements: Owners of boilers shall, as a minimum, maintain such boilers in accordance with manufacturer's specifications.

(3) Operational requirements: Owners of boilers shall perform periodic checks and operational maintenance of such boilers to ensure the mechanical integrity of the boiler. Frequency of checks and operational maintenance shall be determined by the manufacturer of the boiler and this chapter. Depending on the size and use of a boiler, checks and maintenance must be made at designated intervals by the operator. The designated interval and checks shall be as prescribed by, but need not be limited to, the manufacturer's specification(s) and ASME CSD 1 (Controls and Safety Devices for Automatically Fired Boilers). Operators responsible for the maintenance and operation of boil-

ers shall have the skills necessary to perform those tasks at the level to ensure the safe operation of regulated boilers. It is recommended that all operators of boilers obtain training in the proper operation and maintenance of such boilers; training may be obtained through community colleges, mechanical insurers, trade associations, trade unions, owners, and manufacturers and distributors of such devices.

(4) Recordkeeping: Is required for power boilers with a energy input greater than 500,000 Btu/hr (146.5 kW) and low pressure steam and hydronic heating boilers with a energy input of greater than 2,500,000 Btu/hr (732 kW). The owner shall maintain records of operation and maintenance of boilers for a period of no less than three years from the date of recording and records must be available upon request of the inspector. Such records shall include, but not be limited to, the following information:

(a) Maintenance history of the boiler.

(b) Operational check and maintenance logs that are secured in such a way to prevent revisions, additions, or deletions to entries which have been previously entered.

(c) Permits, licenses, and other regulatory compliance information.

(d) Problems and operational disruptions due to failure of the boiler or a boiler accessory.

(5) This section takes effect April 2, 2027.

AMENDATORY SECTION (Amending WSR 25-09-124, filed 4/22/25, effective 7/1/25)

WAC 296-104-700 What are the inspection fees—Examination fees—Certificate fees—Expenses? The following fees shall be paid by, or on behalf of, the owner or user upon the completion of the inspection. The inspection fees apply to inspections made by inspectors employed by the state.

The boiler and pressure vessel installation/reinstallation permit fee of ((~~$78.70~~)) $83.80 shall be paid by the installer, as defined in WAC 296-104-010.

Certificate of inspection fees: For objects inspected, the certificate of inspection fee per object is ((~~$33.80~~)) $36.00.

Hot water heaters per RCW 70.79.090, inspection fee: ((~~$10.00~~)) $10.60.

The department shall assess a ((~~$8.10~~)) $8.60 fee, per object, for processing of jurisdictional inspection reports to any authorized in-service inspection agency or inspector who does not file the report directly into the department's electronic inspection report system.

Heating boilers:	Internal	External
Cast iron—All sizes	((~~$57.20~~)) $60.90	((~~$45.70~~)) $48.60
All other boilers less than 500 sq. ft.	((~~$57.20~~)) $60.90	((~~$45.70~~)) $48.60
500 sq. ft. to 2500 sq. ft.	((~~$114.60~~)) $122.00	((~~$57.20~~)) $60.90
Each additional 2500 sq. ft. of total heating surface, or any portion thereof	((~~$45.70~~)) $48.60	((~~$22.20~~)) $23.60
Power boilers:	Internal	External

Less than 100 sq. ft.	((~~$57.20~~)) $60.90	((~~$45.70~~)) $48.60
100 sq. ft. to less than 500 sq. ft.	((~~$69.30~~)) $73.80	((~~$45.70~~)) $48.60
500 sq. ft. to 2500 sq. ft.	((~~$114.60~~)) $122.00	((~~$57.20~~)) $60.90
Each additional 2500 sq. ft. of total heating surface, or any portion thereof	((~~$45.70~~)) $48.60	((~~$22.20~~)) $23.60
Pressure vessels:		
Square feet shall be determined by multiplying the length of the shell by its diameter.	Internal	External
Less than 15 sq. ft.	((~~$45.70~~)) $48.60	((~~$33.80~~)) $36.00
15 sq. ft. to less than 50 sq. ft.	((~~$68.00~~)) $72.40	((~~$33.80~~)) $36.00
50 sq. ft. to 100 sq. ft.	((~~$79.30~~)) $84.40	((~~$45.70~~)) $48.60
For each additional 100 sq. ft. or any portion thereof	((~~$79.20~~)) $84.30	((~~$22.20~~)) $23.60
Nonnuclear shop inspections, field construction inspections, and special inspection services:		
For each hour or part of an hour up to 8 hours		((~~$69.30~~)) $73.80
For each hour or part of an hour in excess of 8 hours		((~~$103.60~~)) $110.30
Nuclear shop inspections, nuclear field construction inspections, and nuclear triennial shop survey and audit:		
For each hour or part of an hour up to 8 hours		((~~$103.60~~)) $110.30
For each hour or part of an hour in excess of 8 hours		((~~$162.30~~)) $172.80
Nonnuclear triennial shop survey and audit:		
When state is authorized inspection agency:		
For each hour or part of an hour up to 8 hours		((~~$69.30~~)) $73.80
For each hour or part of an hour in excess of 8 hours		((~~$103.60~~)) $110.30
When insurance company is authorized inspection agency:		
For each hour or part of an hour up to 8 hours		((~~$103.60~~)) $110.30
For each hour or part of an hour in excess of 8 hours		((~~$162.30~~)) $172.80

Examination fee: A fee of ((~~$128.30~~)) $136.60 will be charged for each applicant sitting for an inspection examination(s).

Special inspector commission: A fee of ((~~$69.20~~)) $73.70 for initial work card. A fee of ((~~$42.90~~)) $45.60 for annual renewal.

If a special inspector changes companies: A work card fee of ((~~$69.20~~)) $73.70.

Expenses shall include:

Travel time and mileage: The department shall charge for its inspectors' travel time from their offices to the inspection sites and return. The travel time shall be charged for at the same rate as that for the inspection, audit, or survey. The department shall also charge the current Washington office of financial man-

agement accepted mileage cost fees or the actual cost of purchased transportation. Hotel and meals: Actual cost not to exceed the office of financial management approved rate.

Requests for Washington state specials and extensions of inspection frequency: For each vessel to be considered by the board, a fee of ((~~$647.50~~)) $689.60 must be paid to the department before the board meets to consider the vessel. The board may, at its discretion, prorate the fee when a number of vessels that are essentially the same are to be considered.