

SEC. 10. Section 16.28.010, R.C.W., as derived from section 1, chapter 148, Laws of 1919, is amended to read as follows: Amendment.

The term "animal" as used in this chapter means cattle and hogs. Definition.

[Am. R.R.S. 3156]

Passed the House February 13, 1951.

Passed the Senate February 21, 1951.

Approved by the Governor February 28, 1951.

## CHAPTER 32.

[ H. B. 87. ]

### BOILERS AND UNFIRED PRESSURE VESSELS.

AN ACT relating to public safety, creating a board of boiler rules to serve without salary with power to formulate rules and regulations for the safe and proper construction, installation, repair, use and operation of boilers and for the safe and proper construction, installation and repair of unfired pressure vessels; providing for the enforcement of the rules and regulations so promulgated; providing for the examination and appointment of boiler inspectors; providing for the inspection of boilers and unfired pressure vessels, the fees to be charged, and the reports to be made thereof; providing for inspection certificates; providing for appeals, and providing a penalty for the violation of the provisions of this act.

*Be it enacted by the Legislature of the State of Washington:*

SECTION 1. There is hereby created within this state a board of boiler rules, which shall hereafter be referred to as the board, consisting of five members who shall be appointed to the board by the governor, one for a term of one year, one for a term of two years, one for a term of three years, and two for a term of four years. At the expiration of their respective terms of office, they, or their successors identifiable with the same interests respectively as hereinafter provided, shall be appointed for terms of four years each. The governor may at any time

Board of boiler rules created.

Five members.

Terms.

Successors.

Removal.

remove any member of the board for inefficiency or neglect of duty in office. Upon the death or incapacity of any member the governor shall fill the vacancy for the remainder of the vacated term with a representative of the same interests with which his predecessor was identified. Of these five appointed members, one shall be representative of owners and users of boilers and unfired pressure vessels within the state, one shall be representative of the boiler or unfired pressure vessel manufacturers within the state, one shall be a representative of a boiler insurance company licensed to do business within the state, one shall be a mechanical engineer on the faculty of a recognized engineering college or a graduate mechanical engineer having equivalent experience, and one shall be representative of the boilermakers or practical steam operating engineers.

Vacancy.

Composition of board.

remove any member of the board for inefficiency or neglect of duty in office. Upon the death or incapacity of any member the governor shall fill the vacancy for the remainder of the vacated term with a representative of the same interests with which his predecessor was identified. Of these five appointed members, one shall be representative of owners and users of boilers and unfired pressure vessels within the state, one shall be representative of the boiler or unfired pressure vessel manufacturers within the state, one shall be a representative of a boiler insurance company licensed to do business within the state, one shall be a mechanical engineer on the faculty of a recognized engineering college or a graduate mechanical engineer having equivalent experience, and one shall be representative of the boilermakers or practical steam operating engineers.

Chairman.

The board shall elect one of its members to serve as chairman and, at the call of the chairman, the board shall meet at least four times each year at the state capitol or other place designated by the board.

Meetings.

SEC. 2. The members of the board shall serve without salary and shall receive their actual and necessary expenses incurred while in the performance of their duties as members of the board, to be paid in the same manner as in the case of other state officers.

Compensation.

Expenses.

SEC. 3. The board shall formulate definitions, rules and regulations for the safe and proper construction, installation, repair, use and operation of boilers and for the safe and proper construction, installation and repair of unfired pressure vessels in this state. The definitions, rules and regulations so formulated shall be based upon, and, at all times, follow the generally accepted nation-wide engineering standards, formulae, and practices established and pertaining to boiler and unfired pressure vessel construction and safety, and the board may by

Rules and regulations formulated.

SEC. 3. The board shall formulate definitions, rules and regulations for the safe and proper construction, installation, repair, use and operation of boilers and for the safe and proper construction, installation and repair of unfired pressure vessels in this state. The definitions, rules and regulations so formulated shall be based upon, and, at all times, follow the generally accepted nation-wide engineering standards, formulae, and practices established and pertaining to boiler and unfired pressure vessel construction and safety, and the board may by

resolution adopt an existing published codification thereof, known as "The Boiler Construction Code of the American Society of Mechanical Engineers," with the amendments and interpretations thereto made and approved by the council of the society, and may likewise adopt the amendments and interpretations subsequently made and published by the same authority; and when so adopted the same shall be deemed incorporated into, and to constitute a part or the whole of the definitions, rules and regulations of the board. Amendments and interpretations to the code so adopted shall be adopted immediately upon being promulgated, to the end that the definitions, rules and regulations shall at all times follow the generally accepted nation-wide engineering standards.

Board may adopt code.

When adopted shall constitute part of regulations.

SEC. 4. The board shall promulgate rules and regulations for the safe and proper installation, repair, use and operation of boilers, and for the safe and proper installation and repair of unfired pressure vessels which were in use or installed ready for use in this state prior to the date upon which the first rules and regulations under this chapter, pertaining to existing installations became effective, or during the twelve months period immediately thereafter.

Promulgate rules and regulations.

SEC. 5. (1) The rules and regulations formulated by the board shall have the force and effect of law, except that the rules applying to the construction of new boilers and unfired pressure vessels shall not be construed to prevent the installation thereof until twelve months after their approval by the director of the department of labor and industries.

Regulations as law.

(2) Subsequent amendments to the rules and regulations adopted by the board shall be permissive immediately and shall become mandatory twelve months after such approval.

Amendments effective, when.

SEC. 6. No power boiler, low pressure boiler, or unfired pressure vessel which does not conform to

Installations to conform to rules.

the rules and regulations formulated by the board governing new construction and installation shall be installed and operated in this state after twelve months from the date upon which the first rules and regulations under this chapter pertaining to new construction and installation shall have become effective, unless the boiler or unfired pressure vessel is of special design or construction, and is not covered by the rules and regulations, nor is in any way inconsistent with such rules and regulations, in which case a special installation and operating permit may at its discretion be granted by the board.

Special types.

Permit for.

Boilers in use prior to rules.

SEC. 7. (1) All boilers and unfired pressure vessels which were in use, or installed ready for use in this state prior to the date upon which the first rules and regulations under this chapter pertaining to existing installations became effective, or during the twelve months period immediately thereafter, shall be made to conform to the rules and regulations of the board governing existing installations, and the formulae prescribed therein shall be used in determining the maximum allowable working pressure for such boilers and unfired pressure vessels.

Must conform to rules.

Sales of boilers not prevented.

(2) This chapter shall not be construed as in any way preventing the use or sale of boilers or unfired vessels as referred to in subsection (1) of this section, provided they have been made to conform to the rules and regulations of the board governing existing installations, and provided, further, they have not been found upon inspection to be in an unsafe condition.

Exceptions.

SEC. 8. This chapter shall not apply to the following boilers, unfired pressure vessels and domestic hot water tanks:

(1) Boilers and unfired pressure vessels under federal regulation or operated by any railroad subject to the provisions of the interstate commerce act;

(2) Unfired pressure vessels meeting the requirements of the interstate commerce commission for shipment of liquids or gases under pressure;

(3) Air tanks located on vehicles operating under the rules of other state authorities and used for carrying passengers, or freight;

(4) Air tanks installed on the right-of-way of railroads and used directly in the operation of trains;

(5) Unfired pressure vessels having a volume of five cubic feet or less when not located in places of public assembly;

(6) Unfired pressure vessels designed for a pressure not exceeding fifteen pounds per square inch gauge when not located in place of public assembly;

(7) Tanks used in connection with heating water for domestic and/or residential purposes;

(8) Boilers and unfired pressure vessels in cities having ordinances which are enforced and which have requirements equal to or higher than those provided for under this act, covering the installation, operation, maintenance and inspection of boilers and unfired pressure vessels.

SEC. 9. The following boilers and unfired pressure vessels shall be exempt from the requirements of sections 22 to 33, inclusive, of this chapter: Exemptions.

(1) Boilers or unfired pressure vessels located on farms and used solely for agricultural purposes;

(2) Steam boilers used exclusively for heating purposes carrying a pressure of not more than fifteen pounds per square inch gauge and which are located in private residences or in apartment houses of less than six families;

(3) Hot water heating boilers carrying a pressure of not more than thirty pounds per square inch and which are located in private residences or in apartment houses of less than six families;

(4) Unfired pressure vessels containing only water under pressure for domestic supply purposes,

including those containing air, the compression of which serves only as a cushion or airlift pumping systems, when located in private residences or in apartment houses of less than six families;

(5) Unfired pressure vessels containing liquefied petroleum gases.

Vacancy in office of chief inspector.

How filled.

Must pass examination.

Removal.

Duties of chief inspector.

SEC. 10. (1) Within sixty days after the effective date of this chapter, and at any time thereafter that the office of the chief inspector may become vacant, the director of the department of labor and industries shall appoint a chief inspector who shall have had at the time of such appointment not less than ten years practical experience in the construction, maintenance, repair, or operation of high pressure boilers and unfired pressure vessels, as a mechanical engineer, steam engineer, boilermaker, or boiler inspector, and who shall have passed the same kind of examination as that prescribed for deputy or special inspectors in section 18 of this chapter to be chief inspector until his successor shall have been appointed and qualified. Such chief inspector may be removed for cause after due investigation by the board and its recommendation to the director of the department of labor and industries.

SEC. 11. The chief inspector, if authorized by the director of the department of labor and industries is hereby charged, directed and empowered:

(1) To cause the prosecution of all violators of the provisions of this chapter;

(2) To issue, or to suspend, or revoke for cause, inspection certificates as provided for in section 28 of this chapter;

(3) To take action necessary for the enforcement of the laws of the state governing the use of boilers and unfired pressure vessels and of the rules and regulations of the board;

(4) To keep a complete record of the type, dimensions, maximum allowable working pressure,

age, condition, location, and date of the last recorded internal inspection of all boilers and unfired pressure vessels to which this chapter applies;

(5) To publish and distribute, among manufacturers and others requesting them, copies of the rules and regulations adopted by the board.

SEC. 12. The chief inspector shall employ deputy inspectors who shall be responsible to the chief inspector and who shall have had at time of appointment not less than five years practical experience in the construction, maintenance, repair, or operation of high pressure boilers and unfired pressure vessels as a mechanical engineer, steam engineer, boilermaker, or boiler inspector, and who shall have passed the examination provided for in section 18 of this chapter.

SEC. 13. In addition to the deputy boiler inspectors authorized by section 12 of this chapter, the chief inspector shall, upon the request of any company authorized to insure against loss from explosion of boilers and unfired pressure vessels in this state, or upon the request of any company operating unfired pressure vessels in this state, issue to any inspectors of said company commissions as special inspectors, provided that each such inspector before receiving his commission shall satisfactorily pass the examination provided for in section 18 of this chapter, or, in lieu of such examination, shall hold a certificate of competency as an inspector of boilers and unfired pressure vessels for a state that has a standard of examination substantially equal to that of this state or a certificate as an inspector of boilers from the national board of boiler and pressure vessel inspectors. A commission as a special inspector for a company operating unfired pressure vessels in this state shall be issued only if, in addition to meeting the requirements stated herein, the inspector is continuously employed by the company for the purpose

of making inspections of unfired pressure vessels used, or to be used, by such company.

Compensation and expenses.

SEC. 14. Special inspectors shall receive no salary from, nor shall any of their expenses be paid by the state, and the continuance of a special inspector's commission shall be conditioned upon his continuing in the employ of a boiler insurance company duly authorized as aforesaid or upon continuing in the employ of a company operating unfired pressure vessels in this state and upon his maintenance of the standards imposed by this chapter.

Duties of special inspector.

SEC. 15. Special inspectors shall inspect all boilers and unfired pressure vessels insured or all unfired pressure vessels operated by their respective companies and, when so inspected, the owners and users of such insured boilers and unfired pressure vessels shall be exempt from the payment to the state of the inspection fees as provided for in section 32 of this chapter.

No fee.

SEC. 16. Each company employing special inspectors shall within thirty days following each internal boiler or unfired pressure vessel inspection made by such inspectors, file a report of such inspection with the chief inspector upon appropriate forms as promulgated by the American society of mechanical engineers. Reports of external inspections shall not be required except when such inspections disclose that the boiler or unfired pressure vessel is in a dangerous condition.

Report.

External inspections.

Access to premises when boilers being installed.

SEC. 17. The chief inspector, or any deputy or special inspector, shall have free access, during reasonable hours, to any premises in the state where a boiler or unfired pressure vessel is being constructed, or is being installed or operated, for the purpose of ascertaining whether such boiler or unfired pressure vessel is constructed, installed and

operated in accordance with the provisions of this chapter.

SEC. 18. Examinations for chief, deputy, or special inspectors shall be in writing and shall be held by the board, or by at least two members of the board. Such examinations shall be confined to questions the answers to which will aid in determining the fitness and competency of the applicant for the intended service. In case an applicant for an inspector's appointment or commission fails to pass the examination, he may appeal to the board for another examination which shall be given by the board within ninety days. The record of an applicant's examination shall be accessible to said applicant and his employer.

Written  
examina-  
tions.

Questions.

Failure to  
pass exami-  
nations.

SEC. 19. A commission may be suspended or revoked after due investigation and recommendation by the board to the director of the department of labor and industries for the incompetence or untrustworthiness of the holder thereof, or for wilful falsification of any matter or statement contained in his application or in a report of any inspection. A person whose commission has been suspended or revoked, except for untrustworthiness, shall be entitled to apply to the board for reinstatement or, in the case of a revocation, for a new examination and commission after ninety days from such revocation.

Commission  
may be  
revoked.

Reinstatement.

SEC. 20. A person whose commission has been suspended or revoked shall be entitled to an appeal as provided in section 36 of this chapter and to be present in person and/or represented by counsel on the hearing of the appeal.

Appeal.

Counsel.

SEC. 21. If a certificate or commission is lost or destroyed, a new certificate or commission shall be issued in its place without another examination.

Lost  
commission.

SEC. 22. Each boiler and unfired pressure vessel used or proposed to be used within this state, except

**Inspection of boilers.** boilers or unfired pressure vessels exempt in sections 8 and 9 of this chapter, shall be thoroughly inspected as to their construction, installation, condition and operation, as follows:

**Power boilers.** (1) Power boilers shall be inspected annually both internally and externally while not under pressure and shall also be inspected annually externally while under pressure if possible;

**Low pressure heating boilers.** (2) Low pressure heating boilers shall be inspected both internally and externally biennially where construction will permit;

**Unfired pressure vessels subject to internal corrosion.** (3) Unfired pressure vessels subject to internal corrosion shall be inspected both internally and externally biennially where construction will permit, except that the board may, in its discretion, provide for longer periods between inspections;

**Not subject to corrosion.** (4) Unfired pressure vessels not subject to internal corrosion shall be inspected externally at intervals set by the board, but internal inspections shall not be required of unfired pressure vessels, the contents of which are known to be noncorrosive to the material of which the shell, head, or fittings are constructed, either from the chemical composition of the contents or from evidence that the contents are adequately treated with a corrosion inhibitor, provided that such vessels are constructed in accordance with the rules and regulations of the board or in accordance with standards substantially equivalent to the rules and regulations of the board, in effect at the time of manufacture.

**Grace periods.** SEC. 23. In the case of power boilers a grace period of two months longer than the twelve months period may elapse between internal inspections of a boiler while not under pressure or between external inspections of a boiler while under pressure; in the case of low pressure heating boilers not more than twenty-six months shall elapse between inspections, and in the case of unfired pressure vessels not more

than two months longer than the period between inspections prescribed by the board shall elapse between internal inspections.

SEC. 24. The rules and regulations formulated by the board applying to the inspection of unfired pressure vessels may be modified by the board to reduce or extend the interval between required inspections where the contents of the vessel or the material of which it is constructed warrant special consideration.

Modification of rules.

SEC. 25. The inspections herein required shall be made by the chief inspector, by a deputy inspector, or by a special inspector provided for in this chapter.

Inspections, made by whom.

SEC. 26. If at any time a hydrostatic test shall be deemed necessary to determine the safety of a boiler or unfired pressure vessel, same shall be made, at the discretion of the inspector, by the owner or user thereof.

Hydrostatic test.

SEC. 27. All boilers and all unfired pressure vessels to be installed in this state after the twelve months period from the date upon which the rules and regulations of the board shall become effective shall be inspected during construction as required by the applicable rules and regulations of the board by an inspector authorized to inspect boilers in this state, or, if constructed outside of the state, by an inspector holding a certificate from the national board of boiler and pressure vessel inspectors, or a certificate of competency as an inspector of boilers for a state that has a standard of examination substantially equal to that of this state as provided in section 18.

Boilers installed after rules are effective.

SEC. 28. If, upon inspection, a boiler or an unfired pressure vessel is found to comply with the rules and regulations of the board, the owner or user thereof shall pay directly to the chief inspector the sum of one dollar in the case of a boiler, and fifty

Payment upon inspection.

Inspection  
certificate.  
Maximum  
pressure.

Time  
certificate  
valid.

Posting  
certificate.

Certificate  
invalid,  
when.

Certificate  
suspended.

cents in the case of an unfired pressure vessel, and the chief inspector, or his duly authorized representative, shall issue to such owner or user an inspection certificate bearing the date of inspection and specifying the maximum pressure under which the boiler or unfired pressure vessel may be operated. Such inspection certificate shall be valid for not more than fourteen months from its date in the case of power boilers and twenty-six months in the case of low pressure heating boilers, and for not more than two months longer than the authorized inspection period in the case of unfired pressure vessels. Certificates shall be posted under glass in the room containing the boiler or unfired pressure vessel inspected. If the boiler or unfired pressure vessel is not located within the building, the certificate shall be posted in a location convenient to the boiler or unfired pressure vessel inspected or, in the case of a portable boiler or unfired pressure vessel, the certificate shall be kept in a metal container to be fastened to the boiler or vessel in a tool box accompanying the boiler or unfired pressure vessel.

SEC. 29. No inspection certificate issued for an insured boiler or unfired pressure vessel inspected by a special inspector shall be valid after the boiler or unfired pressure vessel, for which it was issued, shall cease to be insured by a company duly authorized by this state to carry such insurance.

SEC. 30. The chief inspector, or his authorized representative, may at any time suspend an inspection certificate when, in his opinion, the boiler or unfired pressure vessel for which it was issued, cannot be operated without menace to the public safety, or when the boiler or unfired pressure vessel is found not to comply with the rules and regulations herein provided. A special inspector shall have corresponding powers with respect to inspection certificates for boilers or unfired pressure vessels insured or unfired

pressure vessels operated by the company employing him. Such suspension of an inspection certificate shall continue in effect until such boiler or unfired pressure vessel shall have been made to conform to the rules and regulations of the board, and until said inspection certificate shall have been reinstated.

Suspension until certificate reinstated.

SEC. 31. After twelve months following the date on which this chapter becomes effective, it shall be unlawful for any person, firm, partnership, or corporation to operate under pressure in this state a boiler or unfired pressure vessel, to which this chapter applies, without a valid inspection certificate as provided for in this chapter. The operation of a boiler or unfired pressure vessel without such inspection certificate, or at a pressure exceeding that specified in such inspection certificate, shall constitute a misdemeanor on the part of the owner, user, or operator thereof. Each day of such unlawful operation shall be deemed a separate offense.

When unlawful to operate without certificate.

Violation.

SEC. 32. The owner or user of a boiler or pressure vessel required by this chapter to be inspected by the chief inspector, or his deputy inspector, shall pay directly to the chief inspector, upon completion of inspection, fees in accordance with the following schedule:

Inspection fees.

Power Boilers—

Internal Inspections

Boilers of five horsepower or less, or fifty square feet or less of heating surface.....	\$ 3.00
Boilers over five horsepower, or over fifty square feet of heating surface.....	10.00

External Inspections

Boilers over fifty square feet of heating surface .....	3.00
Low Pressure Heating Boilers—	
Inspection of heating boilers.....	3.00

Not more than thirteen dollars shall be charged or collected for any and all inspections, as above, of any boiler in any one year.

Hydrostatic Tests—

Where it is necessary to make a special trip to witness the application of a hydrostatic test. . . \$ 5.00

Biennial or Required Inspection of Unfired Pressure Vessels—

Fees to be based on the maximum length of vessel times the maximum width or diameter.

Internal and/or external inspection of each unfired pressure vessel subject to inspection having a cross sectional area of fifty square feet or less. . . \$ 3.00

For each additional one hundred square feet of area in excess of fifty square feet. . . \$ 5.00: *Provided*, That not more than twenty-five dollars shall be paid per day for the actual inspection time of each inspector on any one vessel.

A group of pressure vessels, such as the rolls of a paper machine or dryer operating as a single machine or unit, shall be considered as one pressure vessel.

SEC. 33. Shop inspections, or the inspection of second-hand or used boilers or pressure vessels by the chief or deputy inspector shall be charged for at the rate of not less than twelve dollars and fifty cents for one-half day of four hours, and twenty-five dollars for one full day of eight hours, plus all expenses, including traveling and hotel.

“Second hand” defined.

“Second-hand” shall mean an object which has changed ownership and location after primary use.

Fees, receipt and remittance.

SEC. 34. The chief inspector shall give an official receipt for said fees and shall transfer all sums so received to the treasurer of the state of Washington.

Official bonds.

SEC. 35. The chief inspector shall furnish a bond in the sum of five thousand dollars and each of the deputy inspectors, employed and paid by the state,

shall furnish a bond in the sum of two thousand dollars conditioned upon the faithful performance of their duties and upon a true account of moneys handled by them respectively and the payment thereof to the proper recipient. The cost of said bonds shall be paid by the state.

SEC. 36. Any person aggrieved by an order or act of the director of the department of labor and industries, the chief inspector, under this chapter, may, within fifteen days after notice thereof, appeal from such order or act to the board which shall, within thirty days thereafter, hold a hearing after having given at least ten days written notice to all interested parties. The board shall, within thirty days after such hearing, issue an appropriate order either approving or disapproving said order or act. A copy of such order by the board shall be given to all interested parties. Within thirty days after any order or act of the board, any person aggrieved thereby may file a petition in the superior court of the county of Thurston for a review thereof. The court shall summarily hear the petition and may make any appropriate order or decree.

SEC. 37. The fact that any section, sub-section, sentence, clause, or phrase of this chapter is declared unconstitutional or invalid for any reason shall not affect the remaining portions of this chapter.

Passed the House February 7, 1951.

Passed the Senate February 21, 1951.

Approved by the Governor March 1, 1951.