

STATE OF OKLAHOMA

2nd Session of the 48th Legislature (2002)

COMMITTEE SUBSTITUTE
FOR ENGROSSED
SENATE BILL NO. 1276

By: Douglass of the Senate

and

Fields of the House

COMMITTEE SUBSTITUTE

An Act relating to labor; amending 40 O.S. 2001, Section 141.2, which relates to the Boiler and Pressure Vessel Safety Act; providing inspection procedure for exhibitor boilers; providing an exemption for certain exhibitor boilers; providing definition; modifying exemption for certain oil and gas leases; placing jurisdiction of certain pressure vessels under the Corporation Commission; providing an effective date; and declaring an emergency.

BE IT ENACTED BY THE PEOPLE OF THE STATE OF OKLAHOMA:

SECTION 1. AMENDATORY 40 O.S. 2001, Section 141.2, is amended to read as follows:

Section 141.2 A. This act shall not apply to the following boilers, hot water heaters and pressure vessels:

1. Pressure vessels used for the transportation of compressed gases if constructed and operated in compliance with specifications and regulations of the United States Department of Transportation or of the Corporation Commission of Oklahoma and any unfired pressure vessels used as containers for liquefied petroleum gases and subject to the jurisdiction of the United States Department of Transportation or the Oklahoma Liquefied Petroleum Gas Administration or successor agencies;

2. Pressure vessels containing air located on vehicles operating pursuant to regulations of other jurisdiction authorities;

3. Pressure vessels having an internal or external operating pressure not exceeding fifteen (15) pounds per square inch gauge - one hundred three (103) kilopascals gauge with no limit on size;

4. Pressure vessels having an inside diameter not exceeding six (6) inches (152mm) with no limitation on pressure;

5. Pressure vessels with a nominal water containing capacity of one hundred twenty (120) gallons or four hundred fifty (450) liters or less, to be used for domestic supply purposes, for containing water under pressure including those containing air, the compression of which serves only as a cushion;

6. Pressure vessels containing water heated by steam or other indirect means when none of the following limitations is exceeded:

a. a heat input of two hundred thousand (200,000)

British thermal units per hour - fifty-eight thousand six hundred (58,600) watts,

b. a water temperature of two hundred ten degrees Fahrenheit (210° F), or

c. a water containing capacity of one hundred twenty (120) gallons - four hundred fifty (450) liters;

7. Pressure vessels which may be classified as pressure containers which are integral parts of components of rotating or reciprocating mechanical devices such as pumps, compressors, turbines, generators, engines and hydraulic or pneumatic cylinders where the primary design considerations and/or stresses are derived from the functional requirements of the device, or structures whose primary function is the transport of fluids from one location to another within a system of which it is an integral part, i.e., piping systems;

8. Hot water supply boilers which are directly fired with oil, gas or electricity when none of the following limitations are exceeded:

- a. a heat input of two hundred thousand (200,000) British thermal units per hour - fifty-eight thousand six hundred (58,600) watts,
- b. a water temperature of two hundred ten degrees Fahrenheit (210° F), or
- c. a water containing capacity of one hundred twenty (120) gallons - four hundred fifty (450) liters;

9. Boilers and pressure vessels under federal control and railroad locomotive boilers;

10. Pressure vessels located on remote sites and limited to oil, and natural gas gathering facilities or processing plants ~~or gas producing lease locations~~ that have fewer than ten buildings intended for human occupancy per one-fourth (1/4) square mile and where the closest building is at least two hundred twenty (220) yards from any vessel;

11. Pressure vessels in the care, custody and control of research facilities and used solely for research purposes which require one or more details of noncode construction or which involve destruction or reduced life expectancy of those vessels; and

12. Hot water supply heaters as defined in subparagraph f of paragraph 1 of Section ~~±~~ 141.1 of this ~~act~~ title, with piping connections to the potable water supply system which are intended to supply hot water for domestic or commercial purposes other than space heating. However, the Commissioner shall make routine inspections and issue necessary orders regarding existing hot water supply heaters located in facilities or installations owned or operated by the State of Oklahoma or its agencies, counties, municipalities or school districts.

B. The following boilers and pressure vessels shall be exempt from Sections ~~13, 14, 15 and 16~~ 141.13 through 141.16 of this ~~act~~ title:

1. Pressure vessels not exceeding fifteen (15) cubic feet in volume and two hundred fifty (250) pounds per square inch gauge pressure;

2. Low pressure steam boilers, hot water heating boilers, hot water supply boilers, hot water supply heaters or pressure vessels which are located in private residences or in apartment houses of less than six-family units; and

3. Pressure vessels operated entirely full of water or other liquid which is not materially more hazardous than water, provided the temperature of the vessel contents does not exceed one hundred fifty degrees Fahrenheit (150° F) or a pressure of two hundred (200) pounds per square inch gauge.

C. 1. Either a special inspector or an inspector licensed by the Department of Labor shall inspect exhibitor boilers on an annual basis when exhibitor boilers are being operated at public events. Exhibitor boilers maintained by owner/operators for private use and not for operation for the public shall be exempt from inspection by this state. Annual inspections by this state or a special inspector shall consist of the following:

- a. an internal and external visual,
- b. all threaded openings in the boiler shall be inspected,
- c. a hydrostatic pressure test at one and one-fourth (1.25) times the maximum allowable working pressure,
- d. the maximum allowable working pressure shall not exceed one hundred fifty (150) pounds per square inch (psi),
- e. the ash pan and grates on a dry bottom vessel shall be removed to allow a visual inspection of the crown sheet,
- f. a visual inspection of the crown sheet on wet bottom boilers,

- g. all boilers shall have a fusible plug that is constructed to the American Society of Mechanical Engineers (ASME) code and indicated by an ASME marking on the filler material. It shall protrude one (1) inch into the water on a fireside fusible plug and no more than one (1) inch on a waterside fusible plug,
- h. the pressure relief valve shall be National Board capacity certified,
- i. a gage glass shall be present with a guard to protect the glass, drain valve or petcock, be piped to a safe location, and be operational,
- j. try-cocks shall be located in correlation to the minimum required water level,
- k. a pressure gage that has been tested and proven accurate at the time of the annual pressure test,
- l. all piping shall be schedule 80, black pipe (SA-53 B or SA-105 B) from the boiler to the first valve,
- m. the boiler shall be equipped with two means of supplying feed water while under pressure, and
- n. all welding to the boiler shall be done by a certified repair organization as accredited and described in Part RA of the National Boiler Inspection Code (NBIC).

2. Exhibitor boilers shall have a nondestructive exam performed once every seven (7) years for determining repairs and thin areas that need to be repaired with the following requirements:

- a. on a dry bottom boiler, no less than 150 readings shall be taken,
- b. on a wet bottom boiler, no less than 180 readings shall be taken,
- c. this exam shall include the areas surrounding the crown sheet stays and any areas subject to corrosion,

- d. a loss of metal that is greater than thirty-five percent (35%) of the original boiler plate thickness in an area greater than three (3) inches in diameter shall be considered to be a thin area and shall need to be repaired prior to any operation,
- e. exams shall be by a certified professional pursuant to applicable provisions of law of this state,
- f. no exam shall be by a certified professional that has a vested interest in the boiler that is being examined,
- g. the exam results shall be made available to the organization where the boiler is being exhibited, if requested, and
- h. the exam results shall be made available at the time of the annual inspection to the inspector, if requested.

For purposes of this section, "exhibitor boiler" shall mean a boiler which is operated in this state for nonprofit purposes including, but not limited to, exhibitions, fairs, parades, farm machinery shows, or any other event of a historical or educational nature. An exhibitor boiler includes steam locomotives, traction and portable steam engines, and stationary boilers of the firetube, watertube, and returnable class, model or miniature, and may be riveted, riveted and welded, or all welded construction, if used within the state for nonprofit purposes.

D. Pressure vessels, associated piping, and connections located on oil and gas lease sites shall fall under the exclusive jurisdiction of the Corporation Commission. The Corporation Commission shall be responsible for the inspection of oil and gas lease pressure vessels to ensure the vessels, associated piping, and connections are properly operated and maintained in a manner deemed appropriate by the Corporation Commission.

SECTION 2. This act shall become effective July 1, 2002.

SECTION 3. It being immediately necessary for the preservation of the public peace, health and safety, an emergency is hereby declared to exist, by reason whereof this act shall take effect and be in full force from and after its passage and approval.

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