



Notice of Permanent Rule

January 1, 2012

Adopts 2011 Oregon Boiler & Pressure Vessel Specialty Code

Purpose of the rule:

These rules adopt the 2011 Oregon Boiler and Pressure Vessel Specialty Code. This code consists of model codes and standards with Oregon amendments for the safe installation and operation of boilers and pressure vessels in Oregon. Adoption of these codes and standards are necessary to protect the public and property in Oregon by ensuring safe construction, installation, maintenance and repair of boilers and pressure vessels.

Citation:

Amend: OAR 918-225-0430, 918-225-0435, 918-225-0570, 918-225-0600 & 918-225-0620

These rules and amendments become effective January 1, 2012.

Effect of the rule:

Below are key aspects of this code change cycle:

Power boilers

- Revises single product certification mark
- Clarifies that the Forward is not an enforceable part of the code
- Added a statement regarding a means of manually opening and closing valve(s) from operating floor or platform

Heating boilers

- Marking requirements for cast iron or cast aluminum boilers

Pressure vessels

- Required markings
- Certificates of authorization and certification marks
- Revises single product certification mark

CSD-1

- Burner or burner assemblies installed on boilers or as a replacement burner

Contact:

If you have questions or need further information, please contact Chief Boiler Inspector Mike Graham at 503-373-7499, or Mike.D.Graham@state.or.us.



Secretary of State
Certificate and Order for Filing
PERMANENT ADMINISTRATIVE RULES

I certify that the attached copies* are true, full and correct copies of the PERMANENT Rule(s) adopted upon filing by the

Department of Consumer and Business Services, Building Codes Division	918
Agency and Division	Administrative Rules Chapter Number

Stephanie Snyder	PO Box 14470 Salem, OR 97309	(503) 373-7438
Rules Coordinator	Address	Telephone

to become effective January 1, 2012. Rulemaking Notice was published in the November 2011 Oregon Bulletin.**

RULE CAPTION

Adopts the 2011 Boiler and Pressure Vessel Specialty Code

Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.

RULEMAKING ACTION

List each rule number separately (000-000-0000)

Secure approval of new rule numbers (Adopted or Renumbered rules) with the Administrative Rules Unit prior to filing.

ADOPT:

AMEND: OAR 918-225-0430, 918-225-0435, 918-225-0570, 918-225-0600, and 918-225-0620

REPEAL:

RENUMBER:

AMEND & RENUMBER:

Stat. Auth.: ORS 455.020, 480.545, 480.550, 480.560, 480.585, 480.595, 480.600 & 480.605

Other Auth.:

Stats. Implemented: ORS 480.545, 480.550, 480.560, 480.585, 480.595, 480.600, 480.605 & 480.630

RULE SUMMARY

These rules adopt minimum safety standards for the safe installation and operation of boilers and pressure vessels in Oregon by adopting provisions of national boiler and pressure vessel model codes and standards. These rules adopt the model codes and standards with additional Oregon amendments that will be referred to as the 2011 Oregon Boiler and Pressure Vessel Specialty Code.

Additional rules are amended to change the format of the tables with no changes to the text.

Mark Long	
Authorized Signer	Date
Printed name	

Part III – Codes and Vessel Operations
Subpart A – Codes

918-225-0430

Adopted Oregon Boiler and Pressure Vessel Specialty Code

(1) Effective January 1, 2012 the **Oregon Boiler and Pressure Vessel Specialty Code** consists of the following minimum safety standards for boilers, pressure vessels, pressure piping, parts, items, and repair and alteration procedures:

(a) ORS 480.510 to 480.670 and OAR chapter 918, division 225;

(b) The **Boiler and Pressure Vessel Code of The American Society of Mechanical Engineers (ASME), 2010 Edition** as published, including Section I; Section II, Parts A, B, C, and D; Section IV; Section V; Section VIII, Division 1, 2, and 3; Section IX; and Section X only;

(c) The **2010 Edition of the ANSI/ASME B31.1 Power Piping Code;**

(d) The **2010 Edition of the ANSI/ASME B31.3 Process Piping Code;**

(e) The **2010 Edition of the ANSI/ASME B31.5 Refrigeration Piping Code;**

(f) The **2011 Edition of the ANSI/ASME B31.9 Building Service Piping Code;**

(g) The **2011 Edition of the National Board Inspection Code ANSI/NB 23**, including Parts 1, 2, and 3, with Oregon amendments;

(h) The **2011 Edition of NFPA 85, Boiler and Combustion Systems Hazards Code;** and;

(i) The **2009 Edition of ASME, CSD-1, Controls and Safety Devices for Automatically Fired Boilers.**

(2) Notwithstanding any licensing or certification provisions contained in the model codes adopted in subsection (1) of this section for inclusion in the **Oregon Boiler and Pressure Vessel Specialty Code**, the standards and requirements applicable to boiler and pressure vessel business and trade licenses, as well as inspector certifications, issued by the Building Codes Division are established in ORS chapters 455 and 480, and OAR chapter 918, divisions 30, 90, and 225.

[Publications: Publications referenced are available for review from the agency.]

Stat. Auth.: ORS 455.020, 480.545 & 480.550

Stats. Implemented: ORS 480.545, 480.550 & 480.560

Hist.: DC 17, f. 7-31-72, ef. 8-15-72; DC 19, f. 6-21-73, ef. 7-1-73; DC 27(Temp), f. & ef. 12-31-73; DC 33, f. 5-6-74, ef. 5-25-74; DC 38(Temp), f. & ef. 11-1-74; DC 50, f. 7-2-75, ef. 7-25-75; DC 89, f. & ef. 6-2-77; DC 93, f. & ef. 7-19-76; DC 1-1978, f. 1-5-78, ef. 1-15-78; DC 4-1980, f. & ef. 5-30-80; DC 6-1982, f. & ef. 2-4-82; DC 23-1982, f. & ef. 11-9-82; DC 18-1983, f. & ef. 8-11-1983; DC 21-1983, f. & ef. 9-29-83; DC 1-1984, f. & ef. 1-5-84; DC 18-1984, f. & ef. 5-9-84; DC 36-1984, f. & ef. 12-4-84; DC 16-1985, f. & ef. 7-1-85; DC 6-1986, f. & ef. 5-5-86; DC 2-1987, f. & ef. 2-18-87; BCA 5-1987, f. & ef. 8-24-87; BCA 15-1988, f. & cert. ef. 11-16-88; BCA 25-1989, f. & cert. ef. 7-27-89; Renumbered from 814-025-0006; BCA 5-1990, f. & cert. ef. 2-6-90; BCA 26-1990, f. & cert. ef. 10-30-90; BCA 36-1993, f. 12-30-93, cert. ef. 1-1-94; Renumbered from 918-225-0015; BCD 17-1996, f. & cert. ef. 9-17-96; BCD 18-1997, f. 12-3-97, cert. ef. 1-1-98; BCD 26-1998, f. 12-30-98, cert. ef. 1-1-99; BCD 36-2000, f. 12-29-00, cert. ef. 1-1-01; BCD 13-2002, f. 6-28-02, cert. ef. 7-1-02; BCD 17-2005(Temp), f. & cert. ef. 7-12-05 thru 9-30-05; BCD 20-2005, f. 9-15-05, cert. ef. 10-1-05; BCD 16-2006, f. 12-29-06, cert. ef. 1-1-07; BCD 33-2008, f. 12-31-08, cert. ef. 1-1-09; BCD 21-2011, f. 12-30-11, cert. ef. 1-1-12

918-225-0435

Amendments to the Oregon Boiler and Pressure Vessel Specialty Code

(1) The **Oregon Boiler and Pressure Vessel Specialty Code** is adopted and amended pursuant to OAR chapter 918, division 8. Amendments adopted for inclusion into the **Oregon Boiler and Pressure Vessel Specialty Code** are placed in this rule.

(2) Effective January 1, 2012, the **2011 Edition of the National Board Inspection Code ANSI/NB 23, part 1** is amended in Oregon as provided in [Table 2-B](#).

[Publications: Publications referenced are available for review from the agency.]

Stat. Auth.: ORS 455.020, 480.545 & 480.550

Stats. Implemented: ORS 480.545 & 480.550

Hist.: BCD 16-2006, f. 12-29-06, cert. ef. 1-1-07; BCD 6-2007, f. 6-8-07, cert. ef. 6-15-07; BCD 33-2008, f. 12-31-08, cert. ef. 1-1-09; BCD 21-2011, f. 12-30-11, cert. ef. 1-1-12

918-225-0570

Boiler and Pressure Vessel Inspection Schedules

Unless the division grants special permission, all inspectors must comply with the following inspection schedule:

(1) Power boilers must be inspected, at minimum:

(a) Internally – every year, when physical construction of the boiler allows; and

(b) Externally – every year, while under pressure.

(2) Cast iron boilers must be inspected externally – every two years, while under pressure.

(3) Low pressure steam boilers must be inspected, at minimum:

(a) Internally – every two years, when physical construction of the boiler allows; and

(b) Externally – every two years, while under pressure.

(4) Hot water heating and hot water supply boilers must be inspected:

(a) Internally – every six years, when physical construction of the boiler allows; and

(b) Externally – every two years, while under pressure.

(5) Pressure vessels containing anhydrous ammonia intended for use as fertilizer must be inspected, at minimum, externally every three years.

(6) Portable pressure vessels, mounted on a motorized vehicle and containing only air, not exceeding 5 cubic feet in volume and operated at gauge pressures of not more than 200 pounds per square inch must be inspected, at minimum:

(a) Internally – every four years, subject to section (14) of this rule; and

(b) Externally – every four years.

(7) Fixed pressure vessels, containing only air, not located at a place of public assembly, not exceeding 20 cubic feet in volume, and operated at gauge pressures of not more than 200 pounds per square inch must be inspected, at minimum:

(a) Internally – every six years, subject to section (14) of this rule; and

(b) Externally – every six years.

(8) Co₂ vessels and hydro-pneumatic pressure vessels, used for beverage service, not exceeding 20 cubic feet in volume, and operated at gauge pressures of not more than 300 pounds per square inch must be inspected, at minimum:

(a) Internally – every six years, subject to section (14) of this rule; and

(b) Externally every six years.

(9) Pressure vessels, not classified in sections (5), (6), (7), and (8) of this rule, and subject to internal corrosion or erosion must be inspected, at minimum:

(a) Internally – every two years, subject to section (14) of this rule; and

(b) Externally – every two years.

(10) Unfired pressure vessels, not classified in sections (5), (6), (7), (8), (11), and (12) of this rule, and not subject to internal corrosion must be inspected, at minimum, externally – every–four years.

(11) Unfired pressure vessels not subject to internal corrosion but containing a substance which, if it were to leak, might cause serious irreversible harm to a person must be inspected, at minimum:

(a) Internally – every two years, subject to section (14) of this rule; and

(b) Externally – every two years.

(c) A substance “might cause serious irreversible harm” if the substance’s Material Safety Data Sheet describes serious health or physical risks caused by short-term exposure to the substance.

(12) Unfired pressure vessels not subject to internal corrosion that are located at a place of public assembly and are not classified in section (8) of this rule must be inspected, at minimum:

(a) Internally – every two years, subject to section (14) of this rule; and

(b) Externally – every two years.

(13) Pressure piping systems containing refrigerants, steam, or pressurized condensate: Inspection during fabrication, installation, repair, or alteration for verification of compliance with material, welding, brazing, and structural support requirements. The inspector may require other tests to verify quality of weldments. This rule does not apply to welded repair of pressure piping under OAR 918-225-0720.

(14) The inspector may waive an internal inspection, under section (6), (7), (8), (9), (11), or (12) of this rule if the inspector believes from alternate inspection methods an internal inspection is not necessary to verify the safe condition of the vessel.

(15) An inspector may require additional internal or external inspections, or tests, other than those required in this rule, if the inspector has reason to believe that the boiler or pressure vessel does not meet minimum safety standards.

(16) Failure to comply with sections (1) through (15) of this rule may cause inspections to be performed by a deputy inspector per ORS 480.570(6) as directed by the chief inspector.

NOTE: The information in this rule is summarized in [Table 1-B](#), Boiler and Pressure Vessel Inspection Cycles.

Stat. Auth.: ORS 480.545, 480.550, 480.560
Stats. Implemented: ORS 480.545, 480.550, 480.560
Hist.: DC 17, f. 7-31-72, ef. 8-15-72; DC 12-1980, f. & ef. 9-12-80; BCA 1-1987, f. & ef. 7-1-87; Renumbered from 814-025-0075; BCA 22-1992(Temp), f. 12-15-92, cert. ef. 1-1-93; BCA 4-1993, f. & cert. ef. 4-5-93; BCA 36-1993, f. 12-30-93, cert. ef. 1-1-94; Renumbered from 918-225-0175; BCD 18-1996, f. & cert. ef. 9-17-96; BCD 18-1997, f. 12-3-97, cert. ef. 1-1-98; BCD 36-2000, f. 12-29-00, cert. ef. 1-1-01; BCD 15-2006, f. 12-29-06, cert. ef. 1-1-07; BCD 7-2007, f. 7-13-07, cert. ef. 9-1-07; BCD 29-2008, f. 12-31-08, cert. ef. 1-1-09; BCD 21-2011, f. 12-30-11, cert. ef. 1-1-12

918-225-0600

Permits

(1) An installation permit is required before installing, altering, or repairing a nonexempt boiler or pressure vessel. Fees for installation permits are non-refundable.

(2) An operating permit or a temporary operation authorization is required before placing a nonexempt vessel into operation.

(3) An installation permit fee includes two inspections of the boiler or pressure vessel. An operating permit fee includes one external inspection of the boiler or pressure vessel and one internal inspection when both are required. If an inspection is scheduled, and the inspector is at the site but the boiler or pressure vessel is not ready or cannot be accessed, the rescheduled inspection will be at an additional cost. The fee for such inspections is the hourly rate specified in ORS 480.605.

(4) Permits to operate boilers or pressure vessels shall be issued periodically according to vessel type, based on the schedule established by the division in [Table 1-A](#).

(5) Operating and installation permit fees are as shown in [Table 3-B](#).

(6)(a) Operating permit fees not received within 90 days of the billing date may be considered delinquent and subject to a late penalty

of double the fee amount. It is the equipment owner's responsibility to maintain a current operating permit. This responsibility includes notifying the division of address and other billing information changes. Late penalties may only be waived under exceptional circumstances.

(b) All waiver requests must be submitted in writing and must clearly state the reason for the request. A waiver may be granted for all or part of the additional fee.

(7) Prepaid permit application forms do not authorize work until the contractor provides the required information to the division for review and approval. Prior to beginning the intended installation, repair, or alteration, the contractor must notify the deputy or special inspector who will inspect the work. Work may not begin until the inspector has reviewed and approved the work to be performed.

(8) Upon receipt of permit approval:

(a) The permit must be posted at the job site before beginning the work; or

(b) The approved permit number must be posted at the job site and signed by the contractor.

(9) A permit issued under this rule is not transferable.

(10) This rule does not change the provisions for emergency permits in ORS 480.630(6). It is recommended, but not required, that emergency permits be reviewed and coordinated with the inspector responsible for inspecting the completed work.

Stat. Auth.: ORS 480.585, 480.595, & 480.605
Stats. Implemented: ORS 480.585, 480.595, 480.605, & 480.630
Hist.: BCA 36-1993, f. 12-30-93, cert. ef. 1-1-94; BCD 18-1997, f. 12-3-97, cert. ef. 1-1-98; BCD 14-2007, f. 12-28-07 cert. ef. 1-1-08; BCD 9-2009, f. 12-30-09, cert. ef. 1-1-10; BCD 21-2011, f. 12-30-11, cert. ef. 1-1-12

918-225-0620

Bulk Rate Permits

(1) Bulk rate permits may be granted if there is a quantity of either six (6) or more boilers or six (6) or more pressure vessels at the same location.

(2) To obtain bulk rate permits, the owner or user must make a written request to the division at least 30 days before the expiration of existing operating permits.

(3) If a bulk rate site requires two or more inspections during an inspection cycle, the division

may rescind bulk rate permits and charge the full operating permit fees, as provided in [Table 3-B](#). Inspection cycles are listed in [Table 1-B](#).

Stat. Auth.: ORS 480.600

Stats. Implemented: ORS 480.600

Hist.: DC 17-1982, f. 7-31-72, ef. 8-15-72;

Renumbered from 814-025-0050; BCA 36-1993, f.

12-30-93, cert. ef. 1-1-94; Renumbered from 918-

225-0120; BCD 9-2009, f. 12-30-09, cert. ef. 1-1-10;

BCD 21-2011, f. 12-30-11, cert. ef. 1-1-12