



Notice of Public Hearing

November 15, 2011

Adopts 2011 Oregon Boiler and Pressure Vessel Specialty Code

Opportunity for public input:

Those who would like to provide testimony may attend a public hearing on November 15, 2011 at 9:00 a.m. The hearing will be located at the Building Codes Division, Conference Room A. Written comments may also be submitted to the contact below. The last day to submit written comments is 5:00 p.m. November 18, 2011.

Live broadcast via the internet:

To view the public hearing live, click on "[View live meeting](#)"

Purpose of the rule:

These proposed 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:

Adopt, Amend, and Repeal: OAR 918-225

If adopted, these proposed rules and the codes would become effective January 1, 2012.

History:

From July 1 to August 15, 2011, the Division accepted code amendment proposals. The Boiler and Pressure Vessel Code Committee met one time on August 31, 2011. The committee reviewed the proposed code amendments to the various minimum safety standards and made a recommendation to the Board of Boiler Rules.

The Boiler and Pressure Vessel Specialty Code consists the following codes with Oregon amendments:

- 2010 ASME Boiler and Pressure Vessel Code
- 2010 ANSI/ASME B31.1 Power Piping Code
- 2010 ANSI/ASME B31.3 Process Piping Code
- 2010 ANSI/ASME B31.5 Refrigeration Piping Code
- 2011 ANSI/ASME B31.9 Building Service Piping Code
- 2011 National Board Inspection Code ANSI/NB 23
- 2011 NFPA 85 Boiler and Combustion Systems Hazards Code
- 2009 ASME CSD-1 Controls and Safety Devices for Automatically Fired Boilers

The Board of Boiler Rules, at its October 4, 2011 meeting, considered and approved the recommendations made by the code review committee and forwarded the proposed rules and codes to public hearing.

Contact:

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



Secretary of State
NOTICE OF PROPOSED RULEMAKING HEARING*
A Statement of Need and Fiscal Impact accompanies this form.

| | |
|-----------------------------------------------------------------------|-------------------------------------|
| Department of Consumer and Business Services, Building Codes Division | 918 |
| Agency and Division | Administrative Rules Chapter Number |
| Stephanie Snyder | (503) 373-7438 |
| Rules Coordinator | Telephone |
| PO Box 14470, Salem, OR 97309 | |
| Address | |

RULE CAPTION

Adopts the 2011 Boiler and Pressure Vessel Specialty Code
Not more than 15 words that reasonably identify the subject matter of the agency's intended action.

| | | | |
|-------------------|--------|-------------------------------------------|------------------|
| November 15, 2011 | 9 a.m. | 1535 Edgewater Street NW, Salem, OR 97304 | Mike Graham |
| Hearing Date | Time | Location | Hearings Officer |

Auxiliary aids for persons with disabilities are available upon advance request.

RULEMAKING ACTION

ADOPT: OAR 918-225

AMEND: OAR 918-225

REPEAL: OAR 918-225

RENUMBER:

Stat. Auth.: ORS 455.020, 480.545 & 480.550

Other Auth.:

Stats. Implemented: ORS 480.545 & 480.550

RULE SUMMARY

The proposed 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. The proposed 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.

The Agency requests public comment on whether other options should be considered for achieving the rule's substantive goals while reducing the negative economic impact of the rule on business.

November 18, 2011 by 5 p.m.

Last Day for Public Comment (Last day to submit written comments to the Rules Coordinator)

| | | |
|-----------|---------------|------|
| | Patrick Allen | |
| Signature | Printed name | Date |

STATEMENT OF NEED AND FISCAL IMPACT

A Notice of Proposed Rulemaking Hearing or a Notice of Proposed Rulemaking accompanies this form.

Department of Consumer and Business Services, Building Codes Division

918

Agency and Division

Administrative Rules Chapter Number

Adopts the 2011 Boiler and Pressure Vessel Specialty Code

In the Matter of: Amending, adopting, and repealing OAR 918-225

Statutory Authority: ORS 455.020, 480.545 & 480.550

Other Authority:

Stats. Implemented: ORS 480.545 & 480.550

Need for the Rule(s): The Building Codes Division adopts national model building codes and standards in order to protect public safety by ensuring the safe construction, installation, maintenance and repair of boilers and pressure vessels. Adopted codes and standards must be updated to reflect technological changes and industry practices.

Documents Relied Upon, and where they are available: Boiler Code Review Committee minutes from August 31, 2011; Board of Boiler Rules minutes from October 4, 2011; and draft rules. These materials are available from the division's Rules Coordinator located at 1535 Edgewater Street NW, Salem, Oregon 97309 or the division's website: www.bcd.oregon.gov.

Fiscal and Economic Impact: The division has determined that these proposed changes will not have any fiscal or economic impact on state agencies, units of local government, the public or small businesses. Oregon amendments were added for clarity and increased public safety but are not expected to impose additional costs.

Statement of Cost of Compliance:

1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):

Based on the information available to the division, the division has determined that these proposed rules will have no foreseeable significant fiscal impact on state agencies, units of local governments, or the public outside of the obtaining new code books and training.

2. Cost of compliance effect on small business (ORS 183.336):

a. Estimate the number of small businesses and types of business and industries with small businesses subject to the rule:

There are approximately 350 boiler businesses licensed in the state of Oregon, however the division is unable to determine how many of these licensed boiler businesses are small businesses. Boiler and pressure vessel installation and repair businesses may be impacted by the proposed changes to the Oregon Boiler and Pressure Vessel Specialty Code.

b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:

The 2011 National Board Inspection Code alters reporting requirements for boiler contractors with a pre-qualified welding program. The actual additional costs cannot be determined at this time, but the overall impact is expected to be extremely slight and may result in a net savings. The proposed rules do not impose any additional reporting, record keeping, or administrative requirements on small businesses.

c. Equipment, supplies, labor and increased administration required for compliance:

The proposed rules do not impose any additional requirements on equipment, supplies, labor, or increased administration for small businesses.

How were small businesses involved in the development of this rule? Small businesses were represented on the rulemaking advisory committee and the Board of Boiler Rules, both of which reviewed these rules on August 31, 2011 and October 4, 2011, respectively.

Administrative Rule Advisory Committee consulted?: Yes.

Signature

Patrick Allen

Printed name

Date

DRAFT 2012 Boiler Code Adoption Rule

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 containing~~ **consisting of** the **following** minimum safety standards for boilers, pressure vessels, pressure piping, ~~nuclear components~~, parts, items, and repair and alteration procedures follow:

- (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), 2007-2010 Edition** as published, including Section I; Section II, Parts A, B, C, and D; Section IV; Section V; ~~Section VI; Section VII;~~ Section VIII, Division 1, 2, and 3; Section IX; and, Section X **only**;
- (c) The **2007-2010 Edition of the ANSI/ASME B31.1 Power Piping Code**;
- (d) The **2006-2010 Edition of the ANSI/ASME B31.3 Process Piping Code**;
- (e) The **2006-2010 Edition of the ANSI/ASME B31.5 Refrigeration Piping Code**;
- (f) The **2004-2011 Edition of the ANSI/ASME B31.9 Building Service Piping Code**;
- (g) The **2007-2011 Edition of the National Board Inspection Code ANSI/NB 23**, including Parts 1, 2, and 3, with Oregon amendments;
- (h) The **2007-2011 Edition of NFPA 85, Boiler and Combustion Systems Hazards Code**; and;
- (i) The **2006-2009 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 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

DRAFT 2012 Boiler Code Adoption Rule

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, ~~2009~~ **2012**, the ~~2007~~ **2011 Edition of the National Board Inspection Code ANSI/NB 23, part 1** is amended in Oregon as provided in [Table 2-B](#).

NOTE: Table 2-B is available on the division's Web site website at <http://www.bcd.oregon.gov/rules.html#oar>.

[Publications: Publications referenced are available 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

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.

DRAFT 2012 Boiler Code Adoption Rule

(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, is found on page 18 of this division and is available on the division’s Web site at <http://www.bcd.oregon.gov/rules.html#oar>.

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

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.

DRAFT 2012 Boiler Code Adoption Rule

(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.

NOTE: ~~Table 1 A, Boiler and Pressure Vessel Operating Permit Periods, and Table 3 B, Boiler and Pressure Vessel Permit Fees, are located at the end of Division 225, beginning on page 17, and are available on the division's Web site at <http://www.bcd.oregon.gov/rules.html#oar>.~~

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

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](#).

NOTE: ~~Table 1 B, Boiler & Pressure Vessel Inspection Cycles, and Table 3 B, Boiler & Pressure Vessel Permit Fees, are located at the end of Division 225, beginning on page 18, and are available on the division's Web site at <http://www.bcd.oregon.gov/rules.html#oar>.~~

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