2021 Oregon Boiler and Pressure Vessel Specialty Code

Code update summary

October 2021



The 2021 Oregon Boiler and Pressure Vessel Specialty Code (OBPVSC) is adopted and effective Oct. 1, 2021. The list below can also be found in Oregon Administrative Rule 918-225-0430 and the Building Codes Division website.

The 2021 OBPVSC consists of the following code standards:

- 2021 National Board Inspection Code ANSI/NB 23 (NBIC)
- 2021 ASME Boiler and Pressure Vessel Code
- 2020 ANSI/ASME B31.1 Power Piping Code
- 2020 ANSI/ASME B31.3 Process Piping Code
- 2019 ANSI/ASME B31.5 Refrigeration Piping Code
- 2020 ANSI/ASME B31.9 Building Service Piping Code
- 2019 NFPA 85 Boiler and Combustion Systems Hazard Code
- 2018 ASME CSD-1 Controls & Safety Devices for Automatically Fired Boilers
- 2019 ASME PVHO-1 Safety Standard for Pressure Vessels for Human Occupancy
- Oregon amendments to the NBIC (OAR 918-225 Table 2-B)

Major Changes:

The following is a summary of the major changes to the OBPVSC for 2021:

2021 NBIC Part 1 - Installation:

- Electrical grounding/bonding must now be provided for newly installed boilers.
- There are new temperature and pressure rating requirements for pressure relief valve discharge piping.
- Multiple new supplements have been added with installation requirements for:
 - S5 Thermal Fluid Heaters.
 - S7 Graphite Pressure Vessels.
 - · S8 Pressure Vessels for Human Occupancy (PHVOs).
 - S9 High Temperature Water Boilers.

2021 NBIC Part 2 – Inspection:

- Requirements for remote visual inspection for confined space entry have been updated, though some of those changes have been amended by Oregon Administrative Rule (see Table 2-B below).
- New inspections requirements were added for PVHOs.
- The name plate replacement form NB-136 has been revised. Oregon will now accept the latest version of the form.

2021 NBIC Part 3 - Repair and Alterations:

- The list of standard welding procedures has been updated.
- New requirements have been implemented for the use of Welding Method 7.
- Guidance has been added for various types of repairs.

2021 NBIC Part 4 - Pressure Relief Devices:

- This is a new codebook for Oregon.
- Part 4 includes installation and inspection requirements from NBIC Parts 1 and 2.
- It also details requirements for the National Board T/O and V/R accreditations.

2019 ASME PVHO-1:

- This is also a new codebook for Oregon.
- PVHO-1 details the engineering and construction requirements for pressure vessels used for human occupancy, such as hyperbaric chambers.

2021 Oregon Administrative Rule Chapter 918 Division 225:

- 918-225-0240 The definition of "pressure relief valve" has been updated to better align with wording used in national standards.
- 918-225-0350 Exemption criteria for domestic hot water storage tanks have been revised to align with ASME requirements.
- 918-225-0745 Oregon now recognizes the National Board T/O pressure relief valve testing accreditation.
- 918-225 Table 2 B Updates to the Oregon Amendments to the NBIC include:
 - OBPVSC 1.6.9 Oregon has not adopted the NBIC Part 1 requirement for carbon monoxide detection in fuel fired equipment rooms.
 - OBPVSC 4.2.1 Oregon has removed some of the NBIC Part 2 requirements for remote visual inspection equipment to allow the use of more commonly available and affordable devices.
 - Various other amendments have been added or modified for the sake of consistency of code adoption and enforcement.

For further details on boiler code updates please visit <u>nationalboard.org</u>, <u>asme.org</u>, and our own <u>code</u> <u>adoption webpage</u>. If you have any questions, comments, or concerns, please contact the Chief Boiler Inspector via the information listed below.

Contact

Tom Clark
Chief Boiler Inspector
Oregon Building Codes Division | DCBS
thomas.g.clark@dcbs.oregon.gov
971-209-9082