



State of Oregon
Boiler and Pressure Vessel Law
Pressure Piping: Administration and Enforcement

How is pressure piping regulated in the State of Oregon?

Pressure piping is regulated by the State of Oregon Boiler and Pressure Vessel Law as provided in Oregon Revised Statute (ORS) 480.550(3);

“The Board of Boiler Rules shall adopt minimum safety standards for pressure piping substantially equal to the published codification of standard engineering practices and formulae known as the “Code for Pressure Piping” of the American Society of Mechanical Engineers, numbered B 31.1, B 31.3, B 31.5, B 31.7 and B 31.9 together with the published revisions and interpretations thereof.”

Accordingly, the above language suggests administration and enforcement are under the jurisdiction of the Board of Boiler Rules. No municipal building inspection program or other entity is authorized to administer or enforce the Boiler and Pressure Vessel Law or the Board’s interpretation of rules unless specifically authorized.

What types of pressure piping are covered by the Boiler and Pressure Vessel Law?

As directed by ORS 480.550(3), the Board adopts the following standards:

- **B31.1 Power Piping:** Boiler external piping for power boilers and high temperature, high pressure water boilers in which steam or vapor is generated at a pressure greater than 15 PSIG; and high temperature water is generated at pressures exceeding 160 PSIG or temperature exceeding 250°F.
- **B31.3 Process Piping:** Piping typically found in processing plants for all fluids including: 1) raw, intermediate, and finished chemicals; 2) petroleum products; 3) gas, steam, air and water; 4) fluidized solids; 5) refrigerants; and 6) cryogenic fluids.
- **B31.5 Refrigeration Piping and Heat Transfer Components:** Refrigerant, heat transfer components, and secondary coolant piping for temperatures as low as -320°F (-196°C), whether erected on the premises or factory assembled.
- **B31.7 General Requirements for Nuclear Power-Plant Piping:** The code was applicable until 1971, when the design and construction requirements for nuclear power plant piping were folded into the ASME Boiler and Pressure Vessel Code.
- **B31.9 Building Services Piping:** Piping in industrial, institutional, commercial, and public buildings, and multi-unit residences, which does not require the range of sizes, pressures, and temperatures covered in B31.1.



How is Process Piping within the scope of ASME B31.3 regulated?

The requirements of ASME B31.3 apply to piping for all fluids, including raw, intermediate, and finished chemicals; petroleum products, gas, steam, air, and water; fluidized solids; refrigerants and cryogenic fluids. All standards contained in the Boiler and Pressure Vessel Law apply to process piping (i.e. licensing, permitting, control manuals, etc.). *However, the Board's adopted standards for B31.3 only apply to hazardous process piping which is defined as Category M fluid service.*

With the exception of liquefied petroleum gas piping, all other piping referenced in ASME B31.3 remains under the Board of Boiler Rules.

For the purposes of the Board's rules related to ASME B31.3 Category "M" piping, the rules include process piping and pressure piping systems consisting of welded, brazed, mechanically, or chemically assembled piping listed as Category "M" by the owner.

Does the Oregon Structural Specialty Code regulate seismic and other structural concerns related to process piping?

Yes.

OAR 918-225-0315(2) clarifies that seismic and other structural connections of process piping systems to a structure are regulated and inspected under the provisions of the *Oregon Structural Specialty Code*.

Some jurisdictions have been issuing permits for this work. Are they grandfathered?

No.

ORS 480.550(3), the only area of statute specific to pressure piping, has been in law in one form or another since 1961 with the last update occurring in 1999. Any change in authority to regulate work covered by the codes referenced in ORS 480.550(3) will require a legislative action.

Contact:

Visit the division website to contact a [building code specialist](#).