



Boilers and Pressure Vessels Safety

**Technical Standards &
Safety Authority**
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GUIDELINES FOR REGISTRATION OF PIPING

Anyone, or any company, intending to design, fabricate, and/or install a piping assembly in Ontario should first refer to the Ontario Regulations made under the Technical Standards and Safety Act, 2000, which govern such actions. The Act and Regulations require compliance with the applicable CSA Standards, ASME and ANSI Codes and reference should also be made to these standards.

The following notes are intended to interpret and explain some of these requirements. They are not a substitute for the governing documents themselves.

Submissions:

Drawings (flow diagrams, piping and installation drawings) shall be submitted in duplicate, together with one copy of the system specifications and a letter of application requesting registration.

Drawings:

General information required on these drawings shall include, but is not limited to, the following:

- Construction Code Information latest Edition and Addenda (i.e. ANSI B31.1, B31.3 or B31.5) (excludes B31.9 Building Services Piping);
- Design Pressure;
- Design Temperature;
- Test Pressure and Type of Test;
- Service Fluid Information (e.g. Air, Water, Steam or specific Gas or Liquid);
- Safety/Relief Valve Setting and Location; or
- Statement regarding overpressure protection.

Specifications:

Pipe specification shall indicate, as a minimum, the following:

- Pipe line identification;
- Pipe size and schedule;
- Pipe material (in accordance with ASME or ASTM material specification);
- Fitting(s) classification, identification and rating (for details see TSSA's Guidelines for the Registration of Non-Nuclear Fittings in the Province of Ontario, also note Appendix "E" of this Guideline, for the requirements for flexible hose assemblies);
- Statement attesting that only registered fittings are used;
- Pipe joining methods and details (welding, brazing, or others);
- Non-destructive examination (NDE);
- Statement describing maximum support spacing and type, and anchor location.

General Information:

To help expedite registration, folded and relevant drawings should be submitted. Reproducible, e.g. mylars or originals should not be sent; non-relevant drawings to the piping system being registered should not be included. Submitter should be aware that, in the case of a large number of drawings involved, TSSA will determine which ones are relevant for registration. The remainder will be disposed of or returned, if so requested, at the submitter's expense.

For submissions that include a large number of drawings or systems, a line list and drawings list must be submitted with the package. For piping systems, which contain multiple services where some are subject to registration and others are not, those subject to registration must be highlighted on each of the two sets of submitted drawings. Also, additions or modifications to existing systems should be identified (highlighted) on the two sets of drawings.

Letter of Application:

The letter of application must include a return address, a contact name and telephone number, the location of the installation and a list of drawings submitted. Also, an estimate of the overall length of piping being installed should be indicated.

Inspection:

Where manufacture is performed outside Ontario, and in any other province of Canada, the inspection shall be performed by a Canadian Provincial Boiler Inspector.

If piping is manufactured in the USA, inspection shall be performed by a State Boiler Inspector or Insurance Company Inspector, holding a current National Board Commission.

For all other countries, inspection shall be performed by an Insurance Company Inspector holding a current National Board Commission or by an Inspection Agency authorised by TSSA, to perform the inspection.

The local TSSA Authorized Inspector must be notified prior to commencement of shop fabrication or site installation.

After registration, shop fabricated piping must be inspected during fabrication and a Piping Installation and Test Data Report Form must be prepared and signed by the fabricator and countersigned by the Authorized Inspector and submitted to the owner of the installation.

Appendices: None

Attachments: Piping Systems Installation and Test Data Report
(Located on TSSA's website, BPVS – Forms page)