



SAFETY INFORMATION BULLETIN: SB00-2 Rev. 2

Guide for Registration of Piping Systems

Scope

This Safety Information Bulletin applies to pressure piping systems regulated by the Boiler & Pressure Vessels Regulation, of the Technical Standards & Safety Act. This bulletin describes when Piping Registration is required for all fabrication, assembly, erection, installation, or repair and alteration of piping systems.

Nuclear piping is not covered as part of this Safety Bulletin, see N285 for details.

Definition of Piping Registration

The Boiler and Pressure Vessel division of TSSA registers piping designs.

- Where an installation of a piping system did not exist before.
- When additional work to a piping system requires registration, the new design specification and technical documents along with the original registration number (P#) shall be submitted on the TSSA portal for review.
- After registration, the original P# will be suffixed with an Addendum number identified, (e.g. P12345ADD1). Each time the piping system is resubmitted for registration, the Addendum number will be increased by one, (e.g. P12345ADD2).

Categorization of work performed

1. **New Installation** the complete, new installation of piping in a building or location where one did not exist before.

- A piping registration number (P#)
- Inspection is required
- A completed piping data report
- For piping contractors using the alternate piping process, please follow the safety bulletin for details. See the Safety Information Bulletin [BPV-001-23 Alternate Process for Piping Inspections in Ontario](#)

2. **Additions** of piping connected to a previously installed piping system, this could also be considered rerouting of a piping system.

- Do not require piping re-registration when the addition meets the criteria outlined below in the **Guidance on when piping re-registration is not required**
- Inspection is required
- A completed piping data report

3. Replacement of damaged pipe in a system should be like-for-like replacement, with no re-routing or additions involved

- Do not require piping re-registration when the addition meets the criteria outlined below in the **Guidance on when piping re-registration is not required**
- Inspection is required
- A completed piping data report

4. Repairs are restoration of the item back to original condition at the time of construction without replacement of materials.

- Do not require piping re-registration when the addition meets the criteria outlined below in the **Guidance on when piping re-registration is not required**
- A CofA with a repair scope is mandatory if it will be welded, brazed or bonded.
- Inspection is required and a piping data report.

5. All other cases where there are changes that affect the design of the piping system

- Require a piping registration number (P#).
- Inspection is required
- A completed piping data report

Guidance on when piping re-registration is not required

Piping work shall not be subject to further design re-registration, provided that proof of design registration has been validated, and there are no changes to the following conditions from the registered design:

- Code of construction e.g. ASME B31.1, ASME B31.3, ASME B31.5, or CSA Z7396.1
- Service Fluid (compressed air, nitrogen this list is not exhaustive), and/or fluid service category;
- Design pressure (internal, external);
- Design temperature (upper limit, lower limit);
- Corrosion or erosion allowance;
- Additional loading case(s) when specified;
- Pipe material specifications and grade/type (A106 Grade B, A53 Grade B type ERW this list is not exhaustive, also see additional note 15);
- Increase maximum size of pipe diameter as specified;
- Reducing pipe schedule as specified;
- Pipe joining method (welded, brazed, bonded, threaded, compression, grooved this list is not exhaustive);
- Fitting minimum pressure-temperature rating / class (e.g. 150#).
- Extent of Code required Non-destructive examination requirements (NDE);
- Extent of Code required post weld heat treatment requirements (PWHT);
- Design required test pressure and type of test.
- Change to the arrangement of overpressure protection device, where it can cause an increase in the maximum sustained operating pressure over the design pressure of the specific piping section(s) being protected;

Design Registration Information

Responsibilities

- It is the responsibility of the Owner / User to maintain all revised drawings or schematics, piping data reports and the TSSA Registration Letter for all piping system installations, additions, repairs, replacements and alterations.
- The Owner/User shall keep copies of all completed Piping Installation and Test Data Reports on records in support of the installation changes.

Additional Notes

1. New (non-exempt) piping systems to be installed shall be registered with TSSA regardless of the length. For piping system exemption, see Safety Information Bulletin SB00-7;
2. Piping work to existing pressure piping system are subject to inspection according to TSSA requirements;
3. Moving an entire or part of existing piping system to new location requires new design registration;
4. An organization requires Certificate of Authorization to perform fabrication, assembly, or erection of a piping system, and the work shall be within the scope of the certification of authorization issued by TSSA. See Safety Information Bulletin SB02-02.
5. All fittings in a piping system require valid CRN registration.
6. Maintenance work activities involving replacement of mechanically assembled items may exempt of Certificate of Authorization and inspection. See Safety Information Bulletin SB05-01;
7. Inspector is an authorized person performing piping inspection according to TSSA requirements.
8. For Hot Tapping and Line stopping please review SB05-02 for details.
9. New Piping can also be considered the re-installation of previously used piping system on another site location,
10. When adding a Boiler or Pressure Vessel a CRN is mandatory as well as a First inspection.
11. Addition of Energy sources was removed from the Guidance on when to register a piping system.
12. Piping systems will be registered as P# or PSTD. For registration requirements please review the Guidelines for Registration of Piping Systems.
13. Addition of Gas Compressors, Refrigeration Compressors or Boilers may require changes to the OE Plant registration. Please contact your local OE Inspector.
14. See the Safety Information Bulletin [SB05-01 Guideline for Maintenance Replacement of Mechanically Assembled Items in Existing Pressure Piping Systems](#)
15. At the owner/user's option, an Alternative pipe material Specification and grade/type is acceptable provided the material is assigned under the same P-No in ASME BPVC Section IX, and having at least equal or higher maximum allowable stress values listed in the Registered Design e.g. ASME B31.1, ASME B31.3 or ASME B31.5

Disclaimer

The above scenarios do not address all scenarios for exemption to design registration, they provide items to consider. Organization performing piping manufacturing or installation shall obtain an approval of the Inspector before starting work. The Inspector has discretion in any moment, to request a site review of previously registered documents, and/or to request a design registration addendum.