

APPLICATION FOR THE REGISTRATION OF A PRESSURE PIPING DESIGN USING MULTIPLE SUBMISSION PACKAGES

Information Paper IP-2016-07-03

Table of Contents

1. Scope.....	2
2. Application Requirements - General	2
3. Information Required as Part of Each Submission	2
4. Fabrication of Pressure Piping Systems	3
4.1. TSK-1002 Construction Data Report for Pressure Piping Systems.....	3
4.2. Welding	3
4.2.1. Fabrication inside Saskatchewan	3
4.2.2. Fabrication outside of Saskatchewan but within Canada	3
4.2.3. Fabrication outside of Canada	3
4.3. Pressure Test/Leak Test	4
5. Additional Information & Questions.....	4
5.1. Design of Pressure Piping Systems Inquiries.....	4
5.2. QMS/QCP and Inspection Inquiries	4

1. Scope

This information paper details how to apply for the registration of a pressure piping design with more than one submission package.

The Owner or designate must ensure that all packages have been registered and all conditions removed prior to the systems being put into service. Proof of all the registrations for the separate packages and the final letter removing all conditions (if applicable) shall be provided to the TSASK Inspector upon request.

The 0.5 meter³ or less capacity exemption does not apply to the individual design submissions submitted for registration. Regardless of size, each package shall be registered with TSASK when using the multiple submission application.

Please return to [Policy Paper TSASK-2016-07-01 Application for the Registration of a Pressure Piping Design](#) for detailed information on other submission requirements once you have finished reading this paper

2. Application Requirements - General

Each application shall include:

- A completed [TSK-1011 – Application for the Registration of Pressure Piping Design](#).
 - Under Part IV(B), check box 2 that states:
“Multiple pressure piping design registration application submissions. More than one pressure piping design submission package will be submitted in conjunction with the system at this location. See IP-2015-07-03”
 - Complete Part V for Multiple Submission Packages. The information on the separate submissions shall be sent to TSASK by the company responsible for each of the separate packages of the piping system. The Owner or designate shall name an individual who is responsible for the coordination of the separate piping submission applications. An Owner/designate tracking number that will be included on all the submission packages for this location shall be included and the number of submissions that will be sent to TSASK for registration shall also be included in this section.
- Three copies of the completed, stamped and signed [TSK-1003 – General Engineering Requirements for Design & Construction of Pressure Piping Systems](#) with each submission.
- Two complete sets of design drawings and design documents such as line lists with each submission. A third copy may be added if the Client/Owner requires a returned stamped copy. An additional fee shall apply.
- If applicable, the registration number of the Owner’s Pressure Relief Path (PRP) Stop Valve Control Program or QMS registration number if the PRP Stop Valve Control program is part of the Owner’s QMS (*TSK-1011 Part III*).

3. Information Required as Part of Each Submission

Please ensure that the design drawings and design documents include the following:

- P&IDs depicting the general arrangement of all boilers, pressure vessels, pressure piping systems and/or fittings (P&IDs are acceptable);
- Pressure piping line lists detailing the piping specifications and design conditions (size of the line, material specifications, schedules, maximum pressures and temperatures, MDMT if applicable, corrosion allowance, radiography, test medium and pressure, and PWHT time and temperature) for each pressure piping system unless you have your piping material specifications registered with TSASK as part of the QCP/QMS option. If the piping material specifications are registered, provide the piping material specification registration number in Part II of [TSK-1011 Application for the Registration of a Pressure Piping Design](#). Ensure that the line list is very clear which specification covers each line. Maximum pressures and temperatures, and line sizes as well as any other information not specified on the piping material specification shall be included on the line list;

- A list of pressure relief devices (PRD) to be used in the pressure piping system including their capacities and set pressures (indicating the equipment each PRD is protecting is beneficial);
- A detailed description of the pressure test/leak test procedure (depending on Code of Construction) if different from the procedure within the QMS/QCP manuals;
- A signed letter from the owner of the pressure piping system acknowledging specific lines designated as **Category D** fluid service if applicable;
- Any other information that the TSASK Design Reviewer may require to ascertain that the design is suitable for registration;
- Design drawings and piping line lists **shall be** stamped, dated and signed by a Professional Engineer as defined in *The Engineering and Geoscience Professions Act* of Saskatchewan; and
- Complete and sufficiently detailed drawings so that Design Reviewers will not have to assume anything and the same drawings and specifications could be used to build the exact system and have it meet the code.
- Interconnecting points between the different packages must be clearly identified with the sizes of the header piping shown.

Refer to [IP-2016-07-05 Pressure Piping Registration Submission Package Checklist](#)

4. Fabrication of Pressure Piping Systems

4.1. [TSK-1002 Construction Data Report for Pressure Piping Systems](#)

Refer to information paper [IP-2014-03-01 Guide for Completing Form TSK-1002 Construction Data Report for Pressure Piping Systems](#) for guidance on completing *TSK-1002*. Ensure you are using the most recent copy of IP-2014-03-001 by checking the footer which should have Rev.1/2016.

Fabricators shall ensure that pressure piping lines are clearly identified so that any inspector can easily match the lines on *TSK-1002* with the lines in the field. Additional information may be required to ensure the materials can be verified such as Mill Test Reports, Purchase Orders and/or delivery information.

Reference to the Owner's/designate number may be included in the Remarks section of Part III of *TSK-1002* for ease of tracking for the Design Reviewer.

As per the QMS/QCP manual being followed, TSASK shall be notified prior to the commencement of fabrication. If the pressure piping system is to be fabricated for inventory, the fabricator shall inform the TSASK Inspector that there is no owner inspector.

4.2. Welding

4.2.1. *Fabrication inside Saskatchewan*

All welding shall be performed in accordance with ASME Section IX to a qualified welding procedure registered with TSASK in conjunction with a TSASK registered Quality Control Program (QCP) or Quality Management System (QMS). Refer to CSA B51-14 *Clause 4.5.1 & 4.5.2*.

4.2.2. *Fabrication outside of Saskatchewan but within Canada*

Fabricators shall follow the requirements of the jurisdiction of record and the owner's requirements. Refer to CSA B51-14 *Clause 4.5.1 & 4.5.2*.

4.2.3. *Fabrication outside of Canada*

Fabricators shall follow the guidance of CSA B51-14 *Clause 4.5.3* for fabrication outside of Canada.

As a minimum, fabricators shall provide TSASK with the:

- name and qualifications (specifically National Board Number or equivalent) of the inspector or third party authorized inspection agency employing the inspector;
- Code of Construction (ASME or equivalent);
- owner's requirements; and
- evidence of an approved quality control program (or equivalent).

Fabricators shall obtain TSASK acceptance prior to starting any work.

4.3. Pressure Test/Leak Test

All pressure piping systems shall be subject to a pressure test/leak test (depending on the Code of Construction) as described in the fabricator's QCP or QMS manual (or jurisdictional equivalent) and notification shall be given to the appropriate inspector with as much lead time as possible so the required inspector may make arrangements to witness the test.

If a shop fabricated piping system is not pressure tested/leak tested in the shop, arrangements shall be made by the fabricator to complete the required pressure test/leak test onsite and the test shall be witnessed by the appropriate inspector.

5. Additional Information & Questions

5.1. Design of Pressure Piping Systems Inquiries

If possible, applicants should contact their Design Reviewer directly with questions. Be sure to include the TSASK reference number or provide enough detail that the Design Reviewer will know which application is being referenced.

For all other design inquiries, please contact TSASK Codes & Standards Compliance:

- By email at CodesandStandards@tsask.ca;
- By phone at either (306) 787-4567 (Regina) or Toll Free (866) 530-8599. Please ask to speak to either a TSASK Design Reviewer or the Manager, Codes & Standards Compliance; or
- Visit the TSASK website at www.tsask.ca for more information.

5.2. QMS/QCP and Inspection Inquiries

For additional information or if there are any further questions or concerns, please contact TSASK:

- By email at info@tsask.ca;
- By phone at either (306) 798-7111 (Regina) or Toll Free (866) 530-8599. Please ask to speak to a TSASK inspector or the Manager, Boiler and Pressure Vessel Safety; or
- Visit the TSASK website at www.tsask.ca for more information.