



**Technical Standards &
Safety Authority**
4th Floor, West Tower
3300 Bloor Street West
Toronto, ON M8X 2X4
Tel: (416) 325-1943
Fax: (416) 326-1662

SAFETY INFORMATION BULLETIN: SB00-3 Rev. 3

(Supersedes Safety Information Bulletin: SB00-3 Rev.2, issued August 27, 2001;

Note: SB00-3 Rev. 3 - editorial corrections)

November 22, 2001

Subject: Ontario Requirement for the Repair of Pressure Relief Valves

SCOPE

These administrative rules and procedures are provided for those who wish to obtain a Technical Standards and Safety Authority (TSSA) Certificate of Authorization for the repair of pressure relief valves. It should be noted that the issuance of this Certificate of Authorization is not restricted to companies whose primary business is the repair of pressure relief valves nor to manufacturers or assemblers that hold an ASME “V”, “HV”, “UV” or “NV” Code symbol stamp. Owners and users of boilers and pressure vessels may also make applications to TSSA for this Certificate of Authorization.

Note: In accordance with CSA B51-97, Part 1, clause 4.9.3, a pressure relief device repair organization “shall have in place a written quality control system satisfactory to the regulatory authority.” An organization holding a National Board “VR” stamp is deemed to meet the Ontario requirements for repair of non-nuclear pressure relief valves provided that:

- 1) The program is used strictly in accordance with the scope stated on the National Board Certificate of Authorization
- 2) The “VR” stamp is applied to all repaired non-nuclear pressure relief devices and the repair is documented in accordance with the “VR” program

Alternatively:

A “VR” stamp holder not wishing to stamp every pressure relief device repair with the “VR” stamp or, a company who is not a “VR” stamp holder, may qualify a repair program for Ontario only by following the requirements detailed in this document.

Issuance of Certificate

Repair organizations, manufacturers, assemblers or users that make repairs to pressure relief valves for use on equipment regulated under the Technical Standards and Safety Act, 2000, and Regulations for Boilers and Pressure Vessels in Ontario may apply to TSSA for a Certificate of Authorization. Upon acceptance of the Quality System and payment of administrative fees, a TSSA Certificate of Authorization will be issued, expiring on the triennial anniversary date of the review.

Renewal of Certificate

The Certificate of Authorization is renewable every three years subject to review and acceptance of the Quality system by a designated representative of TSSA. TSSA reserves the right to cancel, refuse to issue or renew such authorization where there is a valid reason for doing so.

Review of applicant's facility

The applicant shall have available for review the latest edition and addenda of the National Board Inspection Code (NBIC) publication #NB-23, the applicable safety valve information from the ASME Code Section(s) that the organization is including in its scope, the specific manufacturers repair information (manuals, drawings, specification sheets, etc.) for the range of valves to be repaired and, when changing the set pressure of pressure relief valves, the National Board Pressure Relief Device Certifications publication #NB-18.

Verification Testing

The applicant shall repair and submit for operational verification testing: one (1) valve for each Code section and test fluid (steam, air/gas, liquid) which will appear on the Certificate of Authorization. A minimum of two valves are required regardless of Code sections or test fluid. Before the Certificate of Authorization may be issued or renewed, the demonstration valves must successfully complete operational verification tests at the applicant's facility or a field site in the presence of the TSSA representative during the Quality Program review.

Valves not meeting the operational requirements of the section of the ASME Code to which they were manufactured shall be considered to have failed. Replacement valves shall be repaired and selected for testing as stated above, at a rate of two (2) valves for each one (1) that failed.

If either or both of these replacement valves fail to meet the above criteria, the applicant shall document the cause of the noted deficiencies and actions taken to guard against future occurrence. Upon acceptance of this information by TSSA, one (1) additional valve for each replacement valve that failed shall be repaired and tested. The valve(s) shall be of the same ASME Code section, fluid and set pressure scope as the valve previously failing to meet the test requirement.

*** NOTE:** During the course of the implementation review, when an applicant is unable to test steam valves on steam, due to limitations of boiler size or availability, steam valves may initially be cold set on air/gas to the original manufacturers specifications when such information is available from the manufacturer. Necessary corrections for differentials in popping pressure between steam and air, as established by the manufacturer shall be applied to the popping point on air. A warning tag shall be attached and sealed on the valve stating **“COLD SET ON AIR ONLY, FINAL PRESSURE SETTING ON STEAM REQUIRED”**. In addition, the tag shall contain the following information:

- Repair Company name and address
- Work Order or Job Number

The repair nameplate shall only be attached on completion of hot setting of the valve. It is the responsibility of the applicant to demonstrate the final pressure setting and sealing on steam. When the applicant is unable to perform the final setting on steam at his facility during the implementation review, the demonstration tests shall be conducted at a facility mutually agreeable to the TSSA representative and the applicant.

Quality Program Requirements

A written Quality Program manual is required to be submitted to TSSA in accordance with the requirements of the National Board of Inspection Code clauses RA-2250 through RA-2294 for the repair of pressure relief valves, with the following exceptions:

RA-2251 General

Delete “VR” and substitute “TSSA”

RA-2254 Review

Delete “National Board” and substitute “TSSA”

RA-2255 Maintenance of controlled copy

Delete “VR”, delete “National Board” (two places) and substitute “TSSA”

RA-2256 Outline of requirements for a quality system

- a. Delete “National Board”
- b. Delete “National Board” and substitute “TSSA”
- d.1 Delete “VR Stamp” and substitute “**program**”
- d.4 Delete “National Board” and substitute “TSSA”
- h.4 Delete complete paragraph and substitute “**when no VR stamp is applied only OEM parts are to be used**”.
- j. Delete “VR” and substitute “TSSA”
- k. Delete “VR”, and delete “National Board” (two places) and substitute “TSSA”
- n.4 Delete “National Board” (two places) and substitute “TSSA”

RA-2258 ASME “V”, “HV”, or “UV” Certificate Holders

- a. Delete “VR”, and delete “National Board” (two places) and substitute “TSSA”
Delete last sentence, second paragraph
- b. Delete “National Board” and substitute “TSSA”
- c. Delete “VR” and substitute “TSSA”
- d. Delete “National Board” and substitute “TSSA”
- e. Delete “National Board VR stamp” and substitute “**TSSA Certificate of Authorization**”
- f.1 Delete “National Board” and substitute “TSSA”
- f.3 Delete “VR stamp” and substitute “**TSSA Certificate of Authorization**”

RA-2262 Nameplate Contents

- a.2 Delete complete sentence

RA-2264 Illegible Nameplates

First sentence – delete “VR stamp holder” and substitute “TSSA **Certificate Holder**”

Third sentence – delete “serialized VR stamp and”

RA-2265 Missing Nameplates

First sentence – delete “VR” and substitute “TSSA”

Second sentence – delete “VR”

RA-2272 Extension to field

Delete “VR” (two places) and substitute “TSSA”

RA-2274 Use of Owner/User personnel

Delete all references to “VR” in each paragraph and substitute “TSSA”

RA2280 Performance testing of repaired valves

Delete “VR repair symbol stamp” and substitute “**program**”

RA-2281 Test Medium and Testing Equipment

Add, “when a repairer is unable to test steam valves at his facility on steam, due to limitations of boiler size or availability, steam valves may initially be cold set on air/gas to the original manufacturers specifications when such information is available from the manufacturer. Necessary corrections for differentials in popping pressure between steam and air, as established by the manufacturer shall be applied to the popping point on air. A warning tag shall be attached and sealed on the valve stating “**COLD SET ON AIR ONLY, FINAL PRESSURE SETTING ON STEAM REQUIRED**”. It is the responsibility of the repairer to arrange for a steam source of adequate pressure and volume, and to perform the final pressure setting and sealing on steam”.

b.3 Delete “National Board” and substitute “TSSA”

RA-2292 Contents of training program

Insert “, TSSA” after the words “ASME Code”.

For further information contact:

Technical Standards and Safety Authority
Boilers and Pressure Vessels Safety
3300 Bloor Street West
4th Floor, West Tower
Toronto, ON M8X 2X4