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*THE NATIONAL BOARD  
OF BOILER AND PRESSURE VESSEL INSPECTORS*

# **NATIONAL BOARD INSPECTION CODE SUBCOMMITTEE PRESSURE RELIEF DEVICES**

## **MINUTES**

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Meeting of January 19<sup>th</sup>, 2022  
San Diego, CA

The National Board of Boiler & Pressure Vessel Inspectors  
1055 Crupper Avenue  
Columbus, Ohio 43229-1183  
Phone: (614)888-8320  
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## 1. Call to Order

The meeting was called to order at 8:05 AM on Tuesday July 1, 2021 by Vice Chair Alton Cox. Members and Visitors in attendance can be found on the attendance sheet (Attachments Page 1).

## 2. Announcements

- The National Board will be hosting a reception on Wednesday evening from 5:30pm to 7:30pm at The Smoking Gun.
- The National Board will be hosting breakfast and lunch on Thursday. Breakfast will be served from 7:00am to 8:00am, and lunch will be served from 11:30am to 12:30pm. Both meals will be served at the hotel in Le Fontainebleau.
- A coffee station will be provided outside of the meeting rooms on each floor.

## 3. Adoption of the Agenda

The agenda dated January 5, 2021 was presented along with the addition of two items 21-83 and 21-84. A motion was made and seconded to adopt the agenda with the additional items. A vote was taken and the motion was unanimously approved.

## 4. Approval of Minutes from the July 14<sup>th</sup>, 2021 Meeting

A motion was made and seconded and seconded to approve the July 2021 minutes. A vote was taken and the motion was unanimously approved.

## 5. Review of the Roster ([Attachment Page 1](#))

### a. Nominations

### b. Reappointments

- The following subcommittee memberships are set to end prior to the July 2022 NBIC meetings: Ms. Marianne Brodeur, Mr. Alton Cox, Mr. Dan Marek, Mr. Brandon Nutter, and Mr. Thakor Patel.

### c. Officer Appointments

- Ms. Marianne Brodeur's term as Chair of Subcommittee PRD will end on January 30, 2022. A Motion was made and seconded to reappoint Marianne Brodeur as Chair. After discussion a vote was taken and the motion unanimously passed.
- Mr. Alton Cox's term as Vice Chair of Subcommittee PRD will end on January 30, 2022. Mr. Cox indicated he will not be seeking reappointment as Vice Chair. Adam Renaldo and Alfred Donaldson were nominated for Vice Chair. A secret letter ballot will be conducted prior to the next meeting to select the Vice Chair.

6. Errata

<b>NBIC Location of Error: Part 4, 2.4.4.3 b)</b>	<b>Attachments pages 2-3</b>
<b>General Description:</b> Last sentence in Part 4, 2.4.4.3	
<b>Task Group:</b> T. Beirne	
<b>Explanation of Need:</b> Item 17-128 was approved for the 2021 NBIC and included identical changes for Parts 1 and 4. However, in the publishing process the last sentence of Part 4, 2.4.4.3 was not deleted and does not match Part 1, 3.9.4.3 b).	
<b>January 2022 Meeting Action:</b>	

7. Interpretation Requests

<b>Item Number: 21-62</b>	<b>NBIC Location: Part 4, 4.8.5.4 i) 3)</b>	<b>No Attachment</b>
<b>General Description:</b> Verification of existing spring during repair activities		
<b>Task Group:</b> A. Donaldson (PM), B. Nutter, E. Creaser, P. Dhobi, T. Patel, J. Simms, J. Grace, D. Gonzales, T. Cardy		
<b>Explanation of Need:</b> This requirement has created an administrative requirement that potentially prevents a VR Stamp holder from applying the "VR" stamp to valves they have repaired. The requirement is negatively impacting owners, and jurisdictions that enforce the NBIC Part 4. This clause introduces a unique requirement in the BPV industry to confirm that code material in a Code stamped item be verified and traceable at all time after the item is ASME code stamped but the verification can only be provided by the manufacturer. Historically, any valve received or worked on that was sealed by a VR Stamp holder or in the case of an initial repair the ASME assembler was deemed to be Code compliant, and no further verification was needed recognizing the validity and continuity of the ASME and VR quality programs. It is clearly understood that if a spring, or any other critical part is deemed necessary to be replaced during a repair the manufactures verification is required and justifiable.		
<b>January 2022 Meeting Action:</b> After discussion with the inquirer, the committee decided to work this item as a code change instead of providing an interpretation. A task group was formed to work on this item.		

8. Action Items

<b>Item Number: NB15-0305</b>	<b>NBIC Location: Part 4</b>	<b>No Attachment</b>
<b>General Description:</b> Create Guidelines for Installation of Overpressure Protection by System Design.		
<b>Task Group:</b> B. Nutter, A. Renaldo, D. Marek (PM), D. DeMichael, J. Wolf, D. Schirmer		
<b>January 2022 Meeting Action:</b> Comments and negatives received from the letter ballot to subcommittee PRD and Installation will be responded to by the task group and revised proposal recirculated.		

<b>Item Number: NB15-0307</b>	<b>NBIC Location: Part 4</b>	<b>No Attachment</b>
<b>General Description:</b> Create Guidelines for Repair of Pin Devices.		
<b>Task Group:</b> D. McHugh (PM), A. Renaldo, T. Tarbay, R. McCaffrey, Jay Simms, C. Bear, C. Chernisky		
<b>January 2022 Meeting Action:</b> Task group is working on responses to the comments received from the letter ballot and revise proposal accordingly.		
<b>Item Number: NB15-0315</b>	<b>NBIC Location: Part 4, 2.5.6 and 2.6.6 and Part 1, 4.5.6 and 5.3.6</b>	<b>No Attachment</b>
<b>General Description:</b> Review isolation Valve Requirements, and reword to allow installation of pressure relief devices in upstream piping.		
<b>Task Group:</b> D. DeMichael (PM), B. Nutter, A. Renaldo, D. Marek		
<b>January Meeting Action:</b> Work continues on this item. Part 4 text complete, will need to work on Part 1 text. Possible letter ballot to SG between meetings.		
<b>Item Number: 17-119</b>	<b>NBIC Location: Part 4, 2.2.5 and Part 1, 2.9.1.4</b>	<b>No Attachment</b>
<b>General Description:</b> States pressure setting may exceed 10% range. Clarify by how much.		
<b>Task Group:</b> T. Patel (PM), D. Marek, J. Ball, R. Donaldson		
<b>January 2022 Meeting Action:</b> Work continues on this item. Item maybe reopened in ASME.		
<b>Item Number: 19-37</b>	<b>NBIC Location: Part 4, 4.3.1 c) 4)</b>	<b>No Attachment</b>
<b>General Description:</b> Origin of Replacement Parts for Pressure Relief Devices		
<b>Task Group:</b> A. Cox (PM), T. Patel, P. Dhobi, J. Simms		
<b>January 2022 Meeting Action:</b> Work continues on this item. Should have proposal ready for letter ballot between meetings.		
<b>Item Number: 19-83</b>	<b>NBIC Location: Part 4, Part 1</b>	<b>No attachment</b>
<b>General Description:</b> Address alternate pressure relief valve mounting permitted by ASME CC2887-1.		
<b>Task Group:</b> D. Marek (PM), T. Patel, J. Ball		
<b>January 2022 Meeting Action:</b> The proposal was balloted to Subcommittee Installation and received three disapproval votes. The task group will respond to the negatives and if necessary revise and recirculate the proposal.		

<b>Item Number: 20-85</b>	<b>NBIC Location: Part 4, 3.2.6</b>	<b>No attachment</b>
<p><b>General Description:</b> Add language to Part 4, 3.2.6 to define test intervals for thermal fluid heaters for PRD's</p> <p><b>Subgroup:</b> PRD</p> <p><b>Task Group:</b> B. Nutter (PM), T. Patel, D. Schirmer, J. Wolf</p> <p><b>Explanation of Need:</b> Need to align Part 4 language with work done under Item 19-88.</p> <p><b>January 2022 Meeting Action:</b> Work continues on this item.</p>		

<b>Item Number: 21-05</b>	<b>NBIC Location: Part 4, 3.3 and 4.8</b>	<b>Attachments Pages 4-6</b>
<p><b>General Description:</b> Develop specific requirements for Shop and Field Audits for VR &amp; T/O Certificate Holders</p> <p><b>Subgroup:</b> PRD</p> <p><b>Task Group:</b> A. Donaldson (PM), A. Cox, J. Simms, P. Dhobi, T. Tarbay, D. Marek</p> <p><b>Explanation of Need:</b> There has long been a requirement for an Annual Audit of Field Activities for VR and, more recently, T/O Activities. This same opportunity for improvement should be extended to Shop Activities that involve for T/O or VR Repair, as applicable, are properly performed and documented.</p> <p><b>January 2022 Meeting Action:</b> This item was letter ballot and passed, but required revision as a result of an editorial comment. A motion was made and seconded to accept the attached proposal. After discussion a vote was taken and the motion unanimously passed.</p>		

<b>Item Number: 21-08</b>	<b>NBIC Location: Part 4, S4.4</b>	<b>No attachment</b>
<p><b>General Description:</b> Additional guidance for tank vent repairs</p> <p><b>Subgroup:</b> PRD</p> <p><b>Task Group:</b> D. DeMichael (PM), B. Donaldson, B. Nutter, K. Beise, J. Grace</p> <p><b>Explanation of Need:</b> The recently approved S4.4, "Weight Loaded Vents," (NB12-0901) provided new guidance for tank vent repairs. Several additional topics need to be addressed to enhance the guidance. These topics include: 1) Suggested test equipment and configuration for the prescribed tank vent testing. 2) Minimum requirements for replacement parts, 3) Guidance for painting tank vent components.</p> <p><b>January 2022 Meeting Action:</b> Work continues on this item.</p>		

<b>Item Number: 21-18</b>	<b>NBIC Location: Part 4, 4.6.4</b>	<b>No Attachment</b>
<b>General Description:</b> Pressure tests for pressure relief valve parts.		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> J. Simms (PM), T. Tarbay, A. Donaldson, D. DeMichael, T. Patel, B. Nutter		
<b>Explanation of Need:</b> Pressure relief valve manufacturers must produce valve parts that comply with ASME Code requirements to be able to apply the ASME Symbol Stamp and Designator to a new valve. These parts are the same that are sold as repair parts. The logistic issues to fabricate and maintain an inventory of spare parts not complying with ASME Code requirements is significant versus producing all parts in compliance with code. Consequently, why have a pressure test requirement for parts purchased from the valve manufacturer for those certificate holders who chose to buy parts produced by the manufacturer?		
<b>January 2022 Meeting Action:</b> Work continues on this item.		

## 9. New Business

<b>Item Number: 21-36</b>	<b>NBIC Location: Part 4, 3.3.3.4 i)</b>	<b>No Attachment</b>
<b>General Description:</b> Add Test Details to NBIC Part 4, 3.3.3.4 i) Valve Adjustment and Sealing		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> D. Marek (PM), A. Cox, P. Dhobi, T. Patel		
<b>Explanation of Need:</b> There is no reference in the T/O requirements for Set Pressure Testing, use of proper Test Fluid or Seat Tightness unless and until a minor adjustment is required. This is surely the intent, but it is not clearly specified as it is in the current VR requirements.		
<b>January 2022 Meeting Action:</b> A task group was formed to work on this item.		

<b>Item Number: 21-49</b>	<b>NBIC Location: Part 4, 3.3.3.4 l) 5)</b>	<b>Attachments Pages 7-8</b>
<b>General Description:</b> Change 3.3.3.4 l) 5) to be consistent with 4.8.5.4 n) 5)		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> T. Beirne (PM)		
<b>Explanation of Need:</b> The intent was that the changes to a certificate holder's QC Manual would be accepted prior to being implemented. This change in text clarifies the intent.		
<b>January 2022 Meeting Action:</b> A motion was made and seconded to accept the attached proposal. After discussion a vote was taken and the motion unanimously passed.		

<b>Item Number: 21-51</b>	<b>NBIC Location: Part 4, Supplement 3</b>	<b>No attachment</b>
<p><b>General Description:</b> Clarify relief valve term to be pressure relief valve in Supplement 3</p> <p><b>Subgroup:</b> PRD</p> <p><b>Task Group:</b> T. Beirne (PM)</p> <p><b>Explanation of Need:</b> Several places refer to relief valve or valve. Should be pressure relief valve to be consistent with the rest of the book.</p> <p><b>January 2022 Meeting Action:</b> Mr. Beirne presented a draft proposal that will be letter balloted between meetings.</p>		

<b>Item Number: 21-52</b>	<b>NBIC Location: Part 4, 2.5.3 a) &amp; Part 1, 4.5.3 a)</b>	<b>Attachments Pages 9</b>
<p><b>General Description:</b> Incorrect paragraph reference at end of Part 4 2.5.3 a) and Part 1 4.5.3 a)</p> <p><b>Subgroup:</b> PRD</p> <p><b>Task Group:</b> T. Beirne (PM)</p> <p><b>Explanation of Need:</b> Paragraph reference at end of Part 4, 2.5.3 a) and Part 1, 4.5.3 a) should be 2.5.6 e) and 4.5.6 e) not e)2) since all of the requirements of e apply to isolation valves not just e)2)</p> <p><b>January 2022 Meeting Action:</b> A motion was made and seconded to accept the attached proposal. After discussion a vote was taken and the motion unanimously passed.</p>		

<b>Item Number: 21-59</b>	<b>NBIC Location: Part 4, 3.2.6.1</b>	<b>No Attachment</b>
<p><b>General Description:</b> Deferral of inspection due dates (pressure relieving devices NBIC PART IV)</p> <p><b>Subgroup:</b> PRD</p> <p><b>Task Group:</b> None assigned</p> <p><b>Explanation of Need:</b> Since the code has clearly recommended inspection frequency intervals for the different classes of pressure relief devices, it shall have the requirements related to the deferral of due dates. The inspection due date deferrals are usually not considered but in exceptional cases where operating plant may not be able to handover the device due to some practical limitations or the turnaround frequency of the plant is extended due to stakeholders' requirements etc. The owner is usually ensuring that a deferment is not posing any significant EHSS risk by proper risk analysis but a clarity from code on the minimum or maximum duration the device can be deferred will add a great value in decision making. There are some codes which have added deferment clauses such as API 510 but the NBIC is always having precedence in this subject and shall have statement added to its code.</p> <p><b>January 2022 Meeting Action:</b> After brief discussion, it was requested that NB Staff contact the inquirer directly to determine specifically what is needed to be changed in the code to resolve his issue.</p>		

<b>Item Number: 21-61</b>	<b>NBIC Location: Part 4, 3.3.4</b>	<b>No Attachment</b>
<b>General Description:</b> Audit Requirements for the T/O holder		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> A. Donaldson (PM), A. Cox, J. Simms, P. Dhobi, T. Tarbay, D. Marek		
<b>Explanation of Need:</b> Opened as a result of a Subgroup PRD ballot comment from item 21-05 (Shop audits for VR certificate holders). The comment recommended adding requirements specifically for organizations that are T/O only.		
<b>January 2022 Meeting Action:</b> A task group was formed to work on this item.		

<b>Item Number: 21-63</b>	<b>NBIC Location: Part 4, 4.7.2</b>	<b>No attachment</b>
<b>General Description:</b> Require unique identifier marked on Pilots in addition to main valves		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> B. Donaldson (PM), B. Nutter, D. Gonzales, J. Simms, T. Patel, D. Marek, T. Beirne		
<b>Explanation of Need:</b> The 2021 Edition of ASME BPVC Section XIII requires pilots of pilot operated pressure relief valves be marked with a unique identifier that matches the main valve (Section I has similar approved text for the 2023 Edition). This should be addressed for VR nameplates as well since pilots can be replaced as VR operation.		
<b>January 2022 Meeting Action:</b> A task group was formed to work on this item.		

<b>Item Number: 21-72</b>	<b>NBIC Location: Part 4, 4.7.2 b)</b>	<b>Attachments Page 10</b>
<b>General Description:</b> Remove reasons for changes in 4.7.2 b) 6) and 7)		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> T. Beirne (PM)		
<b>Explanation of Need:</b> Capacity could change for reasons other than set pressure or service fluid change (for example error or superimposed back pressure for liquid valve being introduced). Type/Model numbers can change for reasons other than a conversion. Sometimes manufacturers include set pressure in the type or model number. A set pressure change is not considered a conversion. Also, error correction could be a reason.		
<b>January 2022 Meeting Action:</b> A motion was made and seconded to accept the attached proposal. After discussion, a vote was taken and the motion unanimously passed.		



<b>Item Number: 21-73</b>	<b>NBIC Location: Part 4, 4.7.3</b>	<b>No attachment</b>
<b>General Description:</b> Simplify paragraph 4.7.3		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> T. Beirne (PM)		
<b>Explanation of Need:</b> Subparagraphs a) through d) are repetitive and can be consolidated to simplify the overall requirement of if changes are made, they should be marked out and left legible.		
<b>January 2022 Meeting Action:</b> Mr. Beirne presented a draft proposal that will be letter balloted to SG/SC between meetings.		

<b>Item Number: 21-76</b>	<b>NBIC Location: Part 4, 3.2.4.3 and Part 2, 2.5.5.3</b>	<b>Attachments Page 11</b>
<b>General Description:</b> Update ASME paragraph reference in Part 4, 3.2.4.3 and Part 2, 2.5.5.3		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> T. Beirne (PM)		
<b>Explanation of Need:</b> ASME Section VIII Div. 1 updated pressure relief device paragraph references as a result of publishing Section XIII. UG-135 should now be UG-156		
<b>January 2022 Meeting Action:</b> A motion was made to accept the attached proposal. After discussion a vote was taken and the motion unanimously passed.		

<b>Item Number: 21-83</b>	<b>NBIC Location: Part 4, 4.4.7 b)1)</b>	<b>Attachments Page 12</b>
<b>General Description:</b> Incorrect paragraph reference in Part 4 4.4.7 b)1)		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> T. Beirne (PM)		
<b>Explanation of Need:</b> Paragraph reference is incorrect. Current reference points to Part 3, 2.2.2 which deals with SWPS. Part 3, 3.3.2 is the correct paragraph and deals with waiving in-process involvement of the Inspector for routine repairs.		
<b>January 2022 Meeting Action:</b> A motion was made to accept the attached proposal. After discussion a vote was taken and the motion unanimously passed.		

<b>Item Number: 21-84</b>	<b>NBIC Location: Part 4, 4.7.4</b>	<b>No Attachment</b>
<b>General Description:</b> Update duplicate nameplate marking requirements to reflect new Section XIII		
<b>Subgroup:</b> PRD		
<b>Task Group:</b> A. Cox (PM), D. Sullivan, D. Marek, P. Dhobi, B. Nutter, T. Beirne		
<b>Explanation of Need:</b> With the new publication of Section XIII, valves that were previously constructed to Section IV or VIII Div. 1 are now constructed to Section XIII. The HV and UV designators still indicate the service, however.		
<b>January 2022 Meeting Action:</b> A task group was formed to work on this item.		

## 10. Presentations

## 11. Future Meetings

- July 2022 – TBD
- January 2023 – Charleston, SC

## 12. Adjournment

The meeting was adjourned at 9:57 AM.

Respectfully Submitted,

Thomas P. Beirne, P.E.  
Secretary, NBIC Subcommittee Pressure Relief Devices  
pc: J. Amato  
G. Galanes  
J. Ellis

**Subcommittee PRD Attendance - January 19, 2022**

<b>MEMBERS:</b>	<b>Interest Category</b>	<b>In Person</b>	<b>Remote</b>	<b>Not In Attendance</b>
Marianne Brodeur-Chair	National Board Certificate Holders			<b>X</b>
J. Alton Cox-Vice Chair	General Interest		<b>X</b>	
Thomas Beirne - Secretary		<b>X</b>		
Kim Beise	National Board Certificate Holders		<b>X</b>	
Denis DeMichael	Users		<b>X</b>	
Prakash Dhobi	National Board Certificate Holders		<b>X</b>	
Alfred Donaldson	Manufacturers		<b>X</b>	
Robert Donaldson	Manufacturers		<b>X</b>	
Daniel Marek	General Interest		<b>X</b>	
Raymond McCaffrey	General Interest			<b>X</b>
David McHugh	National Board Certificate Holders	<b>X</b>		
Brandon Nutter	National Board Certificate Holders		<b>X</b>	
Thakor Patel	Manufacturers		<b>X</b>	
Adam Renaldo	Users		<b>X</b>	
Delton Schirmer	Authorized Inspection Agencies	<b>X</b>		
Jon Wolf	Authorized Inspection Agencies		<b>X</b>	
Jay Simms	Manufacturers	<b>X</b>		

<b>VISITORS:</b>	<b>Company/Title/Interest</b>	<b>In Person</b>	<b>Remote</b>
Luis ponce	NBBI	<b>X</b>	
Raymond Ceccarelli	FM Global		<b>X</b>
Dave Sullivan	State of Arkansas	<b>X</b>	
Jermemy Grace	Chemours	<b>X</b>	
Joe Ball	NBBI		<b>X</b>
Tom Tarbay	TRT Consultants	<b>X</b>	
Pierre Bantolo	Naval Facilities Engineering	<b>X</b>	
Denis Sendek	NAVFAC Southwest	<b>X</b>	
Shelly Fisher	NAVFAC Southwest	<b>X</b>	
Theresa Melfi	Lincoln Electric	<b>X</b>	
Herbert Johnson	NAVFAC Southwest	<b>X</b>	
Jesus Silva	NAVFAC	<b>X</b>	
Clark Turner	Calder Testers		<b>X</b>
Chris Chernisky	Valve Sales		<b>X</b>
Tom Cardy	Setpoint		<b>X</b>
Dave Gonzales	Scallon Controls		<b>X</b>
Donnie Lasage	State of Louisiana	<b>X</b>	
Gary Scribner	NBBI	<b>X</b>	
Bob Wielgozinski	HSB	<b>X</b>	

**2021 NBIC Part 4, 2.4.4.3 b) errata:**

How the section currently reads:	How it should read:
<p><b>Part 4:</b></p> <p><b>2.4.4.3 REQUIREMENTS FOR COMMON CONNECTION FOR TWO OR MORE VALVES</b></p> <p>a) When a potable water heater is fitted with two or more temperature and pressure relief valves on one connection, this connection shall have a cross sectional area not less than the combined areas of inlet connections of all the temperature and pressure relief valves with which it connects.</p> <p>b) When the size of the water heater requires a temperature and pressure relief valve larger than NPS 4 (DN 100) two or more valves having the required combined capacity shall be used. When two or more valves are used on a water heater, they may be single, directly attached, or installed on a Y-base.</p>	<p><b>Part 4:</b></p> <p><b>2.4.4.3 REQUIREMENTS FOR COMMON CONNECTION FOR TWO OR MORE VALVES</b></p> <p>a) When a potable water heater is fitted with two or more temperature and pressure relief valves on one connection, this connection shall have a cross sectional area not less than the combined areas of inlet connections of all the temperature and pressure relief valves with which it connects.</p> <p>b) When the size of the water heater requires a temperature and pressure relief valve larger than NPS 4 (DN 100) two or more valves having the required combined capacity shall be used. <del>When two or more valves are used on a water heater, they may be single, directly attached, or installed on a Y-base.</del></p>

**Item 17-128 for reference:**

**Part 4:**

**2.4.4.3 REQUIREMENTS FOR COMMON CONNECTION FOR TWO OR MORE VALVES**

a) When a potable water heater is fitted with two or more temperature and pressure relief valves on one connection, this connection shall have a cross sectional area not less than the combined areas of inlet connections of all the temperature and pressure relief valves with which it connects.

~~b) When a Y-base is used, the inlet area shall be not less than the combined outlet areas.~~

~~e)b) When the size of the water heater requires a temperature and pressure relief valve larger than NPS 4 (DN 100) two or more valves having the required combined capacity shall be used. ~~When two or more valves are used on a water heater, they may be single, directly attached, or installed on a Y-base.~~~~

**Part 1:****3.9.4.3 REQUIREMENTS FOR COMMON CONNECTION FOR TWO OR MORE VALVES**

a) When a potable water heater is fitted with two or more temperature and pressure relief valves on one connection, this connection shall have a cross sectional area not less than the combined areas of inlet connections of all the temperature and pressure relief valves with which it connects.

~~b) When a Y-base is used, the inlet area shall be not less than the combined outlet areas.~~

~~e)b)~~ When the size of the water heater requires a temperature and pressure relief valve larger than NPS 4 (DN 100) two or more valves having the required combined capacity shall be used. ~~When two or more valves are used on a water heater, they may be single, directly attached, or installed on a Y-base.~~

**Item 21-05. Develop Implementation Audit****Initial Language:****4.8.5.4 r) Field Repairs**

If field repairs are included in the scope of work, the system shall address any differences or additions to the quality system required to properly control this activity, including the following:

- 1) Provisions for annual audits of field activities shall be included;
- 2) Provisions for receipt and inspection of replacement parts, including parts received from the owner-user, shall be addressed;
- 3) If owner-user personnel will assist with repairs, provisions for the use of owner user personnel shall be included; and
- 4) Provisions for use of owner-user measurement and test equipment, if applicable, shall be addressed.

**4.8.6 FIELD REPAIR**

Repair organizations may obtain a "VR" *Certificate of Authorization* for field repair, either as an extension to their in-shop/plant scope, or as a field-only scope, provided that:

- 1) Qualified technicians in the employ of the Certificate Holder perform such repairs;
- 2) An acceptable quality system covering field repairs, including field audits, is maintained; and
- 3) Functions affecting the quality of the repaired valves are supervised from the address of record where the "VR" certification is issued.

**4.8.6.1 AUDIT REQUIREMENTS**

Upon issuance of a *Certificate of Authorization*, provided field repairs are performed, annual audits of the work carried out in the field shall be performed to ensure that the requirements of the Certificate Holder's quality system are met. The audit shall include, but not be limited to performance testing in accordance with 4.6 of valve(s) that were repaired in the field. The audits shall be documented.

**Proposed Language:**

**4.8.5.4 r) Field Repairs**

If field repairs are included in the scope of work, the quality system shall address any differences or additions ~~to the quality system~~ required to properly control this activity, including the following:

- ~~1) Provisions for annual audits of field activities shall be included;~~
- ~~2) 1) Provisions for receipt and inspection of replacement parts, including parts received from the owner-user, shall be addressed;~~
- ~~3) 2) If owner-user personnel will assist with repairs, provisions for the use of owner user personnel shall be included; and~~
- ~~4) 3) Provisions for use of owner-user measurement and test equipment, if applicable, shall be addressed.~~

Table 4.8.5.4 (s) Addition:

<u>Records of audits of the Quality Program</u>	<u>The repair organization shall audit the Quality System on an annual basis</u> <u>Audit results shall be documented and any exclusions shall be noted.</u>	<u>5 Years</u>
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- 1) Qualified technicians in the employ of the Certificate Holder perform such repairs;
- 2) An acceptable quality system covering field repairs, ~~including field audits,~~ is maintained; and
- 3) Functions affecting the quality of the repaired valves are supervised from the address of record where the "VR" certification is issued.

**4.8.6.1 AUDIT REQUIREMENTS**

~~Upon issuance of a *Certificate of Authorization*, provided field repairs are performed, annual audits of the work carried out in the field shall be performed to ensure that the requirements of the Certificate Holder's quality system are met. The audit shall include, but not be limited to performance testing in accordance with 4.6 of valve(s) that were repaired in the field. The audits shall be documented~~

#### 4.11 Annual Audits.

Upon Issuance of a Certificate of Authorization, the repair organization shall audit the Quality System of the repair program on an annual basis. The quality manual shall define the auditing criteria, scope, frequency, and methods to ensure the requirements of the NBIC and Certificate Holder's Quality System are effectively implemented. The scope shall include but not be limited to:

- a) Drawing and Specification Control 4.8.5.4 (g)
- b) Material and Part Control 4.3 & 4.8.5.4 (h)
- c) Repair and Inspection Program 4.8.5.4 (i)
- d) Welding, NDE and Heat Treatment 4.8.5.4 (j) (when in scope)
- e) Valve Testing, Setting, and Sealing 4.8.5.4 (k)
- f) Valve Repair Nameplates 4.8.5.4 (l)
- g) Calibration 4.8.5.4 (m)
- h) Manual and Documentation Control 4.8.5.4 (n)
- i) Nonconformities 4.8.5.4 (o)
- j) Testing Equipment 4.8.5.4 (q)
- k) Field Repair 4.8.5.4 (r) (when in scope)
- l) Record Retention 4.8.5.4 (s)
- m) Competency, Training & Qualification of Personnel 4.9
- n) Use of Personnel not in the Certificate Holder's employ 4.10

The audit results shall be documented. Mandatory items in the repair organization's scope that have not been performed during the annual audit period shall be documented as exceptions in the audit results.



ITEM 21-49 Proposal 10/5/21

NBIC Part 4 Paragraph 3.3.3.4

d) Statement of Authority and Responsibility

A statement of authority and responsibility shall be dated and signed by an officer of the company. It shall include:

- 1) A statement that the "T/O" Certification Mark shall be used only for pressure relief valves that meet the following conditions:
  - a) Are marked with an ASME "V", "UV", or "HV" Code symbol or marked with the ASME Certification Mark with "V", "UV", or "HV" designator and have been capacity certified by the National Board;
  - b) Have been visually inspected, and successfully tested in accordance with this program; and
  - c) Only external adjustments to restore the nameplate set pressure and/or performance of a pressure relief valve shall be made under the provisions of this program. If disassembly, change of set pressure, or additional repairs are necessary, the valve shall be repaired by a National Board "VR" Certificate Holder or replaced.
- 2) The title of the individual responsible for ensuring that the quality system is followed and who has authority and freedom to affect the responsibility;
- 3) A statement that if there is a disagreement in the implementation of the written quality system, the matter is to be referred to a higher authority in the company for resolution; and
- 4) The title of the individual authorized to approve revisions to the written quality system and the method by which such revisions are to be submitted to and accepted by the National Board ~~for acceptance~~ before implementation.

l) Manual Control/Procedures

The quality system manual and referenced procedures shall include:

- 1) Measures to control the issuance of and revisions to the quality system manual;
- 2) Provisions for a review of the system in order to maintain the manual current with these rules and the applicable sections of the ASME Code;
- 3) The title(s) of the individual(s) responsible for preparation, revision distribution, approval, and implementation of the quality system manual;
- 4) Provision for a controlled copy of the accepted written quality system manual to be submitted to the National Board ~~for acceptance prior to implementation~~; and
- 5) Revisions shall be submitted ~~for~~ to and accepted by acceptance by the National Board prior to being implemented.

## NBIC Part 4 Paragraph 4.8.5.4

## d) Statement of Authority and Responsibility

A statement of authority and responsibility shall be dated and signed by an officer of the company. It shall include:

- 1) A statement that the "VR" stamp shall be applied only to pressure relief valves that meet both of the following conditions:
  - a. Are marked with the ASME Certification Mark and the "V", "UV", "HV", or "NV" Designator or the supplanted ASME "V", "UV", "HV" or "NV" Code symbol and have been capacity certified by the National Board; and
  - b. Have been disassembled, inspected, and repaired by the Certificate Holder such that the valves' condition and performance are equivalent to the standards for new valves.
- 2) The title of the individual responsible to ensure that the quality system is followed and who has authority and freedom to effect the responsibility;
- 3) A statement that if there is a disagreement in the implementation of the written quality system, the matter is to be referred to a higher authority in the company for resolution; and
- 4) The title of the individual authorized to approve revisions to the written quality system and the method by which such revisions are to be submitted to and accepted by the National Board ~~for acceptance~~ before implementation.

## n) Manual Control

The quality system shall include:

- 1) Measures to control the issuance of and revisions to the quality system manual;
- 2) Provisions for a review of the system in order to maintain the manual current with these rules and the applicable sections of the ASME Code;
- 3) The title(s) of the individual(s) responsible for control, revisions, and review of the manual;
- 4) Provision of a controlled copy of the accepted written quality system manual to be submitted to the National Board; and
- 5) Revisions shall be submitted to and accepted by the National Board prior to being implemented.

**ITEM 21-52 1/18/22**

**Part 4 Paragraph 2.5.3**

**2.5.3 LOCATION**

a) The pressure relief device shall be installed directly on the pressure vessel, unless the source of pressure is external to the vessel and is under such positive control that the pressure cannot exceed the maximum overpressure permitted by the original code of construction and the pressure relief device cannot be isolated from the vessel, except as permitted by 2.5.6 e)-2).

**Part 1 Paragraph 4.5.3**

**4.5.3 LOCATION**

a) The pressure relief device shall be installed directly on the pressure vessel, unless the source of pressure is external to the vessel and is under such positive control that the pressure cannot exceed the maximum overpressure permitted by the original code of construction and the pressure relief device cannot be isolated from the vessel, except as permitted by 4.5.6 e)-2).

## ITEM 21-72 Proposal 11/10/21

### 4.7.2 REPAIR NAMEPLATES

When a pressure relief valve is repaired, a metal repair nameplate stamped with the information required below shall be securely attached to the valve adjacent to the original manufacturer's stamping or nameplate. If not installed directly on the valve, the nameplate shall be securely attached to the valve independent of the external adjustment seals in a manner that does not interfere with valve operation and sealed in accordance with the quality system.

a) Prior to attachment of the repair nameplate, the previous repair nameplate, if applicable, shall be removed from the repaired valve.

b) As a minimum, the information on the valve repair nameplate (see Figure 4.7.2-a) shall include:

- 1) The name of the repair organization preceded by the words "repaired by";
- 2) The "VR" repair symbol stamp and the "VR" certificate number;
- 3) Unique identifier (e.g., repair serial number, shop order number, etc.);
- 4) Date of repair;
- 5) Set pressure;
- 6) Capacity and capacity units (if changed from original nameplate ~~due to set pressure or service fluid change~~);
- 7) Type/Model number (if changed from original nameplate ~~by a conversion. See 4.2~~); and
- 8) When an adjustment is made to correct for service conditions of superimposed back pressure and/ or temperature, the information on the valve repair nameplate shall include the:
  - a. Cold Differential Test Pressure (CDTP); and
  - b. Superimposed Back Pressure (BP) (only when applicable).

## ITEM 21-76 Proposal 12/13/21

PART 4,

### 3.2.4.3 PRESSURE VESSELS AND PIPING

Standard practice for overpressure protection devices is to not permit any type of isolation valve either before or after the device. However, some pressure vessel standards permit isolation valves under certain controlled conditions when shutting down the vessel to repair a damaged or leaking valve. If isolation block valves are employed, their use should be carefully controlled by written procedures. Block valves should have provisions to be either car-sealed or locked in an open position when not being used. For ASME Section VIII, Div. 1 pressure vessels, see UG-[435156](#), Appendix M, and Jurisdictional rules for more information.

PART 2,

### 2.5.5.3 PRESSURE VESSELS AND PIPING

Standard practice for overpressure protection devices is to not permit any type of isolation valve either before or after the device. However, some pressure vessel standards permit isolation valves under certain controlled conditions when shutting down the vessel to repair a damaged or leaking valve. If isolation block valves are employed, their use should be carefully controlled by written procedures. Block valves should have provisions to be either car-sealed or locked in an open position when not being used. For ASME Section VIII, Div. 1 pressure vessels, see UG-[435156](#), Appendix M, and Jurisdictional rules for more information.

## ITEM 21-83 Proposal 1/13/22

### PART 4, 4.4.7 WELD REPAIRS TO PRESSURE RELIEF VALVE PARTS BY AN “R” STAMP HOLDER

a) The quality system manual may include controls for the “VR” Certificate Holder to have the pressure relief valve part repaired by a National Board “R” Certificate Holder, per this section provided the following documentation is provided to the “R” Certificate Holder:

- 1) Code of construction, year built;
- 2) Part identification;
- 3) Part material specified; and
- 4) “VR” Certificate Holder’s unique identifier for traceability as required by the repair inspection program.

b) Prior to performing weld repairs to pressure relief valve (PRV) parts, the “R” Certificate Holder shall receive repair information required by 4.4.7 a) from the “VR” Certificate Holder responsible for the pressure relief valve repair.

- 1) PRV part weld repairs shall be performed under the “R” Certificate Holder’s quality system; however, the requirements for in-process involvement of the Inspector (see Part 3, [2.23.3.2](#)) may be waived. The requirement for stamping is waived.